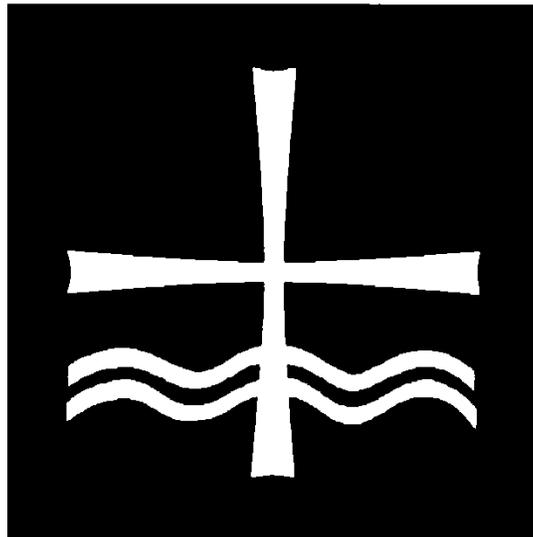


# **Archdiocese of Louisville**

## **Curriculum Guide**



**Office of Lifelong Formation and Education**  
Curriculum Office

Flaget Center  
1935 Lewiston Drive  
Louisville, Kentucky 40216  
502-448-8581

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# ARCHDIOCESE OF LOUISVILLE

Office of Lifelong Formation and Education

FLAGET CENTER • 1935 LEWISTON DRIVE • LOUISVILLE, KENTUCKY 40216-2569

Dear Principals and Teachers,

The purpose of Catholic education is to draw or lead people of all ages out of isolation and into communion with God and others through a deeper understanding, experience, and practice of one's faith. Formation and education are both essential aspects of our teaching ministry in the Archdiocese of Louisville. Our vision is that all schools in the Archdiocese of Louisville are professional learning communities grounded in Catholic faith formation.

The information contained within the Archdiocese of Louisville Curriculum Guide gives schools the framework in which to design, implement, and assess curriculum. This handbook contains the archdiocesan curriculum framework which represents many hours of conscientious planning and the collective wisdom of archdiocesan consultants, principals, and teachers.

The charge for schools is to use the curriculum framework and other handbook information to identify desired results, develop collaborative strategies to achieve their goals, and create systems to assess student learning.

The integration of religious values with knowledge and life experiences places Catholic schools in an excellent position to help us realize our vision of proclaiming the Gospel, bringing all learners to their full potential, leading persons to prayer and worship, building community, and transforming the world.

Sincerely,

Leisa Schulz  
Superintendent of Schools

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The collaborative model is an essential part of the curriculum framework development process within the Archdiocese of Louisville. Sincere gratitude is extended to the curriculum framework writing teams, Archdiocese of Louisville staff, and school personnel involved in the process.

Very special thanks and recognition go to the members of the writing teams for their perseverance and dedication to Catholic education. They are as follows:

## Curriculum Framework Writing Teams

### Religion

June 2001

Name	School/Parish
Brenda Clark	St. Margaret Mary
Julie Davis	St. Barnabas
Terri Lear	St. Patrick
Debbie McMurray	Most Blessed Sacrament
Missy Oakes	St. Nicholas
Patrice Payton	St. James
Colleen Pittman	St. Raphael
Kathy Shannon	St. Augustine

### Language Arts

July 2013

Grade Level	Name	School
Kindergarten	Amy Hall	St. Agnes
	Kathy Hoon	St. Nicholas
Grade One	Cindy Chevalier	St. Edward
	Elizabeth Furlong	Holy Spirit
Grade Two	Jennifer Miller	St. Gabriel
	Anne Perryman	St. Patrick
Grade Three	Paula Do	St. Francis of Assisi
	Carolyn Gnau	St. Margaret Mary
Grade Four	Kathleen Harren	Holy Spirit
	Julia Wright	St. Mary
Grade Five	Tracy Law	St. Martha
	Meredith Scherr	St. Gabriel
Grade Six	Amy Nguyen	St. Mary
	Karla Spencer	St. Raphael
Grade Seven	Amanda Brown	St. Athanasius
	Joyce Wicke	St. Margaret Mary
Grade Eight	Jessica Farrell	Nativity Academy
	Maureen Miller	John Paul II

**Mathematics****July 2009**

<b>Grade Level</b>	<b>Name</b>	<b>School</b>
Primary	Anne Bahr	St. Martha
	Cindy Chevalier	St. Edward
	Heather Cordaro	St. Nicholas
	Karen Ising	John Paul II
	Donna Kamer	St. Francis of Assisi
	Anne Perryman	St. Patrick
	Lisa Seidt	St. Nicholas
	Shannon Veal	St. Rita
Intermediate	Susan Argabright	St. Patrick
	Barbara Bowles	St. Rita
	Bobbie Brown	St. Martha
	Paula Do	St. Francis of Assisi
	Caroline Donnelly	St. Agnes
	Terri Lear	St. Patrick
	Emily Pratt	St. Andrew
	Denise Stead	Ascension
	Debbie Tucker	St. Rita
Middle School	Jeff Beavin	Our Lady of Lourdes
	Kathy Blanton	St. Andrew
	Karen DeNeve	St. Nicholas
	Martha Dodge	St. Nicholas
	Mary Ellen Doninger	St. Bernard
	Jan Fisch	St. Nicholas
	Inez Grider	St. Dominic
	Sheryl Kremer	St. Gabriel
	Karen Scharpf	St. Patrick
	Paula Watkins	St. Francis of Assisi

**Science****July 2016**

<b>Grade Level</b>	<b>Name</b>	<b>School</b>
Primary	Ann Colvin	St. Albert
	Kristen Kischnick	St. Margaret Mary
	Lara Krill	St. Michael
	Connie Whiteman	St. Joseph
Intermediate	Katrina Ballard	St. Joseph
	Dana Bale	St. Martha
	Katie Garrett	St. Joseph
	Linda Marvel	St. Patrick
	DeeDee Nauert	Notre Dame
	Christy Perkins	St. Martha
	Karen Spalding	St. Joseph
	Middle School	Mary Jo Brockie
Valerie Brooks		St. Joseph
Carolyn Hayden		St. Martha
Chris Huelsman		St. Gabriel
Lisa Platt		Our Lady of Lourdes
Linda Seewer		St. Michael
Jon Wiseman		St. Mary

**Social Studies****September 2016**

<b>Grade Level</b>	<b>Name</b>	<b>School</b>	
Primary	Lindsey Ackerman	Ascension	
	Kelsey Konermann	St. Gabriel	
	Jessica Rawe	St. Gabriel	
	Tara Brentzel	St. Mary	
	Cammie Burba	Notre Dame	
	Tina Chaput	St. Margaret Mary	
	Emily Dyar	St. Albert	
	Jennifer Miller	St. Gabriel	
	Connie Byers	St. Edward	
	Vicki Johnston	St. Andrew	
	Janelle Lim	St. Margaret Mary	
	Kimi Osting	Sacred Heart Model	
	Intermediate	Dana Bale	St. Martha
		Lisa Mattmiller	St. Gabriel
Angela Muller		Holy Trinity	
Patrice Payton		St. Athanasius	
Natalie Gassman		St. Athanasius	
Micki Hayden		St. Bernard	
Shawn Bond		St. Joseph	
Emily Brown		Ascension	
Cathy Duncanson		Notre Dame	
Staci Rampenthal	Sacred Heart Model		
Georgie Shannon	St. Athanasius		

**Social Studies (continued)****September 2016**

<b>Grade Level</b>	<b>Name</b>	<b>School</b>
Middle School	Kirk Eckstein	Our Lady of Lourdes
	Emily Flaugher	St. Edward
	Stephanie Hagan	St. Athanasius
	Tom Stephens	Ascension
	Michael Baete	St. Raphael
	Kim Conway	St. Joseph
	Pat Garr	St. Margaret Mary
	Sally Glacken	St. Patrick
	Janice Sullivan	St. Mary
	David Trueblood	St. Nicholas
	Kevin Mattingly	St. Andrew
	Maureen Miller	John Paul II
	Mark Probus	St. Gabriel
	Emily Slater	St. Agnes
	Susan Snyder	Sacred Heart Model
	Mike Zimmerman	St. Paul

**Pre-Kindergarten (4)****2015-2016**

<b>Position</b>	<b>Name</b>	<b>School</b>
Director	Valerie Shell.	Ascension
	Sharon Zdunek	St. Albert
Director and Teacher	Shirley Anderson	St. Mary
	Martha Gray	Holy Trinity
	Suzanne Stewart	St. Lawrence
Pre-K Teacher	Dawn Blair	St. Francis of Assisi
	Cindy Blaske	St. Mary
	Robin Hilpp	St. Lawrence
	Debbie Horan	St. Michael
	Terry McKiernan	Holy Spirit
	Kristin Roberts	St. Michael
	Mary Lynn Storrie	St. Michael
	Brenda U'Sellis	St. Francis of Assisi
Kindergarten Teacher	Susan Gilfert	John Paul II
	Cheryl House	St. Agnes
	Angela Krish	St. Joseph
	Monica Mills	St. Gregory
	Courtney Veit	St. Agnes
K-2 Reading Specialist	Morgan Wissing	Our Lady of Lourdes

**Foreign Language****July 2011**

<b>Name</b>	<b>School</b>
Susan Delk	St. Margaret Mary
Donna Jimenez	St. Michael
Nicolasa Menchu	St. Francis of Assisi
Laura Skowronski	St. Mary Acacemy

**Visual Arts****July 2010**

<b>Name</b>	<b>School</b>
Cathy Balbach	St. Gabriel
Laura Dant	St. Agnes / St. Francis of Assisi
Carey Given	Holy Trinity
Cheryl Sinclair	St. Athanasius
Jean Woodland	St. Michael

**Music/Performing Arts****July 2010**

<b>Name</b>	<b>School</b>
Marilyn Cross	St. Agnes
Gina Eberenz	St. Francis of Assisi
Niamh Lutes	St. Gabriel
Melanie Tipton	Holy Family / St. Rita
Karen Widener	St. Mary

**Physical Education****July 2009**

<b>Name</b>	<b>School</b>
Betsy Dragoo	St. Agnes
Vince Muchow	Holy Family / St. Albert / St. James
Teri Nelson	St. Margaret Mary
Lisa Smith	St. Barnabas
Amanda Stewart	St. Mary

## **Library Media**

**August 2009**

<b>Name</b>	<b>School</b>
Anne Bainbridge	St. Athanasius
Tammy Herbert	St. Gabriel
Angie Kalb	Mercy Academy
Adele Koch	St. Patrick
Susan Messerschmidt	St. Francis of Assisi
Elaine Whitehead	Ascension

## **Technology**

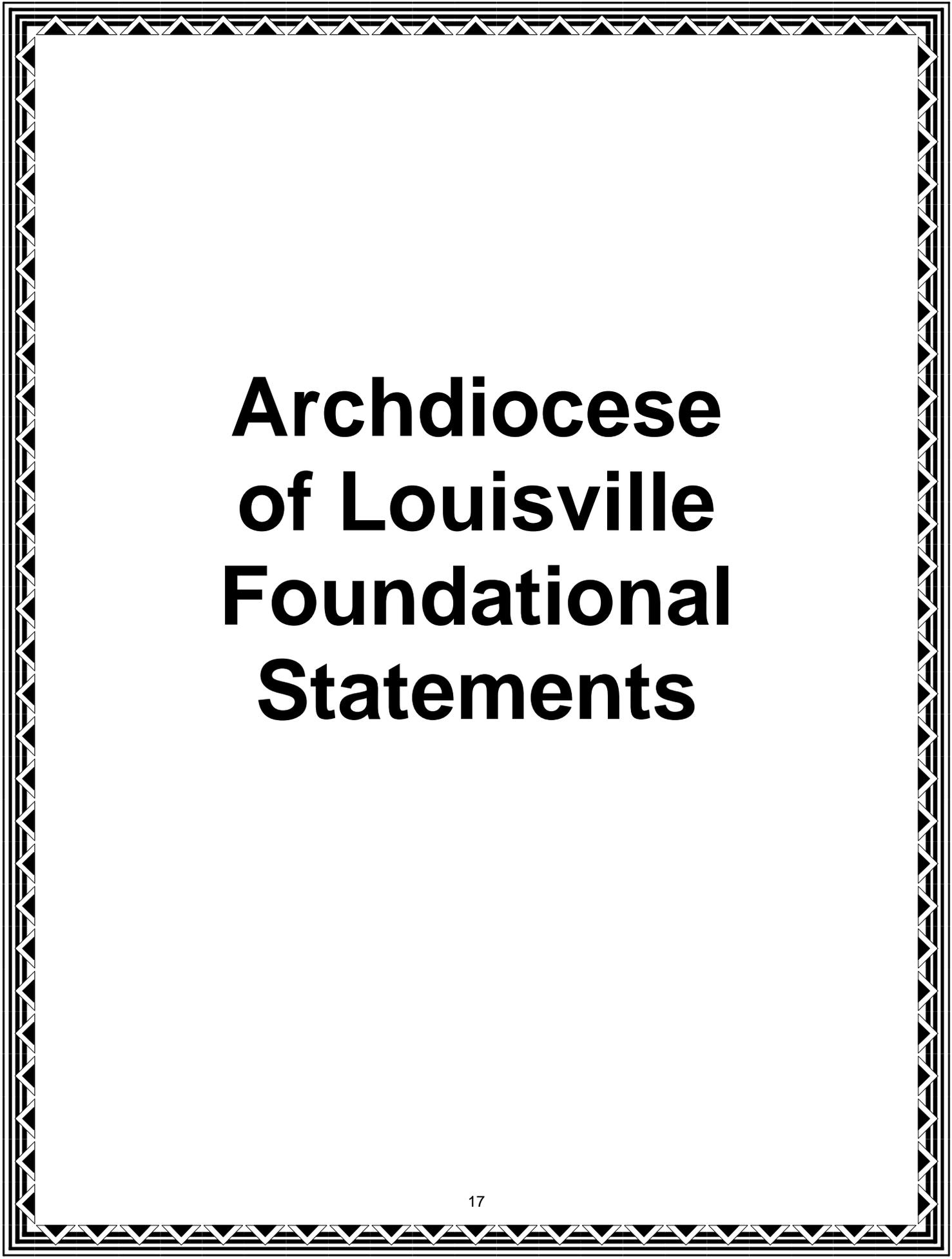
**August 2017**

<b>Name</b>	<b>School</b>
Mary Fichter	Sacred Heart Model School
Dee Dee Walsh	St. Margaret Mary School
Melinda Erickson	St. Francis of Assisi School
Pamela Raidt	St. Agnes School
Deica Brown	Saint Mary Academy
Catherine Giangarra	St. Patrick School
Sheryl Kremer	St. Gabriel School

Master teachers, such as those listed above, who are willing to take a position of leadership, promote meaningful and measurable change and opportunities for growth and improvement for all those who teach and learn in the Archdiocese of Louisville. We salute their efforts and hope they are an inspiration for others who might wish to serve, so the long tradition of excellence in education and continuous improvement for all professional learning communities will carry our students and schools, proudly and securely, through the 21<sup>st</sup> century.

Thanks and recognition is given to the Archdiocese of Louisville staff who gave their time and expertise to the success of this initiative. They are as follows:

- Superintendent of Schools – Leisa Schulz
- Assistant Superintendent of Schools – Mary Beth Bowling
- Curriculum Coordinator – Karen O’Connell and Kathleen Doyle
- Technology Curriculum Consultant – Donna Brown
- Coordinator of School Planning and Professional Development – Terry Crawley
- Faith Formation – Art Turner and Denise Puckett
- Administrative Assistant – Nancy Johnson



# **Archdiocese of Louisville Foundational Statements**

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# **MISSION AND VISION OF ARCHDIOCESE OF LOUISVILLE CATHOLIC SCHOOLS**

## **MISSION OF ARCHDIOCESE OF LOUISVILLE CATHOLIC SCHOOLS**

*The Catholic schools of the Archdiocese of Louisville exist to serve and engage young people in response to the call of Jesus Christ to “teach all nations.” In partnership with families and parishes, we seek to form our students, and through them, transform our world in light of the Gospel message. Our diverse community of schools, each with its own unique history, spirit, and tradition, prepares our graduates to live their faith as maturing adults and provide Christian leadership for Church and society.*

## **VISION OF ARCHDIOCESE OF LOUISVILLE CATHOLIC SCHOOLS**

*As stewards of Catholic education, our community of schools leads the way to a just and life-giving future without limits. Through collaboration, our faith and learning communities empower each other to learn our Catholic teachings, achieve academic excellence, embrace diversity, accept challenges, take risks, and seek God’s image in self and others. We are called to transform ourselves, one another, and the world through the Gospel of Jesus Christ in this complex time of rapid change.*

## **MISSION AND VISION OF ARCHDIOCESE OF LOUISVILLE CATHOLIC SCHOOLS**

With fidelity to this mission and vision, we provide:

- Living Faith – In-depth study of the teachings and traditions of the Catholic Church and opportunities for students to develop their personal relationships with God within caring faith communities.
- Inspiring Achievement – An exceptional academic experience that inspires excellence and achievement and fosters the lifelong pursuit of truth through self-disciplined habits of mind, body, and spirit.
- Celebrating Community – Communities of lifelong learners and believers who share responsibility for developing themselves to the fullest – intellectually, spiritually, emotionally, physically, and aesthetically – with appreciation for diverse individual gifts and challenges and respect for the common good.
- Embracing Service – People and programs that teach and promote the dignity of all people as children of God, especially those most in need, vulnerable, or neglected, by embracing service, justice, and compassion.

# **CURRICULUM MISSION AND VISION**

## **Curriculum Mission**

**The curriculum mission of the Archdiocese of Louisville is to develop and support exemplary Catholic education and faith formation through application of best practices in the teaching/learning process for all learners. This allows educators and students alike to reach their highest potential and carry out the mission of the Church.**

**This curriculum mission is accomplished by:**

- making collaborative curriculum decisions that encompass Catholic beliefs, traditions and values
- challenging schools, teachers, and all learners to reach their highest potential and function as Professional Learning Communities
- using research and best practice to provide a guide for curriculum and assessment that can be adapted and enhanced at the local school and parish level
- providing professional learning experiences that shape valuable initiatives and programs and guide teachers toward effective implementation of curriculum and assessment

## **Curriculum Vision**

**The curriculum vision of the Archdiocese of Louisville is to create professional learning communities that develop and support exemplary Catholic education with a focus on Catholic beliefs and continuous improvement in student and adult achievement and faith formation.**

**This curriculum vision is accomplished through:**

- the infusion of faith, principles, values, and social justice themes
- a collaborative model of decision-making and sharing of knowledge and resources
- Professional Learning Communities in which individuals and groups view themselves and function as learners
- application of best practices to all teaching/learning processes
- a comprehensive plan for curriculum and assessment adapted and implemented to meet all learners' needs
- professional learning experiences identified and provided to support appropriate curricular initiatives

# **CURRICULUM VALUES AND GOALS**

## **Curriculum Values**

In order to advance our vision of creating Professional Learning Communities that develop and support exemplary Catholic education, continuous faith formation, and improvement in student and adult achievement, the curriculum values are:

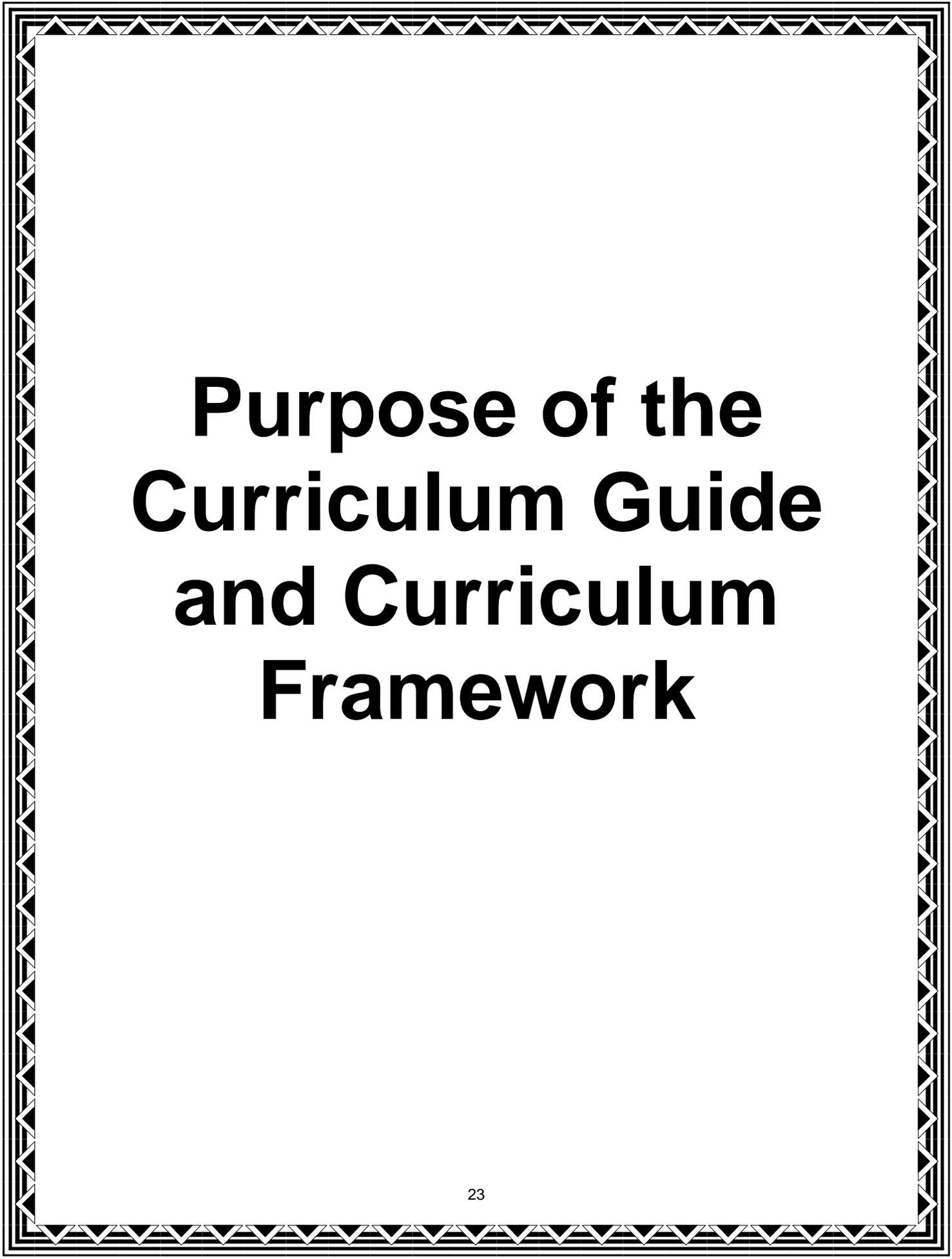
- Catholic beliefs, traditions, and values
- the foundations and practices of Professional Learning Communities
- respect and support for the individuality and the potential of all learners
- best practices in all teaching/learning processes
- collaborative decision-making
- purposeful, data driven curriculum development and assessment
- multiple approaches and strategies for differentiation in curriculum practices and initiatives
- valuable and effective professional learning experiences to shape and support curricular initiatives

## **Curriculum Goals**

In order to advance our vision, our goals are to:

- make curriculum decisions based on Catholic beliefs, traditions, and values
- implement the foundations and practices of Professional Learning Communities
- engage in collaborative decision-making
- implement multiple and effective curriculum practice and initiatives to invite and engage all learners
- continue the development of a guide for curriculum and assessment with specific, clearly stated and challenging learning goals and standards for all learners
- assist schools and parishes with curriculum development and assessment plans that focus on student and adult learning as the ultimate goal
- engage in systemic analysis, goal setting, and data driven refinement of curriculum documents, programs, and practices to focus on and monitor continuous improvement
- provide quality and continuous professional learning experiences to shape and support curricular initiatives

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# **Purpose of the Curriculum Guide and Curriculum Framework**

# PURPOSE OF THE CURRICULUM GUIDE AND CURRICULUM FRAMEWORK

*The Archdiocese of Louisville Curriculum Guide is designed as a reference for administrators, teachers, and the community. The handbook contains foundational statements, such as curriculum mission, vision, values, and goals, which bring direction and cohesiveness to curriculum planning and development in Catholic schools. Broad-spectrum components of the guide, and part of the curriculum framework, are the Academic Expectations and Learning Goals which are exit outcomes aligned with standards.*

## How to Use the Curriculum Framework

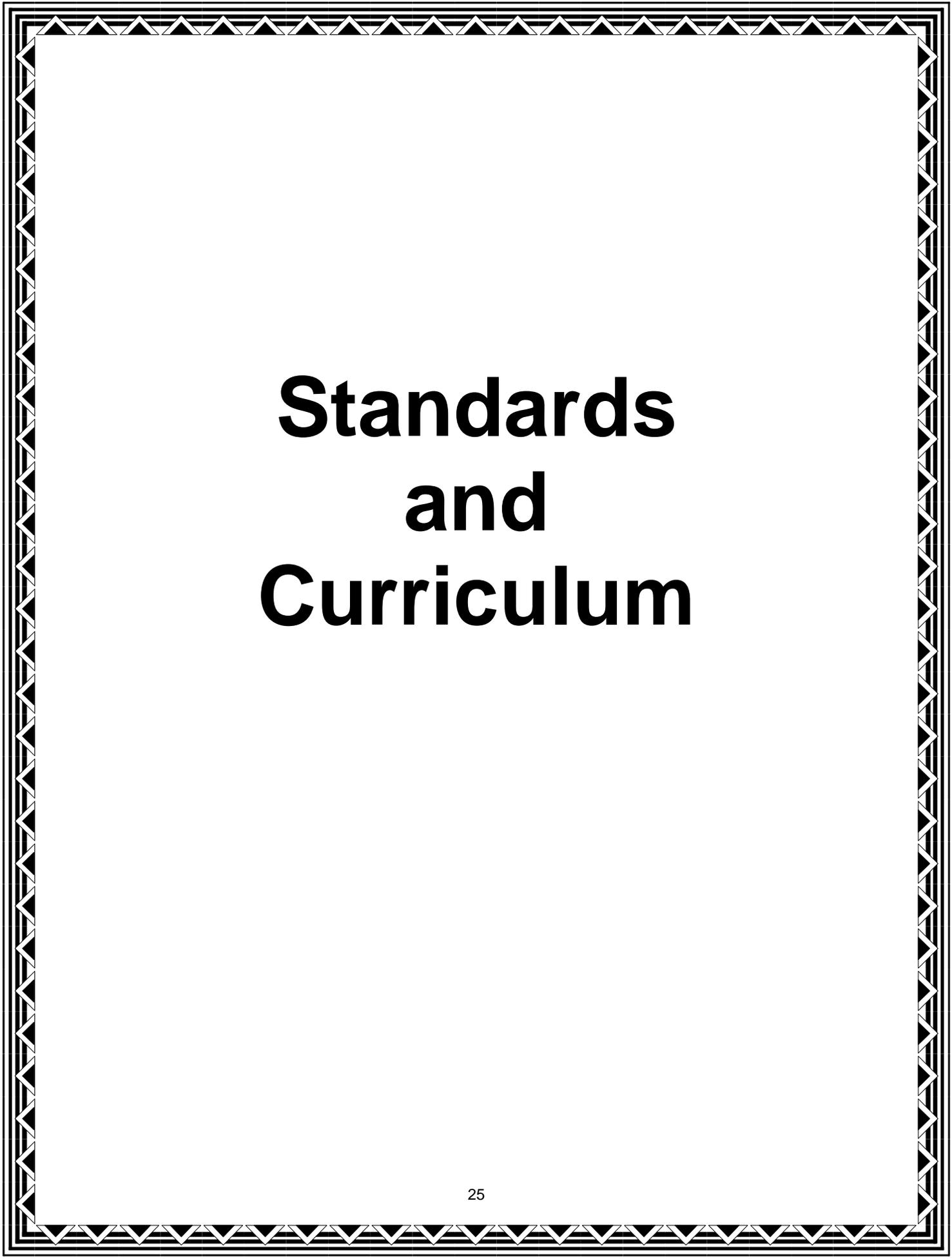
The Guide and its components **are** designed to direct and assist by:

- stating publicly the standards, objectives, philosophies, and practices of Catholic education
- documenting the curriculum development process in the Archdiocese of Louisville
- providing a framework as a basis for cohesiveness in curriculum design, assessment, and implementation throughout Catholic schools
- providing a framework that offers structure, in tandem with local autonomy, throughout the curriculum decision-making process
- providing a “core content” that can be “taught” with the goal of mastery/proficiency for all students
- providing an overview of and reference to documents and practices that are currently in place in the Archdiocese of Louisville
- providing broad guidelines for introduction, development, and mastery of knowledge and skills through use of the performance standards
- suggesting opportunities for integration and application of technology and library media skills into the content areas
- providing a resource for administrators to use when supporting teachers and setting professional goals in conjunction with the Professional Growth Plan
- providing direction for all teachers, including beginning teachers or teachers who are new to Catholic education
- guiding teachers in the process of selecting material in textbooks that support the archdiocesan standards and incorporating other resource materials in order to effectively focus on critical content and concepts to be included in the local curriculum

## How Not to Use the Curriculum Framework

The Guide and its components **are not** designed to direct and assist teachers with:

- a complete “checklist” of content to “cover” because content is to be addressed and taught in a variety of contexts
- the answers to all curriculum decisions because teachers should retain their autonomy to make decisions based on student needs and the curriculum
- a specific local scope and sequence for all grades/levels because local schools need to confer/collaborate to make these final decisions based on student’s needs and available resources, while using the curriculum framework as the guide
- “breaking down” more specific understandings, skills, and processes for each unit and lesson because the classroom teacher makes those decisions based on student needs and the curriculum
- aligning content directly with standardized tests, because standardized tests are designed to be a “moving target” and to test items above and below grade level
- lists of teaching strategies to teach specific concepts, content, topics, skills, and processes because the classroom teacher makes those decisions, based on student needs and learning styles
- specific suggestions for intra/interdisciplinary integration and connections because the classroom teacher needs to determine these opportunities based upon available resources



# **Standards and Curriculum**

# CATHOLIC SCHOOL STANDARDS

The mission of Catholic schools is to educate the whole child – mind, body, and spirit – by providing an excellent education rooted in Gospel values, beliefs, and principles. The *National Standards and Benchmarks for Effective Catholic Elementary and Secondary Schools* was created by leaders in Catholic education to provide Catholic schools with characteristics, standards, and benchmarks to guide their work.

The characteristics define the deep Catholic identity of Catholic schools and serve as a platform on which the standards and benchmarks rest. The defining characteristics authenticate the standards and benchmarks, justifying their existence and providing their meaning.

The defining characteristics of Catholic schools include:

- Centered in the Person of Jesus Christ
- Contributing to the Evangelizing Mission of the Church
- Distinguished by Excellence
- Committed to Educate the Whole Child
- Steeped in a Catholic Worldview
- Sustained by Gospel Witness
- Shaped by Communion and Community
- Accessible to All Students
- Established by the Expressed Authority of the Bishop

The standards describe policies, programs, structures, and processes that should be present in mission-driven, program effective, well-managed, and responsibly governed Catholic schools that operate in concert with the defining characteristics. The standards address four domains: Mission and Catholic Identity, Governance and Leadership, Academic Excellence, and Operational Vitality.

The benchmarks provide observable, measurable descriptors for each standard. Benchmarks provide a solid basis for future development of more detailed self-assessment and diagnostic instruments, data collection and reporting structures, and accreditation tools, as appropriate at the local, diocesan, regional, and national levels.

The *National Standards and Benchmarks for Effective Catholic Elementary and Secondary Schools* will provide the standards framework to guide mission, Catholic identity, governance and leadership, academic excellence, and operational vitality in Catholic schools in the Archdiocese of Louisville.

For further information or to view the *National Standards and Benchmarks for Effective Catholic Elementary and Secondary Schools*, visit the Catholic Schools Standards Project website at [www.catholicschoolstandards.org](http://www.catholicschoolstandards.org).

# STANDARDS AND CURRICULUM

The Archdiocese of Louisville embraces a dual mission of faith formation and academic excellence. This is accomplished through the application of best practices in the teaching and learning process in support of our Catholic identity.

*The Archdiocese of Louisville Curriculum Frameworks*, created by teams of content area teachers in 2002 and updated on an established cycle, contain performance standards which represent a cohesive set of expectations for all students. These standards define the expected learning objectives as well as the ways students will demonstrate their knowledge and understanding of the essential concepts and skills for each grade level in a particular content area. The Archdiocese of Louisville, in collaboration with principals and educators, identifies research-based pedagogy, best practices, assessments, instructional materials, technology, and professional learning opportunities that support the implementation of these standards.

A school's curriculum outlines when the concepts and skills specified in the standards will be taught, the pacing and overall sequencing, how the learning will take place, and the resources that will be utilized. The curriculum also includes the multiple formative and summative assessment measures used to determine student progress toward meeting the standards.

Curricular decisions are made by principals and educators within the school. Principals and school leaders decide on the use of instructional time, instructional materials, resources, programs, etc., for their schools. Teachers decide upon strategies, resources from textbooks and instructional materials, lessons, and projects in order to optimize learning and meet the individual needs of the students. Through written lesson and unit plans, teachers document these decisions. The principal verifies the expected teaching and learning.

# 21<sup>st</sup> CENTURY SKILLS AND THE ARCHDIOCESE OF LOUISVILLE

Archdiocese of Louisville Catholic schools, in partnership with parents, provide a Christ-centered education that prepares students for an ever-changing world. This education cultivates a learning environment that includes the 21<sup>st</sup> century skills of critical thinking, communication, collaboration, and creativity and that fosters the principles of compassion, self-efficacy, resiliency, and global awareness. Thus, students of all ages are empowered to successfully navigate academic, digital, artistic, and interpersonal realms leading to the pursuit of lifelong learning and community engagement.

In the Archdiocese of Louisville, we define the five C's of 21<sup>st</sup> century learning in the following way:

**Catholic Identity**—To be centered in the person of Jesus Christ, students must know their faith, participate in liturgical and communal prayer, and take action in service of social justice. They must be steeped in the Catholic worldview, sustained by Gospel witness, and contribute to the evangelizing mission of the Church.

**Critical Thinking** – To be effective critical thinkers and problem solvers, students must interpret, analyze, and evaluate information. They must make connections and consider evidence before reaching conclusions. They must be able to use their reasoning skills and adapt to constant change.

**Communication** – To be effective communicators, students must express thoughts clearly for a variety of purposes and a variety of audiences. They must be able to use oral and written skills as well as a range of media and technologies to convey information. They must be active listeners who are able to discern meaning and nuance from oral and written information.

**Collaboration** – To be effective collaborators, students must be adaptable and able to work with a group or partner. They must be able to negotiate and make compromises when necessary. They must be able to offer ideas and options and share responsibility for the work of the group. They must be willing to consider different perspectives.

**Creativity** – To exhibit creativity in their learning, students must develop and incorporate new ideas. They must evaluate and refine existing ideas and demonstrate originality. They must be able to communicate their original ideas using a variety of creative techniques.

# Standards

# OVERVIEW

Standards, curriculum, instructional materials, and teaching/learning practices must align in order to be effective. This cohesiveness allows for consistent student performance, transfer of knowledge, deep understanding of essential concepts, and application of skills in order to serve all learners in an equitable manner. Implementation of standards is most crucial at the classroom level, which is where the use of standards can lead to the most significant change in student achievement. A thorough understanding of standards in content areas is a critical part of any teacher's basic knowledge and should be embedded into the design, assessment, and implementation process within each school and classroom. Opportunities for teachers to study, reflect, and openly discuss the teaching/learning process and how it relates to standards is necessary to the success of the use of standards.

## National Standards

In 1987, The National Council of Teachers of Mathematics was the first national group to create standards for developing curriculum and assessment. Currently, standards are in place for all content areas included in a comprehensive school curriculum.

Standards are available and easily obtainable for the following content areas:

- Language Arts
- Mathematics
- Science
- Social Studies
  - History
  - Civics
  - Economics
  - Geography
- Physical Education
- Health
- The Arts
  - Music and Theater
  - Visual Arts
- Foreign Language

Schools should house current copies of standards, and teachers should be given opportunities to become familiar with them and to utilize them when planning and throughout the teaching/learning process.

## National Organizations

<b>Content Area</b>	<b>Organization</b>
Language Arts	National Council of Teachers of English and International Reading Association (NCTE/IRA)
Mathematics	National Council of Teachers of Mathematics (NCTM)
Science	National Science Teachers Association (NSTA) and National Academy of Sciences (NAS)
Social Studies	National Council for the Social Studies (NCSS)
History	National Center for History in the Schools (NCHS)
Civics	Center for Civic Education
Economics	Council for Economic Education (CEE)
Geography	National Council for Geographic Education (NCGE)
Physical Education	Society of Health and Physical Educators-SHAPE America
Health	National Center for Chronic Disease Prevention and Health Promotion (CDC)
Music and Theater	National Association for Music Education (MENC)
Visual Arts	Consortium of National Arts Education Association
Foreign Language	American Council on the Teaching of Foreign Languages (ACTFL)

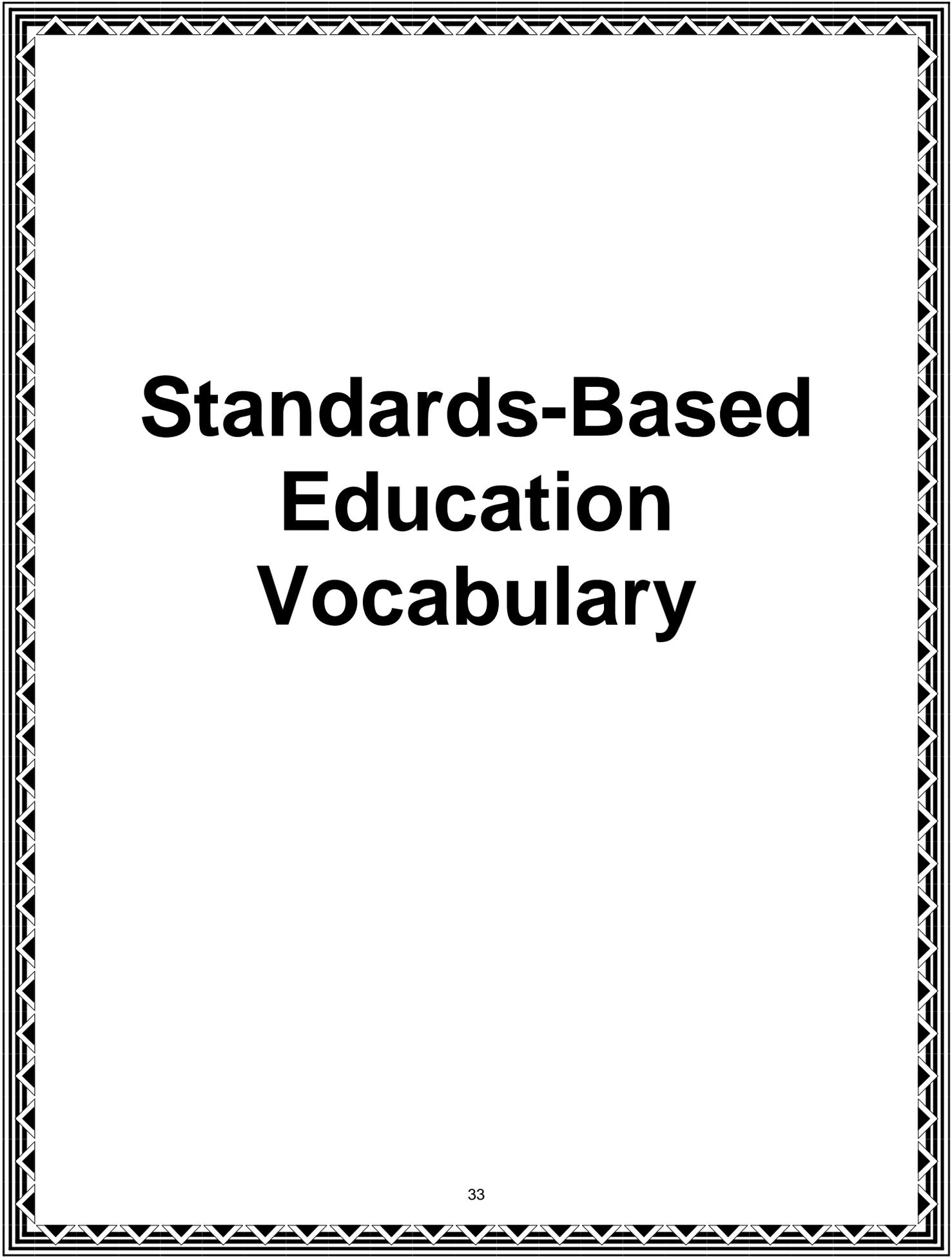
# Kentucky Department of Education

The Archdiocese of Louisville Curriculum Framework is also aligned with Kentucky Department of Education curricular documents. Following is a brief description of the KDE documents to clarify their purpose and to assist in the use of the documents and the connections to the Archdiocese of Louisville Curriculum Framework.

**Kentucky Core Academic Standards** – The Kentucky Core Academic Standards outline the minimum content required for all students before graduation from a public high school in the state of Kentucky. The document specifies the content for the required credits for high school graduation, as well as primary, intermediate, and middle-school programs leading to these requirements. The Kentucky Core Academic Standards most directly affect Catholic high schools because of the relationship to graduation requirements and specific course content. Generally all Catholic schools far exceed these minimum requirements within their academic curricular programs.

**Learning Goals and Academic Expectations** – Kentucky has six broad-based Learning Goals that serve as exit outcomes and are more fully detailed through the fifty-seven Academic Expectations. The Academic Expectations are **content standards** that describe what students should know and be able to do in a variety of content areas. The Academic Expectations help teachers by providing a major focus for developing local curriculum and should be part of all curriculum planning.

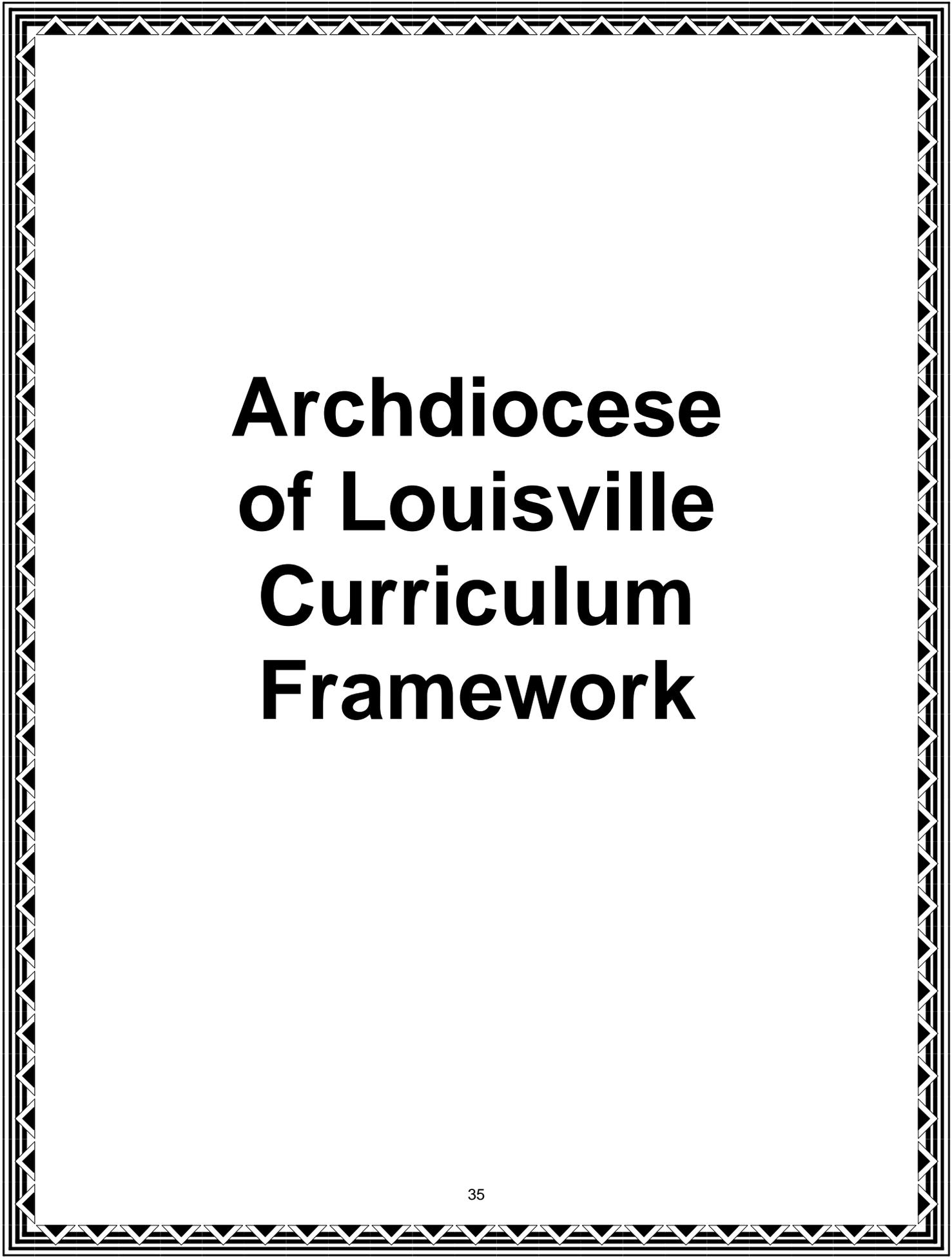
The Kentucky Core Academic Standards and the Kentucky Learning Goals and Academic Expectations can be accessed on the KDE web site at [education.ky.gov](http://education.ky.gov).



# **Standards-Based Education Vocabulary**

# STANDARDS-BASED EDUCATION VOCABULARY

1. Standards-Based Education – a model for organizing education into sets of criteria to measure what students know and are able to do in relation to the desired knowledge and skills and not in relation to one another.
2. Standards – models for organizing knowledge and skills in specific content areas into broad criteria.
3. Content Standards – description of the knowledge and skills expected of students at certain stages in their education (what students should know and be able to do).
4. Performance Standards – written standards that can be measured and may describe the levels of performance (on tasks) that students must achieve to demonstrate that they have met the content standards or their placement on the continuum for achieving them - may be broad or specific in nature.
5. Kentucky Academic Standards – guidelines mandated by law that outline the minimum content requirement, based on the Learning Goals and Academic Expectations, for all students before graduation from a high school in the state of Kentucky.
6. Learning Goals – six/seven broad-based exit outcomes for all students in the state of Kentucky, including the Archdiocese of Louisville.
7. Curriculum Framework – a set of written statements in the form of a plan for teachers to use as a resource when designing and delivering the school- or classroom-based curriculum; serves as a bridge between standards and local curriculum.
8. Curriculum – the full set of features, components, situations, and experiences of the educational (teaching/learning) environment, e.g., goals, strategies, exit outcomes, pacing and overall sequencing, resources, programs, activities).
9. Local Curriculum – the school- or classroom-based set of teaching and learning statements (plan) of the educational environment, including content, scope and sequence, features, situations, and experiences that connect to the curriculum framework and standards.



# **Archdiocese of Louisville Curriculum Framework**

# INTRODUCTION

The purpose of curriculum is to focus and connect the work of classroom teachers. **Curriculum is a means to an end and not an end in itself.**

## Curriculum Framework

The Archdiocese of Louisville Curriculum Framework is a written plan for teachers to use as a resource when designing and delivering the school/classroom-based curricula to students and serves as a bridge to ensure that students progress toward meeting the standards, Learning Goals, and Academic Expectations. The framework is designed to effect change by building capacity and empowering schools to create professional learning communities that keep curriculum design, development, and delivery at the forefront of the daily business of educating students.

A **curriculum framework** provides parameters and guidelines for the development of the school and classroom curriculum. It also provides an opportunity for many choices by the classroom teacher. The curriculum framework is designed to support the creative and self-directed process of local curriculum design, development, and implementation. A curriculum framework allows for various approaches to sequencing, organization, and strategies depending upon student needs and learning styles. All the while, the educator continues to use the framework to establish the outer limits and set direction and standards for design, assessment, and implementation. **A curriculum framework is used to develop, but is not, the local school/classroom curriculum, and it is not a curriculum checklist.**

## **Components of the Archdiocesan Curriculum Framework**

The Archdiocesan Curriculum Framework is aligned with and guides learners toward the knowledge, skills, and processes embedded in standards and the Archdiocesan Learning Goals and Academic Expectations (adapted from KDE). The components of the various content area frameworks include:

- Learning Goals and Academic Expectations
- Essential Understandings
- Guided Questions
- Content Guidelines
- Anchor Standards
- Performance Standards
- Examples of Formative and Summative Assessment
- Examples of Applications for Technology and Library Media

Content Guidelines and Performance Standards or Standards are available in the following areas:

- Religion
- Language Arts
- Mathematics
- Science
- Social Studies
- Pre-Kindergarten(4)
- Foreign Language
- Visual Arts
- Music/Performing Arts
- Physical Education
- Library Media
- Technology

### **Learning Goals and Academic Expectations**

The Learning Goals provide broad-based outcomes (desired end-results) that connect to the content standards (what students should know and be able to do). They are more fully stated through the Archdiocesan Academic Expectations. The content standards begin the process of “unraveling” the goals so teachers can assist students in meeting the Learning Goals. Academic Expectations help teachers by providing a major focus for developing local curriculum and should be part of all curriculum planning. Teachers need to be proficient in their knowledge of the Learning Goals and Academic Expectations. The Archdiocesan Learning Goals and Academic Expectations are directly aligned with the KDE Learning Goals and Academic Expectations. The difference is the addition of language that puts them in the context of Catholic education. Also, the Archdiocesan Academic Expectations include religious studies as a content area under Goal Two and as a broad-based curriculum goal through the creation of Goal Seven – *Students are able to apply the learning of Catholic teachings to everyday living.*

## **Essential Understandings**

The Essential Understandings focus on critical concepts or understandings that are embedded in the Content Guidelines. They provide insight into the big ideas or concepts that students must understand, not just know. They correlate with the Academic Expectations.

## **Guided Questions**

The Guided Questions correlate with the Essential Understandings. They provide the questions students should be answering as a result of the learning that is taking place.

## **Content Guidelines**

The Content Guidelines detail the essential concepts and skills for each grade level. They are designed to be used in conjunction with the Archdiocesan Learning Goals and Academic Expectations.

The Content Guidelines apply the mastery or core curriculum approach. They also help in the further “unraveling” of the Learning Goals and Academic Expectations. The mastery curriculum narrows the scope and sequence, which gives guidance and direction to teachers as they make decisions regarding the concepts, skills, and strategies found in instructional resources, especially textbooks. It also facilitates in-depth study and problem solving and allows time for attention to individual student needs.

## **Performance Standards, Performance Expectations, and Standards**

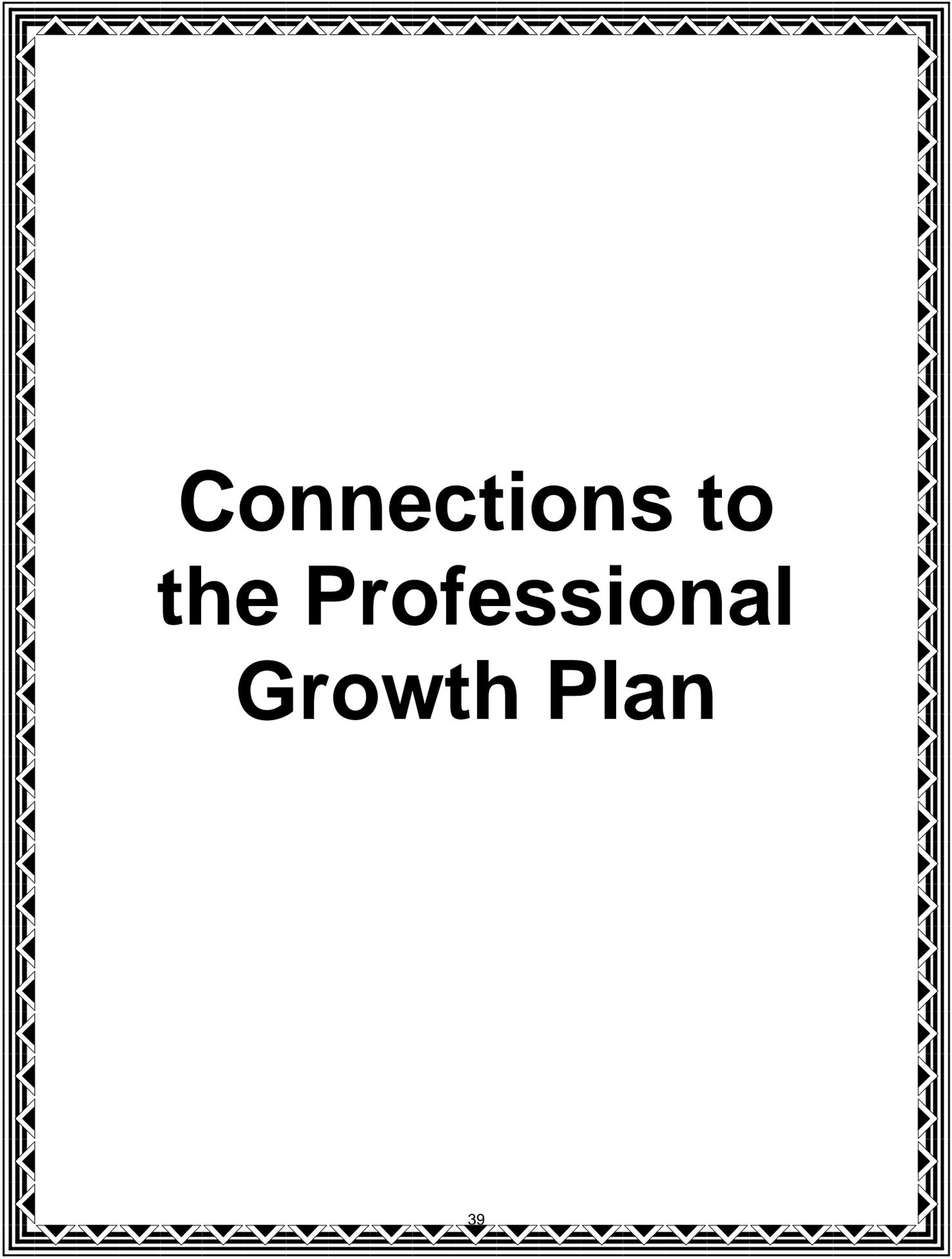
The Performance Standards, Performance Expectations, and Standards found in the content area curriculum frameworks outline expected learning and the ways students will demonstrate that learning. The Performance Standards, Performance Expectations, and Standards determine how the teacher will know that students have learned expected concepts and skills (what students should know and be able to do as a result of the learning).

## **Examples of Formative and Summative Assessment**

The Examples of Formative and Summative Assessment section offers suggestions for a holistic approach to assessment using a variety of assessment measures including pre- and post-assessment, performance events, and other types of assessment.

## **Examples of Applications of Technology and Library Media**

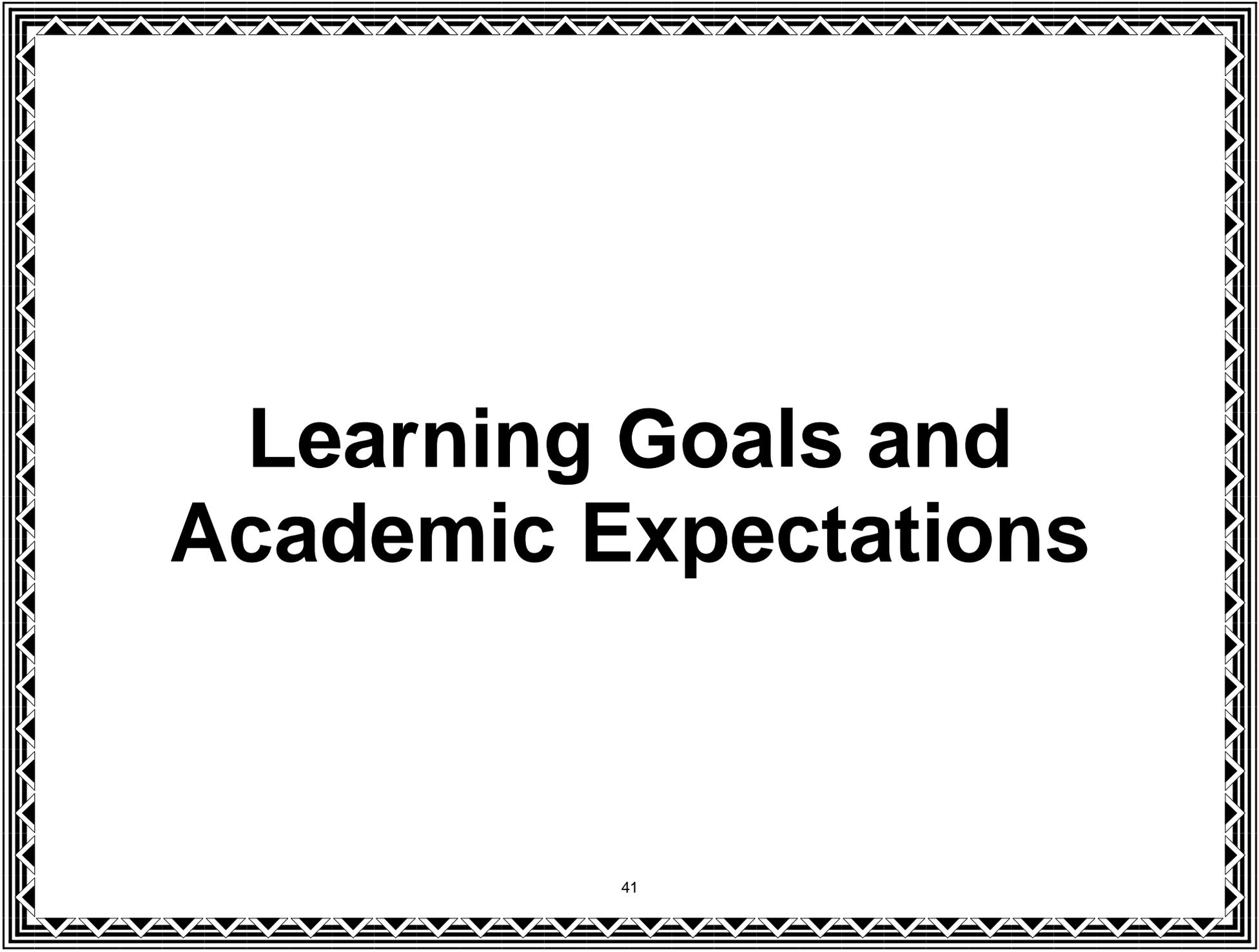
The Examples of Applications of Technology and Library Media section offers suggestions for the incorporation of technology and library media into all areas of the curriculum.



# **Connections to the Professional Growth Plan**

## **CONNECTIONS TO THE PROFESSIONAL GROWTH PLAN**

Professional Learning Communities operate with the expectation that all members (principals, teachers, and students) are lifelong learners. Professional Learning Communities also have a belief and an understanding that the on-going learning process is critical to teacher effectiveness and increased student achievement. In the Archdiocese of Louisville, to assist principals and teachers with assessment of the adult learning and goal setting process, the Professional Growth Plan (PGP) was developed. All of the areas in the Professional Growth Plan relate directly to assessing a teacher's willingness to learn and ability to understand, implement, and assess a standards/performance-based curriculum. The Professional Growth Plan is an excellent vehicle for principals to use in affirming a teacher's successes and in identifying areas for growth in regard to the level of acceptance and application of standards- and performance-based educational approaches.



# **Learning Goals and Academic Expectations**

## Archdiocese of Louisville Learning Goals and Academic Expectations

### Philosophy/Pedagogy

The Learning Goals and Academic Expectations are academic standards that describe the knowledge, skills, processes, and habits of mind expected of all students graduating from a Catholic school in the Archdiocese of Louisville. The Learning Goals and Academic Expectations for the Archdiocese of Louisville are adapted from the Kentucky Department of Education document, "Transformations: Kentucky's Curriculum Framework." The Learning Goals and Academic Expectations provide purpose, direction, and guidance for school-based curriculum development and planning. Teachers are expected to design curriculum, prepare educational activities, and align implementation and assessment in order to ensure that every child meets the standards in the Learning Goals and Academic Expectations by the end of their K - 12 educational experience.

### Format

The Learning Goals and Academic Expectations contain the same content and focus as the KDE document, but have been adapted and expanded for use in Catholic education. It is important to note that Religious Studies components have been added to Goal Two to address the content so important to Catholic schools. Goal Seven has been added to include the Catholic Identity component of our curriculum, providing our faith-based foundation which makes attending a Catholic school unique. The standards in Goal Seven must be modeled and nurtured in all that we do in Catholic education.

### Goal 1

<b>Goal One: Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.</b>				
1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.	1.4 Students make sense of the various messages to which they listen.	1.10 Students organize information through development and use of classification rules and systems.	1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.	1.15 Students make sense of and communicate ideas with movement.
1.2 Students make sense of the variety of materials they read.	1.5–1.9 Students use mathematical ideas and procedures to communicate, reason, and solve problems.	1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.	1.13 Students make sense of and communicate ideas with the visual arts.	1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.
1.3 Students make sense of the various things they observe.			1.14 Students make sense of and communicate ideas with music.	

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 2**

<b><i>Goal Two: Students shall develop their abilities to apply core concepts and principles from religious education, the sciences, mathematics, social studies, the arts, the humanities, practical living studies, and vocational studies to what they will encounter throughout their lives.</i></b>					
<b>SCIENCE</b>	<b>MATHEMATICS</b>	<b>SOCIAL STUDIES</b>	<b>ARTS AND HUMANITIES</b>	<b>PRACTICAL LIVING</b>	<b>VOCATIONAL STUDIES</b>
2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems.	2.7 Students understand number concepts and use numbers appropriately and accurately.	2.14 Students understand the democratic principles of justice, equality, responsibility, and freedom and apply them to real-life situations.	2.22 Students create works of art and make presentations to convey a point of view.	2.29 Students demonstrate skills that promote individual well-being and healthy family relationships.	2.36 Students use strategies for choosing and preparing for a career.
2.2 Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.	2.8 Students understand various mathematical procedures and use them appropriately and accurately.	2.15 Students accurately describe various forms of government and analyze issues that relate to the rights and responsibilities of citizens in a democracy.	2.23 Students analyze their own and others' artistic products and performances using accepted standards.	2.30 Students evaluate consumer products and services and make effective consumer decisions.	2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.
2.3 Students identify and analyze systems and the ways their components work together or affect each other.	2.9 Students understand space and dimensionality concepts and use them appropriately and accurately.	2.16 Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.	2.24 Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.	2.31 Students demonstrate the knowledge and skills they need to remain physically healthy and to accept responsibility for their own physical well-being.	2.38 Students demonstrate skills such as interviewing, writing resumes, and completing applications that are needed to be accepted into college or other post-secondary training or to get a job.

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 2**

<b><i>Goal Two: Students shall develop their abilities to apply core concepts and principles from religious education, the sciences, mathematics, social studies, the arts, the humanities, practical living studies, and vocational studies to what they will encounter throughout their lives.</i></b>					
<b>SCIENCE</b>	<b>MATHEMATICS</b>	<b>SOCIAL STUDIES</b>	<b>ARTS AND HUMANITIES</b>	<b>PRACTICAL LIVING</b>	<b>VOCATIONAL STUDIES</b>
2.4 Students use the concept of scale and scientific models to explain the organization and functioning of living and non-living things and predict other characteristics that might be observed.	2.10 Students understand measurement concepts and use measurements appropriately and accurately.	2.17 Students interact effectively and work cooperatively with the many ethnic and cultural groups of our nation and world.	2.25 In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities, languages, literature, and history.	2.32 Students demonstrate strategies for becoming and remaining mentally and emotionally healthy.	
2.5 Students understand that under certain conditions nature tends to remain the same or move toward a balance.	2.11 Students understand mathematical change concepts and use them appropriately and accurately.	2.18 Students understand economic principles and are able to make economic decisions that have consequences in daily living.	2.26 Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.	2.33 Students demonstrate the skills to evaluate and use services and resources available in their community.	
2.6 Students understand how living and non-living things change over time and the factors that influence the changes.	2.12 Students understand mathematical structure concepts, including the properties and logic of various mathematical systems.	2.19 Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.	2.27 Students recognize and understand the similarities and differences among languages.	2.34 Students perform physical movement skills effectively in a variety of settings.	

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 2**

<b><i>Goal Two: Students shall develop their abilities to apply core concepts and principles from religious education, the sciences, mathematics, social studies, the arts, the humanities, practical living studies, and vocational studies to what they will encounter throughout their lives.</i></b>					
<b>SCIENCE</b>	<b>MATHEMATICS</b>	<b>SOCIAL STUDIES</b>	<b>ARTS AND HUMANITIES</b>	<b>PRACTICAL LIVING</b>	<b>VOCATIONAL STUDIES</b>
	2.13 Students understand and appropriately use statistics and probability.	2.20 Students understand, analyze, and interpret historical events, conditions, trends, and issues to develop historical perspective.	2.28 Students understand and communicate in a second language.	2.35 Students demonstrate knowledge and skills that promote involvement in physical activity throughout their lives.	

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 2**

<b>RELIGIOUS STUDIES</b>				
2.39 Students demonstrate an understanding of God as creator of all things.	2.45 Students recognize that through Jesus, God established a relationship of particular intimacy with us.	2.51 Students identify the context of the Scriptures and their role in the development of the Church.	2.57 Students demonstrate the ability to apply the commandment of love by making life decisions within the Christian moral framework.	2.63 Students demonstrate the importance of sacraments, with an emphasis on centrality of the Eucharist, in the life of Catholics.
2.40 Students understand the human person as imaging God.	2.46 Students demonstrate an understanding of the Holy Spirit as being the Spirit of God who reveals God and makes Christ known to us.	2.52 Students articulate the nature of tradition and its role in the development of the Church.	2.58 Students demonstrate an understanding of the relationship between faith and culture as it is found in the arts, sciences, and technology.	2.64 Students demonstrate recognition of the sacredness of time through the celebration of the Hours, the liturgical seasons, and special feasts and days.
2.41 Students recognize the Inter-connectedness of humans with all creation.	2.47 Students articulate an understanding of the Holy Spirit as the one who awakens us to faith.	2.53 Students articulate the nature of sacrament and sacramentality and their role in the development of the People of God.	2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.	2.65 Students demonstrate an understanding of Christ's command to love and serve one another.
2.42 Students recognize the call to continuing creation by further developing the Kingdom of God.	2.48 Students articulate an understanding of the Holy Spirit as the vibrant presence of God in the Church and the world.	2.54 Students illustrate a basic understanding of the documentary tradition of the universal, national, and local Church.	2.60 Students exercise responsible stewardship toward all creation.	2.66 Students engage in service to the community in response to the Gospel call.
2.43 Students articulate an understanding of the Incarnation: the Word of God enfleshed in Jesus Christ.	2.49 Students identify the covenants revealed in the Scriptures as extending to all creation.	2.55 Students illustrate a basic understanding of the history of the Church.	2.61 Students examine the variety of Christian lifestyles as ways of responding to the Baptismal call to a life of service.	2.67 Students critique societal structures in the light of Catholic social justice principles.
2.44 Students articulate an understanding of Christ's life, death, and resurrection as the distinctive sign of Christian faith.	2.50 Students demonstrate an understanding of active participation in a community of faith.	2.56 Students demonstrate an understanding of the Paschal mystery and the various ways it is encountered in daily living.	2.62 Students demonstrate an understanding of different ways of relating to God in prayer, on a personal level, and in community.	2.68 Students acknowledge the diverse cultural expressions of Catholicism.

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 3-7**

Goal Three	Goal Four	Goal Five	Goal Six	Goal Seven	
<i>Students shall develop their abilities to become self-sufficient individuals, who are dependent upon God.</i>	<i>Students shall develop their abilities to become responsible members of a family, work group, church, or community, including demonstrating effectiveness in community service.</i>	<i>Students shall develop their abilities to think and solve problems based upon Christian values in a variety of situations they will encounter in life.</i>	<i>Students shall develop their abilities to connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources.</i>	<i>Students are able to apply the understanding of Catholic teachings to everyday living.</i>	
3.1 Students demonstrate positive growth in self-concept through appropriate tasks or projects.	4.1 Students effectively use interpersonal skills.	5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.	6.1 Students connect knowledge and experiences from different subject areas.	7.1 Students practice respect and care for all creation seeing it as a gift of God's love.	7.7 Students demonstrate different ways of relating to God in prayer on a personal level and in community.
3.2 Students demonstrate the ability to maintain a healthy lifestyle.	4.2 Students use productive team membership skills.	5.2 Students use creative thinking skills to develop or invent novel, constructive ideas or products.	6.2 Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.	7.2 Students integrate Christ's life, death, and resurrection, the distinctive sign of Christian faith, into their life experiences.	7.8 Students engage in Christ's command to love and serve one another.
3.3 Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.	4.3 Students individually demonstrate consistent, responsive, and caring behavior.	5.3 Students organize information to develop or change their understanding of a concept.	6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.	7.3 Students develop a sense of the movement of the Spirit in one's life.	7.9 Students affirm the diverse cultural expressions of Catholicism.
3.4 Students demonstrate the ability to be resourceful and creative.	4.4 Students demonstrate the ability to accept the rights and responsibilities for self and others.	5.4 Students use a decision-making process to make informed decisions among options.		7.4 Students participate actively in a community of faith.	7.10 Students apply Catholic social justice principles in social and personal situations.

Archdiocese of Louisville  
**Learning Goals and Academic Expectations**  
**Goal 3-7**

Goal Three	Goal Four	Goal Five	Goal Six	Goal Seven	
<i>Students shall develop their abilities to become self-sufficient individuals, who are dependent upon God.</i>	<i>Students shall develop their abilities to become responsible members of a family, work group, church, or community, including demonstrating effectiveness in community service.</i>	<i>Students shall develop their abilities to think and solve problems based upon Christian values in a variety of situations they will encounter in life.</i>	<i>Students shall develop their abilities to connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources.</i>	<i>Students are able to apply the understanding of Catholic teachings to everyday living.</i>	
3.5 Students demonstrate self-control and self-discipline.	4.5 Students demonstrate an understanding of, appreciation for, and sensitivity to a multi-cultural and world view.	5.5 Students use problem-solving processes to develop solutions to relatively complex problems.		7.5 Students give witness to the meaning of the teachings of the Church.	
3.6 Students demonstrate the ability to make decisions based on ethical values.	4.6 Students demonstrate an open mind to alternative perspectives.			7.6 Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.	
3.7 Students demonstrate the ability to learn on one's own.					

# **Religious Education Curriculum Framework**

## RELIGIOUS EDUCATION FOUNDATIONS AND GUIDELINES

The *General Directory for Catechesis (GDC)* outlines six main tasks for all religious education:

- Promoting knowledge of the faith
- Liturgical education
- Moral formation
- Teaching to pray
- Educating for community life
- Missionary initiation

The *Kentucky Guidelines for Religious Education*, created by the Catholic Conference of Kentucky, is intended to serve as the archdiocesan guide for school religion curriculum, with the Archdiocesan Curriculum Framework and texts as supportive resources. The purpose of the *Kentucky Guidelines for Religious Education* is to give direction, unity, and consistency to religious education across the state of Kentucky. These guidelines reflect lifelong catechesis and provide the knowledge and skills appropriate to learners of all ages. Catholic social teachings are also very important to the learners' development and attention and focus should be placed on instilling these into the hearts and minds of both learners and teachers.

Specific content standards in *The Kentucky Guidelines for Religious Education* are included in the Archdiocese of Louisville Learning Goals and Academic Expectations in two areas:

- Goal 2 – as religion goals and expectations incorporated into all content areas
- Goal 7 – as a newly created goal to indicate broader religion standards/exit outcomes

The complete color-coded *Kentucky Guidelines for Religious Education* for early childhood to adult (including indicators for each level) can be found on the Catholic Conference of Kentucky website, [www.ccky.org](http://www.ccky.org). The curriculum framework that is part of the Archdiocese of Louisville Curriculum Guide can be found on the Archdiocese of Louisville website, [www.archlou.org](http://www.archlou.org). In addition, the supporting documents, *Religion Correlation for the Religious Education Content Guidelines and Science/Social Studies Content Guidelines* and the *Religion Correlation Implementation Guide* are also available.

NCEA IFG: ACRE (Information for Growth Survey (IFG) and Assessment of Catechesis Religious Education (ACRE) serve as invaluable tools for planning purposes and for curriculum review, for understanding student attitudes, and strengthening the religious education program. The Archdiocese of Louisville is participating fully in NCEA IFG: ACRE. The assessment is administered annually to students in fifth, eighth, and eleventh grades, in both school and parish religious education programs.

To facilitate the learners' growth in faith, teachers need to enhance their own faith on an ongoing basis through instruction, reading, reflection, prayer, faith-sharing, etc. The Archdiocese of Louisville has made preparation and formation of catechists in both the school and parish setting a primary goal, through the catechist formation process and other offerings.

# **Religious Education Curriculum Framework**

## Archdiocese of Louisville

### **Kentucky Guidelines for Religious Education**

In lifelong religious education, learners make their faith in God real, meaningful, and alive through instruction, community experience, liturgical and personal prayer, and social action. The Nicene Creed, the *National Catechetical Directory* and the *Catechism of the Catholic Church* identify the following core concepts as the doctrinal basis for lifelong religious education. To foster mature faith in individuals and community, the Christian message must be presented in its entirety, while recognizing a certain hierarchy of truths. There are four central truths from which all other truths flow and by which they are illumined.

These four central truths are:

- The Mystery of God, Creator of All Things
- The Mystery of Christ, the Incarnate Word of God
- The Mystery of the Holy Spirit, the Animator of God's Love
- The Mystery of the Church, the People of God

Related to these truths, there are three core concepts that are formational and transformational. These move the learner to appropriate and live out the Christian message:

- God teaches us how to live out our salvation
- God invites us into the divine relationship through personal prayer and through community worship
- God calls us to love and serve our neighbor

All core concepts are to be applied in age-appropriate ways at every age level of learning. The core concepts and their specific categories with age-appropriate skills for the learner are outlined on the following pages. Teaching strategies vary with the developmental level of the learner and may be found in diocesan recommended published materials.

These guidelines:

- Provide focus for religious education
- Provide unity throughout the dioceses of Kentucky
- Provide a basis for evaluation and assessment

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**Archdiocese of Louisville  
Curriculum Framework  
Religious Education**

**Academic Expectations**

**Kindergarten through Second Grade**

**The Mystery of God, Creator of All Things**

**Academic Expectation 2.39**  
Students demonstrate an understanding of God as creator of all things.

- God's love is like the unconditional love of a caring parent.
- God is always willing to forgive us through Jesus.
- God is the creator of all things.

**Academic Expectation 2.40**  
Students understand the human person as imaging God.

- God created the human person to share in God's love and truth.
- Moments of shared love reflect God's love.

**Academic Expectation 2.41**  
Students recognize the interconnectedness of humans with all creation.

- All creation is a gift.
- All creation is interdependent.
- The innate value of things and persons comes from being created by God.

**Academic Expectation 2.42**  
Students recognize the call to continuing creation by further developing the Kingdom of God.

- Choices are made for the good of all.

**The Mystery of Christ, the Incarnate Word of God**

**Academic Expectation 2.43**  
Students articulate an understanding of the Incarnation: the Word of God, enfleshed in Jesus Christ.

- Jesus is a person like us who grew up in a holy family with Mary and Joseph.
- Jesus came to bring us God's Word.

**Academic Expectation 2.44**  
Students articulate an understanding of Christ's life, death, and resurrection as the distinctive sign of Christian faith.

- The events of Jesus' life and ministry are the foundation of Christian faith.
- Jesus died on the cross and rose from the dead to save us and give us new life.

**Academic Expectation 2.45**  
Students recognize that through Jesus, God established a relationship of particular intimacy with us.

- Jesus is God's most special gift and a present to us today.
- Jesus is the Son of God, savior, friend, and brother.
- Jesus lived a life of prayer and served people in need.
- Jesus offers everyone God's forgiveness.

**Teacher's Notes**

**Archdiocese of Louisville  
Curriculum Framework  
Religious Education**

**Academic Expectations**

**Kindergarten through Second Grade**

**The Mystery of the Holy Spirit, the Loving Presence of God**

**Academic Expectation 2.46**

Students demonstrate an understanding of the Holy Spirit as being the Spirit of God who reveals God and makes Christ known to us.

**Academic Expectation 2.47**

Students articulate an understanding of the Holy Spirit as the one who awakens us to faith.

**Academic Expectation 2.48**

Students demonstrate an understanding of the Holy Spirit as the vibrant presence of God in the Church and the world.

- God is Father, Son, and Holy Spirit.
- The Spirit is God's presence in our lives.
  
- The Holy Spirit came to the disciples on Pentecost.
- The Holy Spirit is the one who inspires and strengthens us to live a good life.
- The Holy Spirit gifts us with strength and joy and the help to live together in peace.
  
- The special gifts of the Spirit are named.
- These special gifts are evident in the life of the Church.
- These special gifts are evident in the world.

**Teacher's Notes**

**Archdiocese of Louisville  
Curriculum Framework  
Religious Education**

**Academic Expectations**

**Kindergarten through Second Grade**

**The Mystery of the Church, the People of God**

<p><b>Academic Expectation 2.49</b> Students identify the covenants revealed in the Scriptures as extending to all creation.</p> <p><b>Academic Expectation 2.50</b> Students demonstrate an understanding of and an appreciation for active participation in a community of faith.</p> <p><b>Academic Expectation 2.51</b> Students identify the context of the Scriptures and their role in the development of the Church.</p> <p><b>Academic Expectation 2.52</b> Students articulate the nature of Tradition and its role in the development of the Church.</p> <p><b>Academic Expectation 2.53</b> Students articulate the nature of sacrament and sacramentality and its role in the development of the People of God.</p> <p><b>Academic Expectation 2.54</b> Students illustrate a basic understanding of the documentary tradition of the universal, national, and local Church.</p> <p><b>Academic Expectation 2.55</b> Students illustrate a basic understanding of the history of the Church.</p>	<ul style="list-style-type: none"> <li>• Jesus was the promised Messiah to free all people.</li>   <li>• The People of God are the Church.</li> <li>• The work of the Church continues the work of Jesus through community building, preaching the Word, worship, and service.</li> <li>• God's presence is everywhere, especially in and through other people and the Church.</li>   <li>• The Bible was written by different people under the guidance of the Spirit.</li> <li>• The Bible is the story of God's love for all of us.</li> <li>• There are major divisions in the Bible.</li> <li>• The New Testament tells us about Jesus as God and man.</li>   <li>• The principal elements of the Creed identify the basic truths of our faith.</li> <li>• Family traditions relate to Church traditions.</li>   <li>• Signs of God's love are abundant in the universe.</li> <li>• The sacraments are celebrations of Jesus' love.</li> <li>• The signs and symbols used in the sacraments have special meaning.</li> <li>• Grace is God's life in us.</li>   <li>• Church leaders communicate with the faithful through writings.</li>   <li>• The first Christians were followers of Jesus and formed the earliest Christian communities.</li> <li>• Stories of saints and other famous Christians help relate the history of the Church.</li> </ul>
<p><b>Teacher's Notes</b></p>	

# Archdiocese of Louisville Curriculum Framework Religious Education

## Academic Expectations

## Kindergarten through Second Grade

### God Teaches Us How to Live Out Our Salvation

**Academic Expectation 2.56**  
Students demonstrate an understanding of the Paschal mystery and the various ways it is encountered in daily living.

**Academic Expectation 2.57**  
Students demonstrate the ability to apply the commandment of love by making life decisions within the Christian moral framework.

**Academic Expectation 2.58**  
Students demonstrate the relationship between faith and culture as it is found in the arts, sciences, and technology.

**Academic Expectation 2.59**  
Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, and the Church.

**Academic Expectation 2.60**  
Students exercise responsible stewardship toward all creation.

**Academic Expectation 2.61**  
Students examine the variety of Christian lifestyles as ways of responding to the Baptismal call to a life of service.

- The new life that is ours after death compares to the many things in nature that grow and change into a new life.
- Each person has a special part in God’s plan and, in God’s plan, dying is not the end of life. Heaven is forever.
  
- God gives human persons freedom to make choices.
- One needs to express sorrow for choices made or missed and not in accord with the Christian moral framework.
- The Ten Commandments are guides for loving God and loving neighbor.
  
- Examples of Christian teaching are found in our present culture.
- Examples of cultural faith are expressed through drama, art, song, and gesture.
- Various cultures contribute to the expression of faith.
- Faith values are experienced through art, science, and the use of technology.
  
- One’s beliefs shape the way one relates to family and friends.
- Christ’s love and teachings are for all people, regardless of individual needs, nationality, etc.
  
- One has a responsibility to respect all of God’s creation.
- One recognizes one’s role as steward.
- Time is a gift given and received.
- The value of one’s talents is given by God and shared through service.
- One values the concept of tithing and sharing treasures.
  
- Followers of Jesus are called Christians through Baptism.
- Baptism calls all to the service of others through the married, ordained, vowed religious, or single life.
- Saints are people who live the call of the Gospel.

**Teacher’s Notes**

**Archdiocese of Louisville  
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**Academic Expectations**

**Kindergarten through Second Grade**

<b>God Invites Us into Relationship through Personal Prayer and through Community Worship</b>	
<p><b>Academic Expectation 2.62</b> Students demonstrate an understanding of and an experience with different ways of relating to God in prayer on a personal level and in community.</p> <p><b>Academic Expectation 2.63</b> Students demonstrate the importance of sacraments, with an emphasis on the centrality of the Eucharist, in the life of Catholics.</p> <p><b>Academic Expectation 2.64</b> Students demonstrate recognition of the sacredness of time through the celebration of the Hours, the liturgical seasons, and special feasts and days.</p>	<ul style="list-style-type: none"> <li>• The Sign of the Cross is our prayer for naming God.</li> <li>• Prayer addresses God in praise, thanksgiving, contrition, and petition.</li> <li>• One prays in song, gesture, movement, art, and drama.</li>   <li>• The Eucharist is Jesus' gift of himself.</li> <li>• The sacraments are celebrations of Jesus' love.</li> <li>• The sacrament of reconciliation is a sign of Jesus' love, mercy, and forgiveness.</li>   <li>• Advent is a time of waiting and preparing for the birth of Christ at Christmas.</li> <li>• Lent is the period from Ash Wednesday through Holy Thursday and Good Friday when we pray, sacrifice, and reach out to others in preparation for Easter.</li> <li>• Easter is the celebration of the resurrection of Jesus.</li> </ul>
<b>God Calls Us to Love and Serve Our Neighbor</b>	
<p><b>Academic Expectation 2.65</b> Students engage in activities that demonstrate an understanding of and personal witness to Christ's command to love and serve one another.</p> <p><b>Academic Expectation 2.66</b> Students engage in service to the community in response to the Gospel call.</p> <p><b>Academic Expectation 2.67</b> Students critique societal structures in the light of Catholic social justice principles and apply them to social and personal situations.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge and affirm the diverse cultural expressions of Catholicism.</p>	<ul style="list-style-type: none"> <li>• Compassion, loving actions, and sharing with others demonstrate God's love.</li> <li>• Jesus sums up the commandments for us in His commandment to love.</li>   <li>• Christians are called to lead just and peaceful lives in the service of God and others, and by loving ourselves.</li> <li>• One practices acts of service.</li>   <li>• The Church works for love, justice, and peace.</li>   <li>• Catholicism extends to people of all races and nationalities.</li> </ul>

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**Academic Expectations**

**Grades Three through Five**

<b>The Mystery of God, Creator of All Things</b>	
<p><b>Academic Expectation 2.39</b> Students demonstrate an understanding of God as creator of all things.</p>	<ul style="list-style-type: none"> <li>• God is faithful, merciful, and forgiving.</li> <li>• Goodness and love come from God.</li> <li>• God is always present in creation.</li> <li>• God continues to create for our enjoyment, respect, and stewardship.</li> <li>• God is a God of freedom.</li> <li>• God teaches and heals us through Jesus.</li> </ul>
<p><b>Academic Expectation 2.40</b> Students understand the human person as imaging God.</p>	
<p><b>Academic Expectation 2.41</b> Students recognize the interconnectedness of humans with all creation.</p>	
<p><b>Academic Expectation 2.42</b> Students recognize the call to continuing creation by further developing the Kingdom of God.</p>	
<b>The Mystery of Christ, the Incarnate Word of God</b>	
<p><b>Academic Expectation 2.43</b> Students articulate an understanding of the Incarnation: the Word of God, enfleshed in Jesus Christ.</p>	<ul style="list-style-type: none"> <li>• Christ is fully human and fully divine.</li> <li>• Christ is the sacrament of God and greatest sign of God's love.</li> </ul>
<p><b>Academic Expectation 2.44</b> Students articulate an understanding of Christ's life, death, and resurrection as the distinctive sign of Christian faith.</p>	
<p><b>Academic Expectation 2.45</b> Students recognize that through Jesus, God established a relationship of particular intimacy with us.</p>	
<p><b>Teacher's Notes</b></p>	

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**Academic Expectations**

**Grades Three through Five**

**The Mystery of the Holy Spirit, the Loving Presence of God**

**Academic Expectation 2.46**  
Students demonstrate an understanding of the Holy Spirit as being the Spirit of God who reveals God and makes Christ known to us.

**Academic Expectation 2.47**  
Students articulate an understanding of the Holy Spirit as the one who awakens us to faith.

**Academic Expectation 2.48**  
Students demonstrate an understanding of the Holy Spirit as the vibrant presence of God in the Church and the world.

- God is Trinity: Creator, Redeemer, and Sanctifier.
- Jesus sent the Spirit to be present in our lives.
  
- The Holy Spirit is helper, guide, and inspiration.
- The Holy Spirit is the one who helps us to pray.
- The Holy Spirit helps us to live by Jesus' example.
- Pentecost is the coming of the Spirit on Jesus' disciples.
- One's life reflects the gifts of the Spirit.
  
- The Spirit is the force that draws Jesus' followers into one Christian family.
- The role of the Spirit is to give life to the Church.
- The symbols of the Spirit are wind, breath, and fire.

**Teacher's Notes**

# Archdiocese of Louisville Curriculum Framework Religious Education

## Academic Expectations

## Grades Three through Five

### The Mystery of the Church, the People of God

<p><b>Academic Expectation 2.49</b> Students identify the covenants revealed in the Scriptures as extending to all creation.</p> <p><b>Academic Expectation 2.50</b> Students demonstrate an understanding of and an appreciation for active participation in a community of faith.</p> <p><b>Academic Expectation 2.51</b> Students identify the context of the Scriptures and their role in the development of the Church.</p> <p><b>Academic Expectation 2.52</b> Students articulate the nature of Tradition and its role in the development of the Church.</p> <p><b>Academic Expectation 2.53</b> Students articulate the nature of sacrament and sacramentality and its role in the development of the People of God.</p> <p><b>Academic Expectation 2.54</b> Students illustrate a basic understanding of the documentary tradition of the universal, national, and local Church.</p> <p><b>Academic Expectation 2.55</b> Students illustrate a basic understanding of the history of the Church.</p>	<ul style="list-style-type: none"> <li>• Promise is the basis of all relationships.</li> <li>• Covenant is a relationship.</li> <li>• A covenant has conditions.</li> <li>• Faithfulness is related to promise and covenant.</li> <li>• Fidelity is apparent in the experiences of God’s people throughout history.</li>   <li>• The Church is the community of God’s people.</li> <li>• The Church’s method of welcoming new member is a process of initiation.</li> <li>• The Church community is the light of Christ and servant to the world.</li> <li>• The Church is the Body of Christ.</li> <li>• The risen Christ is present in the Church.</li> <li>• The mission of the Church is made up of Jesus’ ministries of community, Word, worship, and service.</li>   <li>• The Bible is organized into books, chapters, and verses.</li> <li>• The Scriptures reveal God.</li> <li>• Prayer in the Scriptures, especially the Psalms, is the prayer of the Church.</li> <li>• The Bible teaches about God’s goodness in us and all creation.</li> <li>• The Bible teaches about moral choice.</li> <li>• The Bible is structured into a number of books in each Testament, into general types of writing, and into main divisions.</li> <li>• Several different people wrote the Bible.</li> <li>• The purpose of the Bible is to tell God’s story and the story of God’s people.</li>   <li>• Tradition refers to the living transmission of all that the Church is and believes.</li> <li>• Scripture and Tradition are the sources of Church teaching.</li> <li>• The Creed contains statements of belief.</li>   <li>• The Church is the Sacrament of Christ in the world.</li> <li>• The use of signs and symbols has a unifying power.</li> <li>• Jesus’ presence and work in our lives is celebrated in the seven sacraments.</li> <li>• Grace is God’s life in us.</li> <li>• The Sacraments of Initiation, Healing, and Commitment are identified.</li>   <li>• Different types of writing are used by Church leaders to communicate with the faithful.</li> <li>• These writings have built upon one another through the ages to express understanding of truth and practice.</li>   <li>• The roots of Christianity are Jewish.</li> <li>• Catholicism is one form of Christianity.</li> <li>• The four marks of the Church are: one, catholic, holy and apostolic.</li> </ul>
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# Archdiocese of Louisville Curriculum Framework Religious Education

## Academic Expectations

## Grades Three through Five

### God Teaches Us How to Live Out Our Salvation

**Academic Expectation 2.56**

Students demonstrate an understanding of the Paschal mystery and the various ways it is encountered in daily living.

- The Paschal Mystery consists of the death and resurrection of Christ.
- The Paschal Mystery is God's saving action accomplished once and for all.
- Good and evil exist in the world.
- Jesus' death and resurrection are the atonement for evil in the world.

**Academic Expectation 2.57**

Students demonstrate the ability to apply the commandment of love by making life decisions within the Christian moral framework.

- Selfishness is the basis of evil.
- Sins are unloving choices which turn us away from God and creation.
- There are conditions for serious sin.
- Jesus' commandment is the summary of all other commandments.
- The Ten Commandments are guides for loving God and others.
- The Church teaches the true dignity and worth of each person.
- The Beatitudes are guides for living happily.

**Academic Expectation 2.58**

Students demonstrate the relationship between faith and culture as it is found in the arts, sciences, and technology.

- Aspects of culture can be related to Gospel values.
- There are examples of cultural faith expressions through drama, art, song, and gesture.
- Knowledge of faith applies to the arts, sciences, and use of technology.

**Academic Expectation 2.59**

Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, and the Church.

- One's relationship to others is related to one's relationship to Jesus.
- There are Spiritual and Corporal Works of Mercy.

**Academic Expectation 2.60**

Students exercise responsible stewardship toward all creation.

- There is a need to care for and respect all creation.
- Stewardship has biblical roots.
- The steward has a defined role.
- The concept of steward can be compared with that of owner.
- One is aware of one's talents and their use.

**Academic Expectation 2.61**

Students examine the variety of Christian lifestyles as ways of responding to the Baptismal call to a life of service.

- There are different vocations.
- Each vocation has a service element.

**Teacher's Notes**

# Archdiocese of Louisville Curriculum Framework Religious Education

## Academic Expectations

## Grades Three through Five

<b>God Invites Us into Relationship through Personal Prayer and through Community Worship</b>	
<p><b>Academic Expectation 2.62</b> Students demonstrate an understanding of and an experience with different ways of relating to God in prayer on a personal level and in community.</p>	<ul style="list-style-type: none"> <li>• There are prayers in our Tradition and selected Psalms.</li> <li>• There are various forms of prayer.</li> </ul>
<p><b>Academic Expectation 2.63</b> Students demonstrate the importance of Sacraments, with an emphasis on the centrality of the Eucharist, in the life of Catholics.</p>	
<p><b>Academic Expectation 2.64</b> Students demonstrate recognition of the sacredness of time through the celebration of the Hours, the liturgical seasons, and special feasts and days.</p>	
<b>God Calls Us to Love and Serve Our Neighbor</b>	
<p><b>Academic Expectation 2.65</b> Students engage in activities that demonstrate an understanding of and personal witness to Christ's command to love and serve one another.</p>	<ul style="list-style-type: none"> <li>• There is holiness in caring about others as Jesus cared about us.</li> <li>• The Works of Mercy are ways to live out concern for others.</li> <li>• There is a need to reach out to the needy as continuing the work of Jesus.</li> </ul>
<p><b>Academic Expectation 2.66</b> Students engage in service to the community in response to the Gospel call.</p>	
<p><b>Academic Expectation 2.67</b> Students critique societal structures in the light of Catholic social justice principles and apply them to social and personal situations.</p>	
<p><b>Academic Expectation 2.68</b> Students acknowledge and affirm the diverse cultural expressions of Catholicism.</p>	

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**Academic Expectations**

**Grades Six through Eight**

<b>The Mystery of God, Creator of All Things</b>	
<p><b>Academic Expectation 2.39</b> Students demonstrate an understanding of God as creator of all things.</p> <p><b>Academic Expectation 2.40</b> Students understand the human person as imaging God.</p> <p><b>Academic Expectation 2.41</b> Students recognize the interconnectedness of humans with all creation.</p> <p><b>Academic Expectation 2.42</b> Students recognize the call to continuing creation by further developing the Kingdom of God.</p>	<ul style="list-style-type: none"> <li>• God’s faithfulness is a sign of trust in all creation.</li> <li>• God is worthy of total trust.</li> <li>• Good and evil are present in the world.</li>   <li>• Masculinity and femininity are images of God.</li> <li>• Christian values form the context for human sexuality.</li> <li>• Emotions have sources and value.</li> <li>• The differences in humans are recognized as gifts.</li> <li>• The dignity of the human person deserves respect.</li>   <li>• There are responsible ways to use and reuse resources.</li>   <li>• Jesus proclaims the Kingdom of God.</li> </ul>
<b>The Mystery of Christ, the Incarnate Word of God</b>	
<p><b>Academic Expectation 2.43</b> Students articulate an understanding of the Incarnation: the Word of God, enfleshed in Jesus Christ.</p> <p><b>Academic Expectation 2.44</b> Students articulate an understanding of Christ’s life, death, and resurrection as the distinctive sign of Christian faith.</p> <p><b>Academic Expectation 2.45</b> Students recognize that through Jesus, God established a relationship of particular intimacy with us.</p>	<ul style="list-style-type: none"> <li>• One has a relationship with Jesus – who Jesus is, his values, his intentions, motives, and attitudes – as well as what he really proclaimed and how this relates to one’s own life.</li> <li>• Jesus lived in a historical and social world.</li>   <li>• Jesus’ life and teaching gave human form to God’s compassion.</li> <li>• Jesus shares the power of his resurrection with us by sending the Spirit.</li> <li>• Jesus preached and practiced obedience to God’s will.</li>   <li>• Jesus is the perfect sign of God’s presence.</li> <li>• Jesus is the center of God’s plan for the world, mediator between God and his Church, and the world’s liberator.</li> </ul>
<p><b>Teacher’s Notes</b></p>	

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**Academic Expectations**

**Grades Six through Eight**

**The Mystery of the Holy Spirit, the Loving Presence of God**

**Academic Expectation 2.46**  
Students demonstrate an understanding of the Holy Spirit as being the Spirit of God who reveals God and makes Christ known to us.

**Academic Expectation 2.47**  
Students articulate an understanding of the Holy Spirit as the one who awakens us to faith.

**Academic Expectation 2.48**  
Students demonstrate an understanding of the Holy Spirit as the vibrant presence of God in the Church and the world.

- Trinity is a community of three Persons.
  
- The Spirit has a role in moral decision-making.
- The Spirit provides gifts and fruits for living a life of faith.
- The Spirit has a role in Baptism and Confirmation.
  
- There are specific signs of the presence of the Spirit in the Church and in the world.
- The different ministries in the Church and in the world are responses to a call from the Spirit.

**Teacher's Notes**

# Archdiocese of Louisville Curriculum Framework Religious Education

## Academic Expectations

## Grades Six through Eight

<b>The Mystery of the Church, the People of God</b>	
<p><b>Academic Expectation 2.49</b> Students identify the covenants revealed in the Scriptures as extending to all creation.</p>	<ul style="list-style-type: none"> <li>• The Hebrew and Christian covenants are revealed in Scripture.</li> <li>• God's covenants extend to all creation.</li> <li>• God is faithful in one's life.</li> </ul>
<p><b>Academic Expectation 2.50</b> Students demonstrate an understanding of and an appreciation for active participation in a community of faith.</p>	<ul style="list-style-type: none"> <li>• People actively participate in a community of faith.</li> <li>• The Church is a group of people with a distinctive spirit, sharing their talents in various roles to achieve a common goal.</li> <li>• The marks of the Church are one, holy, catholic, and apostolic.</li> <li>• One has a personal gift for active participation in a community of faith.</li> </ul>
<p><b>Academic Expectation 2.51</b> Students identify the context of the Scriptures and their role in the development of the Church.</p>	<ul style="list-style-type: none"> <li>• The characteristics of the early Christian communities are described in the Acts of the Apostles.</li> <li>• The Church uses Christian Scripture passages to describe herself.</li> <li>• Paul's letters to the early Church communities were written in a particular context and setting.</li> <li>• Paul made missionary journeys and endured suffering and trials.</li> </ul>
<p><b>Academic Expectation 2.52</b> Students articulate the nature of Tradition and its role in the development of the Church.</p>	<ul style="list-style-type: none"> <li>• Elements of faith are used to develop a community's religious identity rooted in its ways and understandings.</li> <li>• Religious words and concepts have specific meanings developed over time.</li> <li>• There are four signs of God's presence: natural, liturgical, scriptural, and ecclesial.</li> <li>• The Apostles' Creed or the Nicene Creed can be recited.</li> <li>• The roles of Scripture and Tradition can be distinguished in the life of the Church.</li> </ul>
<p><b>Academic Expectation 2.53</b> Students articulate the nature of sacrament and sacramentality and its role in the development of the People of God.</p>	<ul style="list-style-type: none"> <li>• Ritual can be identified in everyday activities.</li> <li>• Signs and symbols are integrated into ritual.</li> <li>• There is evidence of the presence and power of grace in the world.</li> </ul>
<p><b>Academic Expectation 2.54</b> Students illustrate a basic understanding of the documentary tradition of the universal, national, and local Church.</p>	<ul style="list-style-type: none"> <li>• Religious information is derived from a variety of sources.</li> <li>• The documents of the Second Vatican Council can be identified.</li> <li>• <i>The Catechism of the Catholic Church</i> is a major resource.</li> </ul>
<p><b>Academic Expectation 2.55</b> Students illustrate a basic understanding of the history of the Church.</p>	<ul style="list-style-type: none"> <li>• There are various rites within the Catholic Church.</li> <li>• The Church developed from Pentecost to the present.</li> <li>• The ordained ministry of the Catholic Church has a structure.</li> <li>• The historical development of the ministries and lifestyles within the Church can be traced.</li> </ul>
<p><b>Teacher's Notes</b></p>	

**Archdiocese of Louisville  
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**Academic Expectations**

**Grades Six through Eight**

**God Teaches Us How to Live Out Our Salvation**

**Academic Expectation 2.56**  
Students demonstrate an understanding of the Paschal mystery and the various ways it is encountered in daily living.

**Academic Expectation 2.57**  
Students demonstrate the ability to apply the commandment of love by making life decisions within the Christian moral framework.

**Academic Expectation 2.58**  
Students demonstrate the relationship between faith and culture as it is found in the arts, sciences, and technology.

**Academic Expectation 2.59**  
Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, and the Church.

**Academic Expectation 2.60**  
Students exercise responsible stewardship toward all creation.

**Academic Expectation 2.61**  
Students examine the variety of Christian lifestyles as ways of responding to the Baptismal call to a life of service.

- Jesus is the source for the meaning of life's mysteries.
- The virtue of hope is related to daily living.
- God judges each of us at death and all people at the end of time.
- The Bible provides an understanding of heaven and hell.
  
- There are techniques that can be applied to control one's impulses.
- Christian values and decision-making skills are applied to moral judgment questions.
- Signs of grace and sin are evident everywhere.
- There is a specific process for making decisions to reflect one's religious values.
- Right and wrong are distinct.
- Emotions and their value can be distinguished.
- Appropriate emotional responses are defined.
  
- The Bible can impact one's life.
- Sacred and cultural symbols are related to religious concepts.
- Various stories have spiritual themes.
- Positive and negative messages are found in media.
  
- The Church has precepts.
- People can relate to Mary in various ways.
- The Spiritual and Corporal Works of Mercy can be applied to contemporary social and spiritual problems.
  
- The elements of stewardship are identified.
- Scriptural passages refer to stewardship.
- One's talents for Christian ministry are identified.
  
- Jesus calls disciples today to continue his mission.
- People today can live the spirit of the Beatitudes.
- The service aspects of various lifestyles can be traced as they are identified in family and friends.

**Teacher's Notes**

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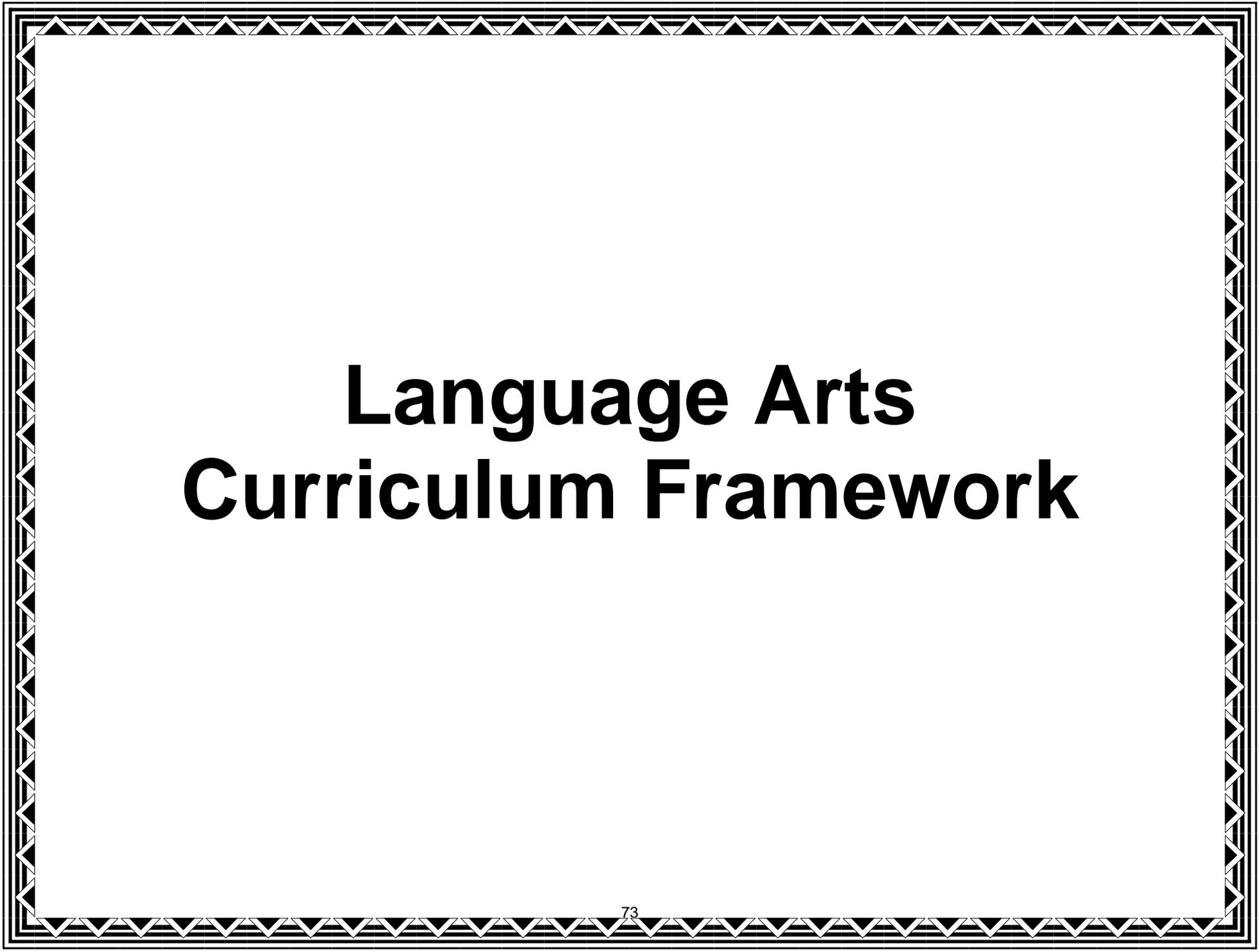
**Academic Expectations**

**Grades Six through Eight**

<b>God Invites Us into Relationship through Personal Prayer and through Community Worship</b>	
<p><b>Academic Expectation 2.62</b> Students demonstrate an understanding of and an experience with different ways of relating to God in prayer on a personal level and in community.</p> <p><b>Academic Expectation 2.63</b> Students demonstrate the importance of sacraments, with an emphasis on the centrality of the Eucharist, in the life of Catholics.</p> <p><b>Academic Expectation 2.64</b> Students demonstrate recognition of the sacredness of time through the celebration of the Hours, the liturgical seasons, and special feasts and days.</p>	<ul style="list-style-type: none"> <li>• The various elements of prayer include praise, thanksgiving, contrition, and petition.</li> <li>• Prayers can be composed personally or in community.</li> <li>• Imaginative prayer helps us relate to God on a personal level.</li> <li>• Meditation is a form of prayer.</li>   <li>• Each sacrament contains a ritual and a rite.</li>   <li>• The major events of Christ's life have significance for daily life.</li> </ul>
<b>God Calls Us to Love and Serve Our Neighbor</b>	
<p><b>Academic Expectation 2.65</b> Students engage in activities that demonstrate an understanding of and personal witness to Christ's command to love and serve one another.</p> <p><b>Academic Expectation 2.66</b> Students engage in service to the community in response to the Gospel call.</p> <p><b>Academic Expectation 2.67</b> Students critique societal structures in the light of Catholic social justice principles and apply them to social and personal situations.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge and affirm the diverse cultural expressions of Catholicism.</p>	<ul style="list-style-type: none"> <li>• Acts of service demonstrate love for others.</li>   <li>• Acts of service can be identified in family, community, and church.</li> <li>• Acts of service are practiced in various communities.</li>   <li>• The seven principles of social justice are applied to personal and social situations.</li> <li>• Rules based on fairness can be determined for the groups to which one belongs.</li>   <li>• The concept that different is good affirms cultural expressions.</li> <li>• The various rites within the Catholic Church can be named.</li> <li>• Different cultural expressions of Catholicism have different gifts.</li> </ul>
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# **Language Arts Curriculum Framework**

# Introduction

## Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

The K-8 standards define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards by number. The CCR and grade-specific standards are necessary complements – the former providing broad standards, the latter providing additional specificity – that together define the skills and understandings that all students must demonstrate.

Students advancing through the grades are expected to meet each year’s grade-specific standards, retain or further develop skills and understandings mastered in preceding grades, and work steadily toward meeting the more general expectations described by the College and Career Readiness Anchor Standards.

The Standards set requirements not only for English language arts (ELA) but also for literacy in history/social studies, science, and technical subjects. Just as students must learn to read, write, speak, listen, and use language effectively in a variety of content areas, so too must the Standards specify the literacy skills and understandings required for college and career readiness in multiple disciplines. Literacy standards for grade six and above are predicated on teachers of ELA, history/social studies, science, and technical subjects using their content area expertise to help students meet the particular challenges of reading, writing, speaking, listening, and language in their respective fields. It is important to note that the 6-8 literacy standards in history/social studies, science, and technical subjects are not meant to replace content standards in those areas but rather to supplement them.

### **Reading Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-8**

*The Reading Standards for Literacy in History/Social Studies, Science, and Technical Subjects begin at grade 6. Standards for K-5 reading in history/social studies, science, and technical subjects are integrated into the K-5 Reading standards. The CCR anchor standards and grade-specific standards in literacy work in tandem to define college and career readiness.*

### **Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-8**

*The Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects begin at grade 6. Standards for K-5 writing in history/social studies, science, and technical subjects are integrated into the K-5 Writing standards. The CCR anchor standards and grade-specific standards in literacy work in tandem to define college and career readiness.*

*Common Core State Standards Initiative  
June 2, 2010*

## Common Core State Standards

The Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (“the Standards”) are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of K–12 standards in order to help ensure that all students are college and career ready in literacy no later than the end of high school.

The present work, led by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA), builds on the foundation laid by states in their decades-long work on crafting high-quality education standards. The Standards also draw on the most important international models as well as research and input from numerous sources, including state departments of education, scholars, assessment developers, professional organizations, educators from kindergarten through college, and parents, students, and other members of the public. In their design and content, refined through successive drafts and numerous rounds of feedback, the Standards represent a synthesis of the best elements of standards-related work to date and an important advance over that previous work.

As specified by CCSSO and NGA, the Standards are (1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous, and (4) internationally benchmarked. A particular standard was included in the document only when the best available evidence indicated that its mastery was essential for college and career readiness in a twenty-first-century, globally competitive society. The Standards are intended to be a living work. As new and better evidence emerges, the Standards will be revised accordingly.

## Catholic Schools and the Common Core State Standards

Catholic schools have a long-standing commitment to academic excellence that is rooted in the faith-based mission of Catholic education. The Common Core State Standards in no way compromise the Catholic identity or educational program of a Catholic school.

The Common Core State Standards initiative, begun in 2007, is a state-led, bipartisan effort that is not a requirement for participation in the No Child Left Behind Act of 2001 (NCLB) or any other federally-funded program, and there are no mandates for any Catholic school to follow any federal rules if they adopt the Common Core. Adoption of the Common Core is voluntary; individual states, Catholic dioceses, and other private schools make their own decisions about whether to adopt the standards.

The Common Core State Standards are a set of high-quality academic expectations that all students should master by the end of each grade level. The standards establish consistent learning goals for all students that focus on preparing them to succeed in college and careers in a globally competitive workplace. The standards define and clearly communicate grade-specific goals and inform parents about learning outcomes, making it easier for parents to collaborate with teachers in helping their children achieve success.

The Common Core State Standards are not a curriculum. A curriculum includes what is taught, when it is taught, how it is taught, and what materials to use. None of these items are included in the Common Core State Standards. In the Archdiocese of Louisville, all of these elements will continue to be determined by curriculum specialists, principals, and teachers working to meet the needs of their students.

The Common Core represents a fundamental shift in the teaching and learning process. The Common Core establishes clear, measurable goals for students that assist teachers in making instructional decisions. The standards place emphasis on creativity, critical and analytical thinking, and application to curriculum content. The Common Core is not a national curriculum. It guides the way that instruction takes place in each classroom, allowing the Catholic school to develop its own curriculum content.

**The Archdiocese of Louisville has adopted the Common Core State Standards and made adaptations to ensure a rigorous academic curriculum that integrates faith and knowledge.** As trained professionals, Catholic administrators and teachers continually seek the best instructional methods for educating students.

*NCEA, Position Statement on the Common Core State Standards - May 31, 2013*

Strand

**Reading Literature (RL) – Grade Two**

Essential Understandings		Guided Questions	
<ul style="list-style-type: none"> <li>Reading helps us to understand our world and our place in it.</li> <li>Reading has intrinsic value.</li> <li>Reading can be used to access information needed to meet specific demands, explore interests, or solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>What can we learn from reading a variety of materials?</li> <li>Why do we read?</li> <li>What was the author's purpose?</li> <li>What genre is the text?</li> <li>What do we do when we come to</li> </ul>		
Academic Expectations		Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p> <p><b>Range of Reading and Level of Text Complexity</b></p>	<p>1. Ask and answer such questions as <i>who, what, where, when, and how</i> to demonstrate understanding of key details in a text.</p> <p>2. Recount stories, including fables and folktales from diverse cultures, and determine their central message (main idea), lesson, or moral.</p> <p>3. Describe how characters in a story respond to major events and challenges.</p> <p>4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.</p> <p>5. Describe the beginning of a story; how the beginning introduces the story and how the beginning sets the tone.</p> <p>6. Acknowledge differences in the points of view or characters, including by speaking in a different voice for each character when reading dialogue aloud.</p> <p>7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p> <p>8. (Not applicable to literature.)</p> <p>9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p> <p>10. By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	
<p><b>RL.2.10 Reading Literature. Grade 2. Standard 10</b></p>			

Anchor Standard Strand

Grade-specific Standard

RL.2.10 Reading Literature. Grade 2. Standard 10

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## **College and Career Readiness Anchor Standards for Reading (R.CCR)**

*The Reading Standards for Literature and Informational Text offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

### **Key Ideas and Details**

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

### **Craft and Structure**

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

### **Integration of Knowledge and Ideas**

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

### **Range of Reading and Level of Text Complexity**

10. Read and comprehend complex literary and informational texts independently and proficiently.

### **Note on Range and Content of Student Reading**

*To build a foundation for college and career readiness, students in grades K-5 must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that also gives them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. Students also acquire the habits of reading independently and closely, which are essential to their future success.*

*The Foundational Skills standards for reading in grades K-5 are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: good readers will need much less practice with those concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know – to discern when particular children or activities warrant more or less attention.*

*To become college and career ready, students in grades 6-8 must grapple with works of exceptional craft and thought whose range extends across genres, cultures, and centuries. Such works offer profound insights into the human condition and serve as models for students' own thinking and writing. Along with high-quality contemporary works, these texts should be chosen from among seminal U.S. documents, the classics of American literature, and the timeless dramas of Shakespeare. Through wide and deep reading of literature and literary nonfiction of steadily increasing sophistication, students gain a reservoir of literary and cultural knowledge, references, and images; the ability to evaluate intricate arguments; and the capacity to surmount the challenges posed by complex texts.*

## **College and Career Readiness Anchor Standards for Writing (W.CCR)**

*The Writing Standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

### **Text Types and Purposes**

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

### **Production and Distribution of Writing**

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

### **Research to Build and Present Knowledge**

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

### **Range of Writing**

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

### **Note on Range and Content of Student Writing**

*To build a foundation for college and career readiness, students in grades K-5 need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveying real and imagined experiences and events. They learn to appreciate that a key purpose of writing is to communicate clearly to an external, sometimes unfamiliar audience, and they begin to adapt the form and content of their writing to accomplish a particular task and purpose. They develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the year.*

*For students in grades 6-8, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career-ready writers, students must take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately. They need to know how to combine elements of different kinds of writing – for example, to use narrative strategies within argument and explanation within narrative – to produce complex and nuanced writing. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner. They must have the flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline as well as the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it.*

## **College and Career Readiness Anchor Standards for Speaking and Listening (SL.CCR)**

*The Speaking and Listening Standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

### Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

### Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

### **Note on Range and Content of Student Speaking and Listening**

*To build a foundation and become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations – as part of a whole class, in small groups, and with a partner – built around important content in various domains. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.*

*New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts confront students with the potential for continually updated content and dynamically changing combinations of words, graphics, images, hyperlinks, and embedded video and audio. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.*

## **College and Career Readiness Anchor Standards for Language (L.CCR)**

*The Language Standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

### Conventions of Standard English

1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.

### Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

### Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

## **Note on Range and Content of Student Language Use**

*To build a foundation for college and career readiness in language, students in grades K-5 must gain control over many conventions of standard English grammar, usage, and mechanics as well as learn other ways to use language to convey meaning effectively. They must also be able to determine or clarify the meaning of grade-appropriate words encountered through listening, reading, and media use; come to appreciate that words have non-literal meanings, shadings of meaning, and relationships to other words; and expand their vocabulary in the course of studying content. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.*

*The language standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

*To be college and career ready in language, students in grades 6-8 must have firm control over the conventions of Standard English. At the same time, they must come to appreciate that language is at least as much a matter of craft as of rules and be able to choose words, syntax, and punctuation to express themselves and achieve particular functions and rhetorical effects. They must also have extensive vocabularies, built through reading and study, enabling them to comprehend complex texts and engage in purposeful writing about and conversations around content. They read to become skilled in determining or clarifying the meaning of words and phrases they encounter, choosing flexibly from an array of strategies to aid them. They must learn to see an individual word as part of a network of other words – words, for example, that have similar denotations but different connotations. The inclusion of Language standards in their own strand should not be taken as an indication that the skills related to conventions, effective language usage, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed they are inseparable from such contexts.*

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## Language and Literacy Development – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Listening is important to understanding of the message.</li> <li>• To communicate effectively, it is essential that the speaker is able to express ideas clearly.</li> <li>• Phonological and phonemic awareness are essential foundational skills for early reading.</li> <li>• The development of active listening skills and memory aid in comprehension.</li> <li>• The use of emergent writing skills is a means of communication.</li> <li>• Increased vocabulary promotes the ability to understand and communicate.</li> </ul>	<ul style="list-style-type: none"> <li>• What must we do to be good listeners?</li> <li>• How can we clearly communicate our ideas and knowledge to others?</li> <li>• Why is it important to speak clearly and audibly?</li> <li>• How can discriminating between sounds support pre-reading skills?</li> <li>• How can careful listening help us understand what we hear?</li> <li>• How can we convey information through the pictures that we draw?</li> <li>• How can we figure out what an unfamiliar word means?</li> </ul>
Content Guidelines	Performance Standards
<p>Listening Skills</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the intent of non-verbal and verbal cues</li> <li>• listen to stories, directions, and conversations</li> <li>• follow directions that involve a two- or three-step sequence of actions</li> <li>• listen to and recognize similar and different sounds in words and rhymes</li> </ul>



Content Guidelines	Performance Standards
<p>Word Recognition Skills</p> <p>Reading Readiness</p> <p>Emergent Writing</p> <p>Background Knowledge and Vocabulary Skills</p> <p>Book Knowledge and Appreciation</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize written first name</li> <li>• demonstrate awareness and beginning knowledge of environmental print (e.g., stop, on, restaurant or store logo)</li> </ul> <ul style="list-style-type: none"> <li>• initiate stories and respond to stories told or read aloud</li> <li>• represent stories told or read aloud through during play</li> <li>• show beginning understanding of concepts about print</li> <li>• engage in “reading” (e.g., look at pictures in a book; pretend to read)</li> <li>• “ reread” a book that has been read by another</li> </ul> <ul style="list-style-type: none"> <li>• understand that writing is a means of communication</li> <li>• use scribbles, shapes, pictures, letter-like symbols, or dictation to represent thoughts or ideas</li> <li>• begin to copy or write own name using an uppercase letter for only the first letter</li> <li>• identify meaning of words in read-alouds, conversations, and descriptions of everyday items in the world around them</li> </ul> <ul style="list-style-type: none"> <li>• make use of new vocabulary in an appropriate manner</li> <li>• use strategies to figure out word meanings (e.g., look at pictures, ask someone, use context clues)</li> <li>• use previous experiences and acquired vocabulary to demonstrate a bigger understanding of the world around them and the world beyond them</li> </ul> <ul style="list-style-type: none"> <li>• demonstrate interest in a range of texts</li> <li>• identify the function and location of a book’s front, back, top, bottom, and spine</li> <li>• demonstrate how to turn the pages of a book properly</li> <li>• know that books are read from front to back</li> <li>• point to where to begin reading</li> <li>• recognize that text flows from left to right and top to bottom</li> <li>• recognize that there are spaces between words</li> </ul>

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## Reading Literature (RL) – Kindergarten

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Understanding the organization and purpose of a text selection can help the reader answer questions about unfamiliar words.</li> <li>• In real life, comparisons help generate similarities and differences and help determine a focus.</li> <li>• Illustrations and words help the reader to understand the character, setting, and plot.</li> <li>• Characters in stories can serve as models of Catholic values and behaviors.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know about the text?</li> <li>• What was the sequence of events in the story?</li> <li>• How can we determine the main idea? What details support the main idea, lesson, or moral?</li> <li>• What strategies can readers use to determine unfamiliar words in a text?</li> <li>• How can learning about the author’s and illustrator’s purposes aid in understanding a reading selection?</li> <li>• Why is the setting important?</li> <li>• How do the characters impact the events?</li> <li>• How do the events affect the characters?</li> <li>• How do illustrations and print work together to help us gather information?</li> <li>• How do characters demonstrate Catholic values and behaviors?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p> <p><b>Range of Reading and Level of Text Complexity</b></p>	<ol style="list-style-type: none"> <li>1. With prompting and support, ask and answer questions about key details in a text.</li> <li>2. With prompting and support, retell familiar stories, including main ideas and key details.</li> <li>3. With prompting and support, identify characters, settings, and sequence of major events in a story.</li> <li>4. Ask and answer questions about unknown words in a text.</li> <li>5. Recognize common types of texts (e.g., storybooks, poems).</li> <li>6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.</li> <li>7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).</li> <li>8. (Not applicable to literature)</li> <li>9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</li> <li>10. Actively engage in group reading activities with purpose and understanding using comprehension strategies.</li> </ol>

## Reading Standards for Informational Text (RI) – Kindergarten

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Words and phrases supply meaning to a selection.</li> <li>• Text features help the reader navigate the text.</li> <li>• Together the illustrations and print provide information.</li> <li>• Reading invites the reader to use new and prior knowledge and ideas to understand the world and the reader's place in the world.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know and remember about the text?</li> <li>• How can we determine the main idea of the text selection?</li>   <li>• How do particular words and phrases impact the meaning?</li> <li>• Why is it important to use descriptive words?</li>   <li>• What information can be learned from previewing and locating the text features and components of a reading selection?</li> <li>• How do text features help us as we read a piece of informational text?</li>   <li>• What is gained from examining both print and illustrations?</li>   <li>• Why is it important to read a variety of materials?</li> <li>• How can we use prior knowledge and ideas to build upon the understanding of new material?</li> <li>• How can we learn to understand and respect others through reading?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p> <p><b>Range of Reading and Level of Text Complexity</b></p>	<ol style="list-style-type: none"> <li>1. With prompting and support, ask and answer questions about key details in a text.</li> <li>2. With prompting and support, identify the main topic and retell key details of a text.</li> <li>3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.</li> <li>4. With prompting and support, ask and answer questions about unknown words in a text.</li> <li>5. Identify the front cover, back cover, and title page of a book.</li> <li>6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.</li> <li>7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).</li> <li>8. With prompting and support, identify the reasons an author gives to support points in a text.</li> <li>9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</li> <li>10. Actively engage in group reading activities with purpose and understanding.</li> </ol>













	<p><b>Vocabulary Acquisition and Use</b></p>	<ol style="list-style-type: none"> <li>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i>.       <ol style="list-style-type: none"> <li>4a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb <i>duck</i>).</li> <li>4b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed, -s, re-, un-, pre-, -ful, -less</i>) as a clue to the meaning of an unknown word.</li> </ol> </li> <li>5. With guidance and support from adults, explore word relationships and nuances in word meanings.       <ol style="list-style-type: none"> <li>5a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of concepts the categories represent.</li> <li>5b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).</li> <li>5c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>).</li> <li>5d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk, march, strut, prance</i>) by acting out the meanings.</li> </ol> </li> <li>6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.</li> </ol>
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## Reading Literature (RL) – Grade One

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Understanding the organization and purpose of a text selection can help the reader answer questions about unfamiliar words.</li> <li>• In real life, comparisons help generate similarities and differences and help determine a focus.</li> <li>• Illustrations and words help the reader to understand the character, setting, and plot.</li> <li>• Characters in stories can serve as models of Catholic values and behaviors.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know about the text?</li> <li>• What was the sequence of events in the story?</li> <li>• How can we determine the main idea? What details support the main idea, lesson, or moral?</li> <li>• What strategies can readers use to determine unfamiliar words in a text?</li> <li>• How can learning about the author’s and illustrator’s purposes aid in understanding a reading selection?</li> <li>• Why is the setting important?</li> <li>• How do the characters impact the events?</li> <li>• How do the events affect the characters?</li> <li>• How do illustrations and print work together to help us gather information?</li> <li>• How do characters demonstrate Catholic values and behaviors?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p> <p><b>Range of Reading and Level of Text Complexity</b></p>	<ol style="list-style-type: none"> <li>1. Ask and answer questions about key details in a text.</li> <li>2. Retell stories, including key details, and demonstrate understanding of their central message (main idea) or lesson.</li> <li>3. Describe characters, settings, and sequence of major events in a story, using key details.</li> <li>4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.</li> <li>5. Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.</li> <li>6. Identify who is telling the story at various points in a text.</li> <li>7. Use illustrations and details in a story to describe its characters, setting, or events.</li> <li>8. (Not applicable to literature)</li> <li>9. Compare and contrast the adventures and experiences of characters in stories.</li> <li>10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.</li> </ol>

## Reading Standards for Informational Text (RI) – Grade One

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Words and phrases supply meaning to a selection.</li> <li>• Text features help the reader navigate the text.</li> <li>• Together the illustrations and print provide information.</li> <li>• Reading invites the reader to use new and prior knowledge and ideas to understand the world and the reader's place in the world.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know and remember about the text?</li> <li>• How can we determine the main idea of the text selection?</li>   <li>• How do particular words and phrases impact the meaning?</li> <li>• Why is it important to use descriptive words?</li>   <li>• What information can be learned from previewing and locating the text features and components of a reading selection?</li> <li>• How do text features help us as we read a piece of informational text?</li>   <li>• What is gained from examining both print and illustrations?</li>   <li>• Why is it important to read a variety of materials?</li> <li>• How can we use prior knowledge and ideas to build upon the understanding of new material?</li> <li>• How can we learn to understand and respect others through reading?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p> <p><b>Range of Reading and Level of Text Complexity</b></p>	<ol style="list-style-type: none"> <li>1. Ask and answer questions about key details in a text.</li> <li>2. Identify the main topic and retell key details of a text.</li> <li>3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.</li> <li>4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</li> <li>6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</li> <li>7. Use the illustrations and details in a text to describe its key ideas.</li> <li>8. Identify the reasons an author gives to support points in a text.</li> <li>9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</li> <li>10. With prompting and support, read informational texts appropriately complex for grade 1.</li> </ol>

## Reading Standards: Foundational Skills (RF) – Grade One

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Understanding reading and writing conventions helps the reader to better understand what is read.</li> <li>• Phonological awareness is an essential foundational skill that primes readers for reading print.</li> <li>• Words are made up of separate and blended sounds.</li> <li>• Phonics and word-analysis skills can be used to decode, read, and write new words.</li> <li>• Syllabication can help in decoding words.</li> <li>• Comprehension is influenced by the accuracy and rate with which the text is read.</li> <li>• Context clues help us to decipher meaning.</li> </ul>	<ul style="list-style-type: none"> <li>• How do spaces on the page help us to make sense of the material we are reading?</li> <li>• How do the conventions of writing help us to read and comprehend what we read?</li>   <li>• How can the manipulation of sounds change a word’s meaning?</li> <li>• How can segmenting a word help when determining the beginning, middle, and ending sounds in words?</li>   <li>• How can we use what we know about one word to determine a word with that same beginning, middle, or ending sound?</li>   <li>• How does knowing phonetic rules help with decoding, reading, and spelling words?</li>   <li>• How does syllabication help us to decode and/or spell a word?</li>   <li>• Why is fluency important when reading?</li>   <li>• How can we use the illustrations and surrounding words to help us figure out an unknown word?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p>	<p><b>Print Concepts</b></p> <p><b>Phonological Awareness</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the organization and basic features of print.               <ol style="list-style-type: none"> <li>1a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).</li> <li>1b. Alphabetize words to the first and second letter.</li> </ol> </li> <li>2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).               <ol style="list-style-type: none"> <li>2a. Distinguish long from short vowel sounds in spoken single-syllable words.</li> <li>2b. Orally produce single-syllable words by blending sounds (phonemes) including consonant blends.</li> <li>2c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.</li> <li>2d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).</li> </ol> </li> </ol>









## Language (L) – Grade One

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Rules of spelling, punctuation, and capitalization are a necessity for good writing.</li> <li>• Language is divided into categories known as parts of speech.</li> <li>• Strategies help us to determine unfamiliar words.</li> <li>• Understanding the connections between roots and affixes help us to expand our vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to use grammar and usage rules when writing?</li> <li>• How do we use language to clearly communicate our ideas and knowledge to others?</li> <li>• How does familiarity with one word help us to determine unknown words?</li> <li>• How do context clues help us to understand unfamiliar words and phrases?</li> <li>• How does adding a prefix and/or suffix to a known root help us to expand our vocabulary?</li> <li>• How does understanding the meaning of common affixes help us to determine the meaning of an unfamiliar word?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Print all upper- and lowercase letters proficiently.</li> <li>1b. Use common, proper, and possessive nouns.</li> <li>1c. Use singular and plural nouns with matching verbs in basic sentences (e.g., <i>He hops; We hop</i>).</li> <li>1d. Use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my, they, them, their; anyone, everything</i>).</li> <li>1e. Use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>).</li> <li>1f. Use frequently occurring adjectives.</li> <li>1g. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>).</li> <li>1h. Use determiners (e.g. articles, demonstratives).</li> <li>1i. Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>).</li> <li>1j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Capitalize dates and names of people.</li> <li>2b. Use end punctuation for sentences.</li> <li>2c. Use commas in dates and to separate single words in a series.</li> <li>2d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.</li> <li>2e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.</li> </ol> </li> </ol>

	<p><b>Knowledge of Language</b></p> <p><b>Vocabulary Acquisition and Use</b></p>	<p>3. (Begins in grade 2)</p> <p>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.</p> <p>4a. Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>4b. Use frequently occurring affixes as a clue to the meaning of a word.</p> <p>4c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks, looked, looking</i>).</p> <p>4d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse, lighthouse, housefly</i>).</p> <p>5. With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.</p> <p>5a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.</p> <p>5b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes).</p> <p>5c. Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>).</p> <p>5d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings.</p> <p>6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).</p>
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## Reading Literature (RL) – Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Understanding the organization and purpose of a text selection can help the reader answer questions about unfamiliar words.</li> <li>• In real life, comparisons help generate similarities and differences and help determine a focus.</li> <li>• Illustrations and words help the reader to understand the character, setting, and plot.</li> <li>• Characters in stories can serve as models of Catholic values and behaviors.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know about the text?</li> <li>• What was the sequence of events in the story?</li> <li>• How can we determine the main idea? What details support the main idea, lesson, or moral?</li> <li>• What strategies can readers use to determine unfamiliar words in a text?</li> <li>• How can learning about the author’s and illustrator’s purposes aid in understanding a reading selection?</li> <li>• Why is the setting important?</li> <li>• How do the characters impact the events?</li> <li>• How do the events affect the characters?</li> <li>• How do illustrations and print work together to help us gather information?</li> <li>• How do characters demonstrate Catholic values and behaviors?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>4.2 Students use productive team membership skills.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>1. Ask and answer such questions as <i>who, what, where, when, why, and how</i> to demonstrate understanding of key details in a text.</li> <li>2. Recount stories, including fables and folktales from diverse cultures, and determine their central message (main idea), lesson, or moral.</li> <li>3. Describe how characters in a story respond to major events and challenges.</li> <li>4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.</li> <li>5. Describe the overall sequential structure of a story, describing how the beginning introduces the story and the ending concludes the action.</li> <li>6. Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.</li> <li>7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</li> <li>8. (Not applicable to literature)</li> <li>9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</li> </ol>

	<b>Range of Reading and Level of Text Complexity</b>	10. By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.
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## Reading Standards for Informational Text (RI) – Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Identifying important ideas and supporting details is essential to understanding what is read.</li> <li>• Words and phrases supply meaning to a selection.</li> <li>• Text features help the reader navigate the text.</li> <li>• Together the illustrations and print provide information.</li> <li>• Reading invites the reader to use new and prior knowledge and ideas to understand the world and the reader's place in the world.</li> </ul>	<ul style="list-style-type: none"> <li>• What does the author want us to know and remember about the text?</li> <li>• How can we determine the main idea of the text selection?</li> <li>• How do particular words and phrases impact the meaning?</li> <li>• Why is it important to use descriptive words?</li> <li>• What information can be learned from previewing and locating the text features and components of a reading selection?</li> <li>• How do text features help us as we read a piece of informational text?</li> <li>• What is gained from examining both print and illustrations?</li> <li>• Why is it important to read a variety of materials?</li> <li>• How can we use prior knowledge and ideas to build upon the understanding of new material?</li> <li>• How can we learn to understand and respect others through reading?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.2 Students make sense of the variety of materials they read.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Key Ideas and Details</b></p> <p><b>Craft and Structure</b></p> <p><b>Integration of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>1. Ask and answer such questions as <i>who, what, where, when, why,</i> and <i>how</i> to demonstrate understanding of key details in a text.</li> <li>2. Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.</li> <li>3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.</li> <li>4. Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i>.</li> <li>5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.</li> <li>6. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.</li> <li>7. Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.</li> <li>8. Describe how reasons support specific points the author makes in a text.</li> <li>9. Compare and contrast the most important points presented by two texts on the same topic.</li> </ol>

<p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Range of Reading and Level of Text Complexity</b></p>	<p>10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grade 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>
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	<p><b>Vocabulary Acquisition and Use</b></p>	<ol style="list-style-type: none"> <li>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 2 reading and content</i>, choosing flexibly from an array of strategies..       <ol style="list-style-type: none"> <li>4a. Use sentence-level context as a clue to the meaning of a word or phrase.</li> <li>4b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy, tell/retell</i>).</li> <li>4c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition, additional</i>)</li> <li>4d. Use knowledge of compound words in oral and written expression.</li> <li>4e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.</li> </ol> </li> <li>5. Demonstrate understanding of word relationships and nuances in word meanings.       <ol style="list-style-type: none"> <li>5a. Identify real-life connections between words and their use (e.g., describe foods that are <i>spicy</i> or <i>juicy</i>).</li> <li>5b. Distinguish shades of meaning among closely related verbs (e.g., <i>toss, throw, hurl</i>) and closely related adjectives (e.g., <i>thin, slender, skinny, scrawny</i>).</li> <li>5c. Identify synonyms, antonyms, homophones, and homonyms.</li> </ol> </li> <li>6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids are happy that makes me happy</i>).</li> </ol>
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## Writing (W) – Grade Three

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of text type is influenced by task, purpose, and audience.</li> <li>• Writing can be used to communicate new learning.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Effective writing includes the use of accurate facts and concrete details.</li> <li>• Using a formal writing process strengthens the written work.</li> <li>• Writing is essential to communication.</li> <li>• Computer skills are crucial in today's world.</li> <li>• The words that others write belong only to them.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we determine whether to write an opinion piece, an informative/explanatory piece, or a narrative piece?</li> <li>• How can we convey information and our ideas through dialogue?</li> <li>• How can we build upon our knowledge by seeking out new information?</li> <li>• How do we communicate new information?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to substantiate our writing with facts and details?</li> <li>• How do planning, revising, and editing enhance our writing?</li> <li>• Why is writing important?</li> <li>• How do we make our writing interesting?</li> <li>• How can the use of the computer help us to improve our writing?</li> <li>• What is plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize,</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write opinion pieces on topics or texts, supporting a point of view with reasons.               <ol style="list-style-type: none"> <li>1a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.</li> <li>1b. Provide reasons that support the opinion.</li> <li>1c. Use linking words and phrases (e.g., <i>because, therefore, since, for example</i>) to connect opinion and reasons.</li> <li>1d. Provide a concluding statement or section.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.               <ol style="list-style-type: none"> <li>2a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.</li> <li>2b. Develop the topic with facts, definitions, and details.</li> <li>2c. Use linking words and phrases (e.g., <i>also, another, and, more, but</i>) to connect ideas within categories of information.</li> <li>2d. Provide a concluding statement or section.</li> </ol> </li> </ol>



## Speaking and Listening (SL) – Grade Three

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The task, purpose, and audience help to determine the most effective way to communicate information.</li> <li>• Listening is important to the understanding of the message.</li> <li>• There is a difference between listening and hearing.</li> <li>• There are important rules for collaborative discussion.</li> <li>• To communicate, it is essential that the speaker is able to express ideas clearly.</li> <li>• Speech is a reflection of the speaker.               <ul style="list-style-type: none"> <li>• To communicate, it is important to express thoughts clearly.</li> <li>• When retelling a sequence of events or conveying a message, it is important to use appropriate facts and relevant, descriptive details.</li> <li>• Working collaboratively reflects our response to God’s call to love and care for others.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How does effective communication enhance learning?</li> <li>• How can we engage our audience with clear and concise presentations of our knowledge?</li> <li>• Why do we consider our audience when determining the best way to communicate our ideas?</li> <li>• How does listening help us to recall and retell the information that is presented to us?</li> <li>• What skills does it take to be a good listener?</li> <li>• How can we gather, organize, and evaluate material through listening?</li> <li>• What is the difference between listening and hearing?</li> <li>• Why are the rules for discussion necessary?</li> <li>• Why do we ask questions when listening to a speaker?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• Why are there different presentation skills for different audiences?</li> <li>• Why is it important to communicate clearly?</li> <li>• Why is it essential to use correct grammar in speaking?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• How can we enhance our oral communication?</li> <li>• How does working collaboratively demonstrate our call to love and respect one another and share the gifts God has given to us?</li> <li>• How do others learn about our responsiveness to God’s message by what we say and the way we say it?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p>

<p>communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p style="text-align: center;"><b>Presentation of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>1a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</li> <li>1b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).</li> <li>1c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.</li> <li>1d. Explain their own ideas and understanding in light of the discussion.</li> <li>2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</li> <li>3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.</li> <li>4. Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</li> <li>5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.</li> <li>6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Three

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of words and phrases impacts the effectiveness of communication.</li> <li>• Rules of spelling, punctuation, and capitalization are essential for clarity and communication in writing.</li> <li>• Using correct grammar is important to effective written and oral communication.</li> <li>• Understanding Greek and Latin roots enables the reader to expand vocabulary and decipher unfamiliar words.</li> <li>• Written work often includes literal and non-literal meanings for words and phrases.</li> </ul>	<ul style="list-style-type: none"> <li>• How does word choice influence another’s understanding of our message?</li> <li>• What is the importance of knowing and using rules of writing?</li> <li>• Why is it necessary to use correct grammar in writing and speaking?</li> <li>• How can we use knowledge of root words and affixes to determine the meaning of unknown words?</li> <li>• How can we use context to determine the meaning of words and phrases?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.</li> <li>1b. Form and use regular and irregular plural nouns.</li> <li>1c. Use abstract nouns (e.g., <i>childhood</i>).</li> <li>1d. Form and use regular and irregular verbs.</li> <li>1e. Form and use the simple (e.g., <i>I walked; I walk; I will walk</i>) verb tenses.</li> <li>1f. Ensure subject-verb and pronoun-antecedent agreement.</li> <li>1g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.</li> <li>1h. Use coordinating and subordinating conjunctions.</li> <li>1i. Produce simple, compound, and complex sentences.</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Capitalize appropriate words in titles.</li> <li>2b. Use commas in addresses.</li> <li>2c. Use commas and quotation marks in dialogue.</li> <li>2d. Form and use possessives.</li> </ol> </li> </ol>

	<p><b>Knowledge of Language</b></p> <p><b>Vocabulary Acquisition and Use</b></p>	<p>2e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., <i>sitting, smiled, cries, happiness</i>).</p> <p>2f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.</p> <p>2g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.</p> <p>3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>3a. Choose words and phrases for effect.</p> <p>3b. Recognize and observe differences between the conventions of spoken and written Standard English.</p> <p>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 3 reading and content</i>, choosing flexibly from a range of strategies.</p> <p>4a. Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>4b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., <i>agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat</i>).</p> <p>4c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company, companion</i>).</p> <p>4d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.</p> <p>5. Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>5a. Distinguish the literal and non-literal meanings of words and phrases in context (e.g., <i>take steps</i>).</p> <p>5b. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew, believed, suspected, heard, wondered</i>).</p> <p>5c. Recognize and explain the meaning of words using synonyms, antonyms, homophones, and homonyms.</p> <p>6. Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i>).</p>
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## Reading Standards: Foundational Skills (RF) – Grade Four

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Patterns help to make sense of print.</li> <li>• Phonics and word recognition skills can be used to decode, read, and write unfamiliar words.</li> <li>• Reading is important to daily life and understanding how words are formed and origins of words leads to fluency.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we make sense of printed information?</li> <li>• How can we use phonics and word recognition skills to determine unfamiliar words?</li> <li>• How can we use what we know about root words and affixes to determine unfamiliar words?</li> <li>• Why is it important to read fluently?</li> <li>• How can knowing word origins help to improve reading fluency?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
1.2 Students make sense of the variety of materials they read.	<b>Phonics and Word Recognition</b>  <b>Fluency</b>	3. Know and apply grade-level phonics and word analysis skills in decoding words. 3a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.  4. Read with sufficient accuracy and fluency to support comprehension. 4a. Read grade-level text with purpose and understanding. 4b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. 4c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

## Writing (W) – Grade Four

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of text type is influenced by task, purpose, and audience.</li> <li>• Writing can be used to communicate new learning.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Effective writing includes the use of accurate facts and concrete details.</li> <li>• Using a formal writing process strengthens the written work.</li> <li>• Writing is essential to communication.</li> <li>• Computer skills are crucial in today's world.</li> <li>• The words that others write belong only to them.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we determine whether to write an opinion piece, an informative/explanatory piece, or a narrative piece?</li> <li>• How can we convey information and our ideas through dialogue?</li> <li>• How can we build upon our knowledge by seeking out new information?</li> <li>• How do we communicate new information?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to substantiate our writing with facts and details?</li> <li>• How do planning, revising, and editing enhance our writing?</li> <li>• Why is writing important?</li> <li>• How do we make our writing interesting?</li> <li>• How can the use of the computer help us to improve our writing?</li> <li>• What is plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.               <ol style="list-style-type: none"> <li>1a. Introduce the topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.</li> <li>1b. Provide reasons that are supported by facts and details.</li> <li>1c. Link opinion and reasons using words and phrases (e.g., <i>for instance, in order to, in addition</i>).</li> <li>1d. Provide a concluding statement or section related to the opinion presented.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.               <ol style="list-style-type: none"> <li>2a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension</li> <li>2b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> </ol> </li> </ol>



## Speaking and Listening (SL) – Grade Four

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The task, purpose, and audience help to determine the most effective way to communicate information.</li> <li>• Listening is important to the understanding of the message.</li> <li>• There is a difference between listening and hearing.</li> <li>• There are important rules for collaborative discussion.</li> <li>• To communicate, it is essential that the speaker is able to express ideas clearly.</li> <li>• Speech is a reflection of the speaker.               <ul style="list-style-type: none"> <li>• To communicate, it is important to express thoughts clearly.</li> <li>• When retelling a sequence of events or conveying a message, it is important to use appropriate facts and relevant, descriptive details.</li> <li>• Working collaboratively reflects our response to God’s call to love and care for others.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How does effective communication enhance learning?</li> <li>• How can we engage our audience with clear and concise presentations of our knowledge?</li> <li>• Why do we consider our audience when determining the best way to communicate our ideas?</li> <li>• How does listening help us to recall and retell the information that is presented to us?</li> <li>• What skills does it take to be a good listener?</li> <li>• How can we gather, organize, and evaluate material through listening?</li> <li>• What is the difference between listening and hearing?</li> <li>• Why are the rules for discussion necessary?</li> <li>• Why do we ask questions when listening to a speaker?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• Why are there different presentation skills for different audiences?</li> <li>• Why is it important to communicate clearly?</li> <li>• Why is it essential to use correct grammar in speaking?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• How can we enhance our oral communication?</li> <li>• How does working collaboratively demonstrate our call to love and respect one another and share the gifts God has given to us?</li> <li>• How do others learn about our responsiveness to God’s message by what we say and the way we say it?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p>

<p>communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Presentation of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>1a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</li> <li>1b. Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>1c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.</li> <li>1d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.</li> <li>2. Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</li> <li>3. Identify the reasons and evidence a speaker provides to support particular points.</li> <li>4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</li> <li>5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</li> <li>6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See grade 4 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Four

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of words and phrases impacts the effectiveness of communication.</li> <li>• Rules of spelling, punctuation, and capitalization are essential for clarity and communication in writing.</li> <li>• Using correct grammar is important to effective written and oral communication.</li> <li>• Understanding Greek and Latin roots enables the reader to expand vocabulary and decipher unfamiliar words.</li> <li>• Written work often includes literal and non-literal meanings for words and phrases.</li> </ul>	<ul style="list-style-type: none"> <li>• How does word choice influence another’s understanding of our message?</li> <li>• What is the importance of knowing and using rules of writing?</li> <li>• Why is it necessary to use correct grammar in writing and speaking?</li> <li>• How can we use knowledge of root words and affixes to determine the meaning of unknown words?</li> <li>• How can we use context to determine the meaning of words and phrases?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>).</li> <li>1b. Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses.</li> <li>1c. Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions.</li> <li>1d. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>).</li> <li>1e. Form and use prepositional phrases.</li> <li>1f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.</li> <li>1g. Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Use correct capitalization.</li> <li>2b. Use commas and quotation marks to mark direct speech and quotations from a text.</li> <li>2c. Use a comma before a coordinating conjunction in a compound sentence.</li> </ol> </li> </ol>



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## Reading Standards: Foundational Skills (RF) – Grade Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Patterns help to make sense of print.</li> <li>• Phonics and word recognition skills can be used to decode, read, and write unfamiliar words.</li> <li>• Reading is important to daily life and understanding how words are formed and origins of words leads to fluency.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we make sense of printed information?</li> <li>• How can we use phonics and word recognition skills to determine unfamiliar words?</li> <li>• How can we use what we know about root words and affixes to determine unfamiliar words?</li> <li>• Why is it important to read fluently?</li> <li>• How can knowing word origins help to improve reading fluency?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
1.2 Students make sense of the variety of materials they read.	<b>Phonics and Word Recognition</b>  <b>Fluency</b>	3. Know and apply grade-level phonics and word analysis skills in decoding words. 3a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.  4. Read with sufficient accuracy and fluency to support comprehension. 4a. Read grade-level text with purpose and understanding. 4b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. 4c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

## Writing (W) – Grade Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of text type is influenced by task, purpose, and audience.</li> <li>• Writing can be used to communicate new learning.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Effective writing includes the use of accurate facts and concrete details.</li> <li>• Using a formal writing process strengthens the written work.</li> <li>• Writing is essential to communication.</li> <li>• Computer skills are crucial in today's world.</li> <li>• The words that others write belong only to them.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we determine whether to write an opinion piece, an informative/explanatory piece, or a narrative piece?</li> <li>• How can we convey information and our ideas through dialogue?</li> <li>• How can we build upon our knowledge by seeking out new information?</li> <li>• How do we communicate new information?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to substantiate our writing with facts and details?</li> <li>• How do planning, revising, and editing enhance our writing?</li> <li>• Why is writing important?</li> <li>• How do we make our writing interesting?</li> <li>• How can the use of the computer help us to improve our writing?</li> <li>• What is plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.               <ol style="list-style-type: none"> <li>1a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.</li> <li>1b. Provide logically ordered reasons that are supported by facts and details.</li> <li>1c. Link opinions and reasons using words, phrases, and clauses (e.g., <i>consequently, specifically</i>).</li> <li>1d. Provide a concluding statement or section related to the opinion presented.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.               <ol style="list-style-type: none"> <li>2a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</li> <li>2b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> </ol> </li> </ol>



	<b>Range of Writing</b>	10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
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## Speaking and Listening (SL) – Grade Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The task, purpose, and audience help to determine the most effective way to communicate information.</li> <li>• Listening is important to the understanding of the message.</li> <li>• There is a difference between listening and hearing.</li> <li>• There are important rules for collaborative discussion.</li> <li>• To communicate, it is essential that the speaker is able to express ideas clearly.</li> <li>• Speech is a reflection of the speaker.                             <ul style="list-style-type: none"> <li>• To communicate, it is important to express thoughts clearly.</li> <li>• When retelling a sequence of events or conveying a message, it is important to use appropriate facts and relevant, descriptive details.</li> <li>• Working collaboratively reflects our response to God’s call to love and care for others.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How does effective communication enhance learning?</li> <li>• How can we engage our audience with clear and concise presentations of our knowledge?</li> <li>• Why do we consider our audience when determining the best way to communicate our ideas?</li> <li>• How does listening help us to recall and retell the information that is presented to us?</li> <li>• What skills does it take to be a good listener?</li> <li>• How can we gather, organize, and evaluate material through listening?</li> <li>• What is the difference between listening and hearing?</li> <li>• Why are the rules for discussion necessary?</li> <li>• Why do we ask questions when listening to a speaker?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• Why are there different presentation skills for different audiences?</li> <li>• Why is it important to communicate clearly?</li> <li>• Why is it essential to use correct grammar in speaking?</li> <li>• How can we effectively express our ideas to our audience?</li> <li>• How can we enhance our oral communication?</li> <li>• How does working collaboratively demonstrate our call to love and respect one another and share the gifts God has given to us?</li> <li>• How do others learn about our responsiveness to God’s message by what we say and the way we say it?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p>

<p>communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Presentation of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>1a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</li> <li>1b. Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>1c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>1d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.</li> <li>2. Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</li> <li>3. Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.</li> <li>4. Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</li> <li>5. Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</li> <li>6. Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• The choice of words and phrases impacts the effectiveness of communication.</li> <li>• Rules of spelling, punctuation, and capitalization are essential for clarity and communication in writing.</li> <li>• Using correct grammar is important to effective written and oral communication.</li> <li>• Understanding Greek and Latin roots enables the reader to expand vocabulary and decipher unfamiliar words.</li> <li>• Written work often includes literal and non-literal meanings for words and phrases.</li> </ul>	<ul style="list-style-type: none"> <li>• How does word choice influence another’s understanding of our message?</li> <li>• What is the importance of knowing and using rules of writing?</li> <li>• Why is it necessary to use correct grammar in writing and speaking?</li> <li>• How can we use knowledge of root words and affixes to determine the meaning of unknown words?</li> <li>• How can we use context to determine the meaning of words and phrases?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.</li> <li>1b. Form and use the perfect (e.g., <i>I had walked; I have walked; I will have walked</i>) verb tenses.</li> <li>1c. Use verb tense to convey various times, sequences, states, and conditions.</li> <li>1d. Recognize and correct inappropriate shifts in verb tense.</li> <li>1e. Use correlative conjunctions (e.g., <i>either/or, neither/nor</i>).</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Use punctuation to separate items in a series.</li> <li>2b. Use a comma to separate an introductory element from the rest of the sentence.</li> <li>2c. Use a comma to set off the words <i>yes</i> and <i>no</i> (e.g., <i>Yes, thank you</i>), to set off a tag question from the rest of the sentence (e.g., <i>It’s true, isn’t it?</i>), and to indicate direct address (e.g., <i>Is that you, Steve?</i>).</li> <li>2d. Use underlining, quotation marks, or italics to indicate titles of works.</li> <li>2e. Spell grade-appropriate words correctly, consulting references as needed.</li> </ol> </li> </ol>



## Reading Literature (RL) – Grade Six

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Central themes are developed over the course of a text through the characters, setting, and plot.</li> <li>• An author uses dialogue to communicate important information.</li> <li>• Using text evidence strengthens the understanding of text.</li> <li>• Comparing and contrasting multiple texts or other mediums on the same topic or by the same author contributes to deeper understanding of text.</li> <li>• Reading a variety of texts is important for expanding knowledge and understanding the world.</li> <li>• Readers form images when reading.</li> <li>• Different forms or genres approach themes or topics differently.</li> <li>• Similar themes, characters, and events can be found in works of fiction throughout time.</li> <li>• Authors choose words and phrases carefully and for specific purposes.</li> </ul>	<ul style="list-style-type: none"> <li>• How does an understanding of the characters, setting, and plot help us to identify the central idea?</li> <li>• How does reading shape values and morals?</li> <li>• How do we learn about the character and other story elements through dialogue?</li> <li>• Why is it essential to cite evidence from the text to support thinking?</li> <li>• How does comparing and contrasting texts, videos, audios, and live versions support our understanding?</li> <li>• Why is it important to read a variety of challenging texts?</li> <li>• Why do images formed when reading a text often differ from those seen while viewing a video or live performance of that text?</li> <li>• Why does a video or live version of a text often differ from the original work?</li> <li>• How would the genre impact the approach an author uses?</li> <li>• Why might the fictional account of a time differ from the historical account?</li> <li>• How do characters, themes, or events from a particular modern work of fiction resemble characters, themes, or events from myths and traditional stories?</li> <li>• How do characters in stories serve as models of Catholic values and behaviors?</li> <li>• How do themes in parables relate to themes in stories, poems, folktales, and fables?</li> <li>• How does word choice impact the overall text?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific</p>	<p><b>Key Ideas and Details</b></p>	<ol style="list-style-type: none"> <li>1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</li> <li>2. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</li> </ol>







## Writing (W) – Grade Six

<b>Essential Understandings</b>		<b>Guided Questions</b>
<ul style="list-style-type: none"> <li>• Following the writing process allows students to engage in specific steps for communicating ideas.</li> <li>• Computer skills are essential in today's world.</li> <li>• Considering the task, purpose, and audience is important to effective writing.</li> <li>• Ethical procedures are required for the use of technology.</li> <li>• The words that others write belong only to them.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Information found in various sources can differ.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the writing process help us to strengthen our writing and communicate ideas more effectively?</li> <li>• How can we use technology to gather information?</li> <li>• How can we use technology to improve our writing?</li> <li>• How do the task, purpose, and audience influence the organization and style used in our writing?</li> <li>• How do we determine the most appropriate form of writing in a particular situation?</li> <li>• How do we assure ethical practices when using technology?</li> <li>• What are the ethical and legal implications of Internet use?</li> <li>• How do we avoid plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to refer to multiple sources when gathering information?</li> <li>• How does the researcher determine if a source is credible?</li> </ul>	
<b>Academic Expectations</b>	<b>Anchor Standard Strand</b>	<b>Standards</b>
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write arguments to support claims with clear reasons and relevant evidence.               <ol style="list-style-type: none"> <li>1a. Introduce claim(s) and organize the reasons and evidence clearly.</li> <li>1b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.</li> <li>1c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.</li> <li>1d. Establish and maintain a formal style.</li> <li>1e. Provide a concluding statement or section that follows from the argument presented.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.               <ol style="list-style-type: none"> <li>2a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> <li>2b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</li> </ol> </li> </ol>



	<b>Range of Writing</b>	10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
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## Speaking and Listening (SL) – Grade Six

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• It is essential to be able to work with others and discuss what is encountered in the classroom.</li> <li>• Organization, clarity, and focus are essential in presenting information.</li> <li>• Verbal and non-verbal communication skills improve oral presentations.</li> <li>• Multimedia and visual displays enhance oral presentations.</li> <li>• The way a speaker communicates depends on the topic, purpose, and audience.                             <ul style="list-style-type: none"> <li>• To communicate, you must express your thoughts clearly.</li> </ul> </li> <li>• You must listen to obtain information.                             <ul style="list-style-type: none"> <li>• There is a difference between listening and hearing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How do we effectively convey to others what we know?</li> <li>• Why are there rules to guide collaborative work and discussions?</li> <li>• Why is it important to communicate ideas in a clear, organized way?</li> <li>• How does the way a speaker talks influence the effectiveness of the speech?</li> <li>• How does the way a speaker acts influence the effectiveness of the speech?</li> <li>• What makes a good oral presentation?</li> <li>• How can the use of both verbal and non-verbal communication impact the clarity of a presentation?</li> <li>• How can the use of multimedia and visual displays help us to improve our oral presentations?</li> <li>• When would it be acceptable to use informal English in an oral presentation?</li> <li>• Why is it important to use formal English for some speeches?</li> <li>• How would an oral presentation change for different audiences?</li> <li>• How does the use of specific words, rate of speech, expression, and concrete evidence help us to express our thoughts clearly?</li> <li>• How can compassion and understanding be increased through listening?</li> <li>• What skills does it take to be a good listener?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 6 topics, texts, and issues</i>, building on others' ideas and expressing their own clearly.</p> <p>1a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>1b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.</p> <p>1c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.</p>

<p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Presentation of Knowledge and Ideas</b></p>	<p>1d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.</p> <ol style="list-style-type: none"> <li>1. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.</li> <li>2. Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.</li> <li>3. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.</li> <li>4. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.</li> <li>5. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Six

Language (L) – Grade Six		
Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Rules of grammar, mechanics, usage, and spelling are important to effective written and oral communication.</li> <li>• Students use collaborative skills and critical thinking skills to create original writing.</li> <li>• Students write for a variety of purposes including narrative, informational, and argumentative writing.</li> <li>• Effectively using our language is essential to communication.</li> <li>• Language can be used to achieve desired effects.</li> <li>• The use of phonics skills and known words assist in decoding and understanding unknown or multiple-meaning words.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to correctly use grammar and mechanics in speaking? In writing?</li> <li>• Why is it important to spell words correctly in written communication?</li> <li>• How does collaboration improve our writing?</li> <li>• Why is it important to write for a variety of purposes?</li> <li>• Why is it important to use our language correctly when writing, speaking, reading, or listening?</li> <li>• How does good communication affect understanding?</li> <li>• How can we use language to make ideas more interesting and exciting?</li> <li>• How can we use language to show our emotions?</li> <li>• How can we use language to help our audience visualize our ideas?</li> <li>• How can our understanding of Greek and Latin roots and affixes help us to determine the meaning of new words?</li> <li>• How can knowledge of language and conventions help us with writing, reading, and speaking?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Ensure that pronouns are in the proper case (subjective, objective, possessive).</li> <li>1b. Use intensive pronouns (e.g., <i>myself</i>, <i>ourselves</i>).</li> <li>1c. Recognize and correct inappropriate shifts in pronoun number and person.</li> <li>1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).</li> <li>1e. Recognize variations from Standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.</li> <li>2b. Spell correctly.</li> </ol> </li> </ol>

<p>of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Knowledge of Language</b></p> <p><b>Vocabulary Acquisition and Use</b></p>	<ol style="list-style-type: none"> <li>3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ol style="list-style-type: none"> <li>3a. Vary sentence patterns for meaning, reader/listener interest, and style.</li> <li>3b. Maintain consistency in style and tone.</li> </ol> </li> <li>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 6 reading and content</i>, choosing flexibly from a range of strategies. <ol style="list-style-type: none"> <li>4a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.</li> <li>4b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience, auditory, audible</i>).</li> <li>4c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</li> <li>4d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</li> </ol> </li> <li>5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. <ol style="list-style-type: none"> <li>5a. Interpret figures of speech (e.g., personification) in context.</li> <li>5b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.</li> <li>5c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>stingy, scrimping, economical, thrifty</i>).</li> </ol> </li> <li>6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ol>
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## Reading Literature (RL) – Grade Seven

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Central themes are developed over the course of a text through the characters, setting, and plot.</li> <li>• An author uses dialogue to communicate important information.</li> <li>• Using text evidence strengthens the understanding of text.</li> <li>• Comparing and contrasting multiple texts or other mediums on the same topic or by the same author contributes to deeper understanding of text.</li> <li>• Reading a variety of texts is important for expanding knowledge and understanding the world.</li> <li>• Readers form images when reading.</li> <li>• Different forms or genres approach themes or topics differently.</li> <li>• Similar themes, characters, and events can be found in works of fiction throughout time.</li> <li>• Authors choose words and phrases carefully and for specific purposes.</li> </ul>	<ul style="list-style-type: none"> <li>• How does an understanding of the characters, setting, and plot help us to identify the central idea?</li> <li>• How does reading shape values and morals?</li> <li>• How do we learn about the character and other story elements through dialogue?</li> <li>• Why is it essential to cite evidence from the text to support thinking?</li> <li>• How does comparing and contrasting texts, videos, audios, and live versions support our understanding?</li> <li>• Why is it important to read a variety of challenging texts?</li> <li>• Why do images formed when reading a text often differ from those seen while viewing a video or live performance of that text?</li> <li>• Why does a video or live version of a text often differ from the original work?</li> <li>• How would the genre impact the approach an author uses?</li> <li>• Why might the fictional account of a time differ from the historical account?</li> <li>• How do characters, themes, or events from a particular modern work of fiction resemble characters, themes, or events from myths and traditional stories?</li> <li>• How do characters in stories serve as models of Catholic values and behaviors?</li> <li>• How do themes in parables relate to themes in stories, poems, folktales, and fables?</li> <li>• How does word choice impact the overall text?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific</p>	<p><b>Key Ideas and Details</b></p>	<ol style="list-style-type: none"> <li>1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</li> <li>2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.</li> </ol>







## Writing (W) – Grade Seven

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Following the writing process allows students to engage in specific steps for communicating ideas.</li> <li>• Computer skills are essential in today's world.</li> <li>• Considering the task, purpose, and audience is important to effective writing.</li> <li>• Ethical procedures are required for the use of technology.</li> <li>• The words that others write belong only to them.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Information found in various sources can differ.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the writing process help us to strengthen our writing and communicate ideas more effectively?</li> <li>• How can we use technology to gather information?</li> <li>• How can we use technology to improve our writing?</li> <li>• How do the task, purpose, and audience influence the organization and style used in our writing?</li> <li>• How do we determine the most appropriate form of writing in a particular situation?</li> <li>• How do we assure ethical practices when using technology?</li> <li>• What are the ethical and legal implications of Internet use?</li> <li>• How do we avoid plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to refer to multiple sources when gathering information?</li> <li>• How does the researcher determine if a source is credible?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write arguments to support claims with clear reasons and relevant evidence.               <ol style="list-style-type: none"> <li>1a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>1b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>1c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.</li> <li>1d. Establish and maintain a formal style.</li> <li>1e. Provide a concluding statement or section that follows from and supports the argument presented.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.               <ol style="list-style-type: none"> <li>2a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> </ol> </li> </ol>



	<b>Range of Writing</b>	<p>9. Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>9a. Apply <i>grade 7 Reading standards</i> to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.”).</p> <p>9b. Apply <i>grade 7 Reading standards</i> to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.”).</p> <p>10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>
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## Speaking and Listening (SL) – Grade Seven

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• It is essential to be able to work with others and discuss what is encountered in the classroom.</li> <li>• Organization, clarity, and focus are essential in presenting information.</li> <li>• Verbal and non-verbal communication skills improve oral presentations.</li> <li>• Multimedia and visual displays enhance oral presentations.</li> <li>• The way a speaker communicates depends on the topic, purpose, and audience.                             <ul style="list-style-type: none"> <li>• To communicate, you must express your thoughts clearly.</li> </ul> </li> <li>• You must listen to obtain information.                             <ul style="list-style-type: none"> <li>• There is a difference between listening and hearing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How do we effectively convey to others what we know?</li> <li>• Why are there rules to guide collaborative work and discussions?</li> <li>• Why is it important to communicate ideas in a clear, organized way?</li> <li>• How does the way a speaker talks influence the effectiveness of the speech?</li> <li>• How does the way a speaker acts influence the effectiveness of the speech?</li> <li>• What makes a good oral presentation?</li> <li>• How can the use of both verbal and non-verbal communication impact the clarity of a presentation?</li> <li>• How can the use of multimedia and visual displays help us to improve our oral presentations?</li> <li>• When would it be acceptable to use informal English in an oral presentation?</li> <li>• Why is it important to use formal English for some speeches?</li> <li>• How would an oral presentation change for different audiences?</li> <li>• How does the use of specific words, rate of speech, expression, and concrete evidence help us to express our thoughts clearly?</li> <li>• How can compassion and understanding be increased through listening?</li> <li>• What skills does it take to be a good listener?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 7 topics, texts, and issues</i>, building on others' ideas and expressing their own clearly.</p> <p>1a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>1b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.</p> <p>1c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.</p> <p>1d. Acknowledge new information expressed by others, and, when warranted, modify their own views.</p>

<p>2.59 Students demonstrate an understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Presentation of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.</li> <li>3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.</li> <li>4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</li> <li>5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</li> <li>6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Seven

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Rules of grammar, mechanics, usage, and spelling are important to effective written and oral communication.</li> <li>• Students use collaborative skills and critical thinking skills to create original writing.</li> <li>• Students write for a variety of purposes including narrative, informational, and argumentative writing.</li> <li>• Effectively using our language is essential to communication.</li> <li>• Language can be used to achieve desired effects.</li> <li>• The use of phonics skills and known words assist in decoding and understanding unknown or multiple-meaning words.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to correctly use grammar and mechanics in speaking? In writing?</li> <li>• Why is it important to spell words correctly in written communication?</li> <li>• How does collaboration improve our writing?</li> <li>• Why is it important to write for a variety of purposes?</li> <li>• Why is it important to use our language correctly when writing, speaking, reading, or listening?</li> <li>• How does good communication affect understanding?</li> <li>• How can we use language to make ideas more interesting and exciting?</li> <li>• How can we use language to show our emotions?</li> <li>• How can we use language to help our audience visualize our ideas?</li> <li>• How can our understanding of Greek and Latin roots and affixes help us to determine the meaning of new words?</li> <li>• How can knowledge of language and conventions help us with writing, reading, and speaking?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Explain the function of phrases and clauses in general and their function in specific sentences.</li> <li>1b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.</li> <li>1c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i> but not <i>He wore an old [,] green shirt</i>).</li> <li>2b. Spell correctly.</li> </ol> </li> </ol>

<p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Knowledge of Language</b></p> <p><b>Vocabulary Acquisition and Use</b></p>	<ol style="list-style-type: none"> <li>3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.       <ol style="list-style-type: none"> <li>3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.</li> </ol> </li> <li>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i>, choosing flexibly from a range of strategies.       <ol style="list-style-type: none"> <li>4a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.</li> <li>4b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i>, <i>bellicose</i>, <i>rebel</i>).</li> <li>4c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</li> <li>4d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</li> </ol> </li> <li>5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.       <ol style="list-style-type: none"> <li>5a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.</li> <li>5b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.</li> <li>5c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>refined</i>, <i>respectful</i>, <i>polite</i>, <i>diplomatic</i>, <i>condescending</i>).</li> </ol> </li> <li>6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ol>
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## Reading Literature (RL) – Grade Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Central themes are developed over the course of a text through the characters, setting, and plot.</li> <li>• An author uses dialogue to communicate important information.</li> <li>• Using text evidence strengthens the understanding of text.</li> <li>• Comparing and contrasting multiple texts or other mediums on the same topic or by the same author contributes to deeper understanding of text.</li> <li>• Reading a variety of texts is important for expanding knowledge and understanding the world.</li> <li>• Readers form images when reading.</li> <li>• Different forms or genres approach themes or topics differently.</li> <li>• Similar themes, characters, and events can be found in works of fiction throughout time.</li> <li>• Authors choose words and phrases carefully and for specific purposes.</li> </ul>	<ul style="list-style-type: none"> <li>• How does an understanding of the characters, setting, and plot help us to identify the central idea?</li> <li>• How does reading shape values and morals?</li> <li>• How do we learn about the character and other story elements through dialogue?</li> <li>• Why is it essential to cite evidence from the text to support thinking?</li> <li>• How does comparing and contrasting texts, videos, audios, and live versions support our understanding?</li> <li>• Why is it important to read a variety of challenging texts?</li> <li>• Why do images formed when reading a text often differ from those seen while viewing a video or live performance of that text?</li> <li>• Why does a video or live version of a text often differ from the original work?</li> <li>• How would the genre impact the approach an author uses?</li> <li>• Why might the fictional account of a time differ from the historical account?</li> <li>• How do characters, themes, or events from a particular modern work of fiction resemble characters, themes, or events from myths and traditional stories?</li> <li>• How do characters in stories serve as models of Catholic values and behaviors?</li> <li>• How do themes in parables relate to themes in stories, poems, folktales, and fables?</li> <li>• How does word choice impact the overall text?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific</p>	<p><b>Key Ideas and Details</b></p>	<ol style="list-style-type: none"> <li>1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</li> <li>2. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.</li> </ol>



## Reading Standards for Informational Text (RI) – Grade Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Writers use specific words, phrases, and formats to convey meaning.</li> <li>• Topics and ideas are presented in print and digital text, video, and multimedia formats or mediums.</li> <li>• Information in text is backed up by arguments or claims using reasoning and evidence.</li> <li>• Particular periods and events in history or scientific work and discoveries can reflect Catholic beliefs and values.</li> <li>• Texts can have conflicting information on the same topic.</li> <li>• Phonics and word recognition skills as well as context can be used to identify unfamiliar words.</li> <li>• Wide reading enhances the ability to understand and respect diversity.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the author of a text affect our understanding of the text?</li> <li>• Why is a particular format effective for understanding and interpreting information?</li> <li>• Why would another medium have been more effective to present the information?</li> <li>• What strategies did the writer use to come to his/her conclusions?</li> <li>• Why is it important to determine whether or not the writer used relevant evidence and credible sources to back up an argument or claim?</li> <li>• Why should readers retrace the reasoning used by a writer to back up information?</li> <li>• How can particular periods and events in history or scientific work and discoveries support or veer from Catholic beliefs and values?</li> <li>• How can texts on the same topic have different facts?</li> <li>• How can we determine the correct information in two texts that have conflicting information?</li> <li>• How can interpretation of facts or point of view lead to differences in informational texts?</li> <li>• How can religious, political, and cultural beliefs influence facts or interpretation of facts?</li> <li>• How do we find the meaning of new words or phrases?</li> <li>• How does the structure of a text help us to understand it?</li> <li>• How can we learn to understand and respect diverse cultures and traditions through reading?</li> <li>• What role can wide reading play in encouraging us to reach out and serve those in need?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.2 Students make sense of the variety of materials they read.</p>	<p><b>Key Ideas and Details</b></p>	<ol style="list-style-type: none"> <li>1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</li> <li>2. Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.</li> <li>3. Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).</li> </ol>



## Writing (W) – Grade Eight

<b>Essential Understandings</b>		<b>Guided Questions</b>
<ul style="list-style-type: none"> <li>• Following the writing process allows students to engage in specific steps for communicating ideas.</li> <li>• Computer skills are essential in today's world.</li> <li>• Considering the task, purpose, and audience is important to effective writing.</li> <li>• Ethical procedures are required for the use of technology.</li> <li>• The words that others write belong only to them.</li> <li>• Our written work is a reflection of the person that we are.</li> <li>• Information found in various sources can differ.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the writing process help us to strengthen our writing and communicate ideas more effectively?</li> <li>• How can we use technology to gather information?</li> <li>• How can we use technology to improve our writing?</li> <li>• How do the task, purpose, and audience influence the organization and style used in our writing?</li> <li>• How do we determine the most appropriate form of writing in a particular situation?</li> <li>• How do we assure ethical practices when using technology?</li> <li>• What are the ethical and legal implications of Internet use?</li> <li>• How do we avoid plagiarism?</li> <li>• Why must we respect an author's ownership of his or her writing?</li> <li>• How can what we write reflect our character?</li> <li>• Why is it important to refer to multiple sources when gathering information?</li> <li>• How does the researcher determine if a source is credible?</li> </ul>	
<b>Academic Expectations</b>	<b>Anchor Standard Strand</b>	<b>Standards</b>
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write arguments to support claims with clear reasons and relevant evidence.               <ol style="list-style-type: none"> <li>1a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>1b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>1c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>1d. Establish and maintain a formal style.</li> <li>1e. Provide a concluding statement or section that follows from and supports the argument presented.</li> </ol> </li> <li>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.               <ol style="list-style-type: none"> <li>2a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> </ol> </li> </ol>



	<p><b>Range of Writing</b></p>	<p>9a. Apply <i>grade 8 Reading standards</i> to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, including describing how the material is rendered new.”).</p> <p>9b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.”).</p> <p>10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>
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## Speaking and Listening (SL) – Grade Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• It is essential to be able to work with others and discuss what is encountered in the classroom.</li> <li>• Organization, clarity, and focus are essential in presenting information.</li> <li>• Verbal and non-verbal communication skills improve oral presentations.</li> <li>• Multimedia and visual displays enhance oral presentations.</li> <li>• The way a speaker communicates depends on the topic, purpose, and audience.                             <ul style="list-style-type: none"> <li>• To communicate, you must express your thoughts clearly.</li> </ul> </li> <li>• You must listen to obtain information.                             <ul style="list-style-type: none"> <li>• There is a difference between listening and hearing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• How do we effectively convey to others what we know?</li> <li>• Why are there rules to guide collaborative work and discussions?</li> <li>• Why is it important to communicate ideas in a clear, organized way?</li> <li>• How does the way a speaker talks influence the effectiveness of the speech?</li> <li>• How does the way a speaker acts influence the effectiveness of the speech?</li> <li>• What makes a good oral presentation?</li> <li>• How can the use of both verbal and non-verbal communication impact the clarity of a presentation?</li> <li>• How can the use of multimedia and visual displays help us to improve our oral presentations?</li> <li>• When would it be acceptable to use informal English in an oral presentation?</li> <li>• Why is it important to use formal English for some speeches?</li> <li>• How would an oral presentation change for different audiences?</li> <li>• How does the use of specific words, rate of speech, expression, and concrete evidence help us to express our thoughts clearly?</li> <li>• How can compassion and understanding be increased through listening?</li> <li>• What skills does it take to be a good listener?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.4 Students make sense of the various messages to which they listen.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>2.59 Students demonstrate an</p>	<p><b>Comprehension and Collaboration</b></p>	<p>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 8 topics, texts, and issues</i>, building on others' ideas and expressing their own clearly.</p> <p>1a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>1b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.</p> <p>1c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.</p> <p>1d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.</p>

<p>understanding of Catholic principles foundational to all relationships.</p> <p>4.2 Students use productive team membership skills.</p>	<p><b>Presentation of Knowledge and Ideas</b></p>	<ol style="list-style-type: none"> <li>2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.</li> <li>3. Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.</li> <li>4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.</li> <li>5. Integrate multimedia and visual displays in presentations to clarify information, strengthen claims and evidence, and add interest.</li> <li>6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards 1 and 3 for specific expectations.)</li> </ol>
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## Language (L) – Grade Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Rules of grammar, mechanics, usage, and spelling are important to effective written and oral communication.</li> <li>• Students use collaborative skills and critical thinking skills to create original writing.</li> <li>• Students write for a variety of purposes including narrative, informational, and argumentative writing.</li> <li>• Effectively using our language is essential to communication.</li> <li>• Language can be used to achieve desired effects.</li> <li>• The use of phonics skills and known words assist in decoding and understanding unknown or multiple-meaning words.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to correctly use grammar and mechanics in speaking? In writing?</li> <li>• Why is it important to spell words correctly in written communication?</li> <li>• How does collaboration improve our writing?</li> <li>• Why is it important to write for a variety of purposes?</li> <li>• Why is it important to use our language correctly when writing, speaking, reading, or listening?</li> <li>• How does good communication affect understanding?</li> <li>• How can we use language to make ideas more interesting and exciting?</li> <li>• How can we use language to show our emotions?</li> <li>• How can we use language to help our audience visualize our ideas?</li> <li>• How can our understanding of Greek and Latin roots and affixes help us to determine the meaning of new words?</li> <li>• How can knowledge of language and conventions help us with writing, reading, and speaking?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.12 Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>2.37 Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p>6.3 Students expand their understanding</p>	<p><b>Conventions of Standard English</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.               <ol style="list-style-type: none"> <li>1a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.</li> <li>1b. Form and use verbs in the active and passive voice.</li> <li>1c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.</li> <li>1d. Recognize and correct inappropriate shifts in verb voice and mood.</li> </ol> </li> <li>2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.               <ol style="list-style-type: none"> <li>2a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.</li> <li>2b. Use an ellipsis to indicate an omission.</li> <li>2c. Spell correctly.</li> </ol> </li> </ol>



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<p>foundational to all relationships.</p> <p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Range of Reading and Level of Text Complexity</b></p>	<p>10. By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.</p>
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## Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects (WHST) Grades Six - Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Writers use domain-specific words and phrases and various formats to convey meaning.</li> <li>• Technology plays a critical role in gathering reliable information.</li> <li>• Ethical procedures are required for the use of technology.</li> <li>• The words that others write belong only to them.</li> <li>• Information found in various sources can differ.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the author of a text affect our understanding of the text?</li> <li>• How can we use technology to gather information?</li> <li>• How can we use technology to improve our written communication on a particular topic?</li> <li>• How do we assure ethical practices when using technology?</li> <li>• What are the ethical and legal implications of Internet use?</li> <li>• How do we avoid plagiarism?</li> <li>• Why must we respect an author’s ownership of his or her writing?</li> <li>• Why is it important to refer to multiple sources when gathering information for our written work?</li> <li>• How does the researcher determine if a source is credible?</li> </ul>	
Academic Expectations	Anchor Standard Strand	Standards
<p>1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, computer reference programs, and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p>1.11 Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p>1.16 Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p>5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.</p>	<p><b>Text Types and Purposes</b></p>	<ol style="list-style-type: none"> <li>1. Write arguments focused on <i>discipline-specific content</i>.               <ol style="list-style-type: none"> <li>1a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>1b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.</li> <li>1c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>1d. Establish and maintain a formal style.</li> <li>1e. Provide a concluding statement or section that follows from and supports the argument presented.</li> </ol> </li> <li>2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.               <ol style="list-style-type: none"> <li>2a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> <li>2b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.</li> <li>2c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.</li> </ol> </li> </ol>

<p>6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<p><b>Production and Distribution of Writing</b></p> <p><b>Research to Build and Present Knowledge</b></p> <p><b>Range of Writing</b></p>	<p>2d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>2e. Establish and maintain a formal style and objective tone.</p> <p>2f. Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p>3. (See Note: not applicable as a separate requirement)  <i>Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results.</i></p> <p>4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p> <p>5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.</p> <p>7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p> <p>8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p> <p>9. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>
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# Mathematics Curriculum Framework

# Mathematics Curriculum Framework

## Archdiocese of Louisville

According to *Principles and Standards for School Mathematics* from the National Council of Teachers of Mathematics, new knowledge, tools, and ways of doing and communicating mathematics continue to emerge and evolve in an ever-changing world. The need to understand and be able to use mathematics in everyday life and in the workplace has never been greater and will continue to increase.

-Adapted from *Principles and Standards for School Mathematics*

In alignment with the *National Mathematics Standards* from the National Council of Teachers of Mathematics, the Archdiocese of Louisville Mathematics Curriculum Framework uses the content goals as organizers.

The Content Goals are:

- Number and Operations
- Algebra
- Geometry
- Measurement
- Data Analysis and Probability

To view the *National Mathematics Standards* or for further information and resources, contact: [www.nctm.org](http://www.nctm.org).

- *Mathematics Curriculum Committee, Archdiocese of Louisville*

# Archdiocese of Louisville Standards for Mathematics

The Archdiocese of Louisville Mathematics Curriculum Framework incorporates the work of the *Common Core State Standards for Mathematics*, stressing the importance of conceptual understanding of key ideas. The Standards for Mathematical Content and the Standards for Mathematical Practice are embedded in the curriculum framework.

The Standards for Mathematical Content outlined in the *Common Core State Standards for Mathematics* by domain are:

- Counting and Cardinality
- Operations and Algebraic Thinking
- Number and Operations in Base Ten
- Number and Operations – Fractions
- Measurement and Data
- Geometry
- Ratios and Proportional Relationships
- The Number System
- Expressions and Equations
- Functions
- Statistics and Probability

To view the *Common Core State Standards for Mathematics* or for further information and resources, visit:  
[www.corestandards.org/the-standards/mathematics](http://www.corestandards.org/the-standards/mathematics).

# Archdiocese of Louisville Standards for Mathematics

According to the *Common Core State Standards for Mathematics*, eight processes and proficiencies are essential to the mathematical development of all students. These “Standards for Mathematical Practice” represent the processes outlined by the National Council of Teachers of Mathematics and the proficiencies outlined by the National Research Council.

The NCTM processes include: “problem solving, reasoning and proof, communication, representation, and connections”. In the National Research Council’s report, *Adding it Up*, the proficiencies are described as: “adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition”. Complete descriptions of the “Standards for Mathematical Practice” can be found in the introduction section of the *Common Core State Standards for Mathematics*.

The Standards for Mathematical Practice are:

- 1) Make sense of problems and persevere in solving them
- 2) Reason abstractly and quantitatively
- 3) Construct viable arguments and critique the reasoning of others
- 4) Model with mathematics
- 5) Use appropriate tools strategically
- 6) Attend to precision
- 7) Look for and make use of structure
- 8) Look for and express regularity in repeated reasoning

In addition, emphasis is placed on the responsibility of all mathematics educators to connect these “Standards for Mathematical Practice” with the “Standards for Mathematical Content” in order to provide a balanced combination of procedure and understanding.

- Adapted from the *Common Core State Standards for Mathematics*  
[www.corestandards.org/the-standards/mathematics](http://www.corestandards.org/the-standards/mathematics)

The Archdiocese of Louisville Mathematics Curriculum Framework provides teachers with guidelines that focus on a balance between conceptual understanding and procedural skills. In addition, mathematical skills are not intended to be taught in isolation. Connections should be made within the mathematics curriculum, as well as with other content areas, whenever appropriate.

### **Problem Solving**

Problem solving should be a daily occurrence used to provide students with the opportunity to develop concepts and skills and apply them to real-world situations. Students will learn to determine and apply appropriate strategies for problem solving and explain their reasoning.

### **Vocabulary and Communication**

Teachers and students will use the language of mathematics to express mathematical ideas precisely. This includes consistent and appropriate use of vocabulary throughout the curriculum in both written and oral expression.

### **Spiral Review**

This mathematics curriculum framework focuses on concepts and skills to be learned at each grade level. However, new concepts always build upon previously learned concepts. Therefore, continuous review is essential in a spiraling format for retention, consistency, and continuity.

In the Archdiocese of Louisville Mathematics Curriculum Framework, Performance Standards listed in bold print indicate first exposure.

# ALGEBRA IN THE ARCHDIOCESE OF LOUISVILLE

Algebra is often referred to as the gatekeeper subject and is the prerequisite for the higher-level mathematics courses students need in order to be successful in college and life in the 21<sup>st</sup> century. The transition from concrete arithmetic to the symbolic language of Algebra enables students to develop the abstract reasoning skills they need for mathematics and science. In the Archdiocese of Louisville, the mathematics program, including 8<sup>th</sup> grade Algebra, is based on the belief that mathematics literacy is a key component in preparing students for future success academically and in life situations.

In 2008, the Archdiocese of Louisville formed a Mathematics Task Force. After extensive study and deliberation, the Mathematics Task Force recommended Algebra instruction for all 8<sup>th</sup> graders and Pre-Algebra instruction for all 7<sup>th</sup> graders beginning in the 2010-11 school year. In addition, the task force recommended that an emphasis be placed on the development of increased algebraic reasoning at every grade level in order to prepare the student for success. The decisions stemmed from the recognition that students in all grade levels must develop the deep conceptual understanding, problem-solving skills, and computational fluency related to Algebra. Through algebraic thinking, students focus on patterning, data analysis, simple functions, and coordinate systems.

Each elementary school is unique. In schools with more than one section of Pre-Algebra and Algebra, students may be organized into sections based on readiness and the level of mathematics achievement. The sections may move toward mastery of the algebraic concepts at varied paces. Schools may choose to offer one section each of Pre-Algebra and Algebra where instruction is differentiated to meet the needs of the students. Students again may move at varied paces.

At the end of the 7<sup>th</sup> grade year, students take an online Algebra readiness exam. Elementary schools use the results of the test to evaluate their own program and to determine placement and course of action for their students.

At the end of the 8<sup>th</sup> grade year, students take an online, nationally-normed Algebra proficiency exam. Elementary schools use the results of the test to evaluate their own programs. The high schools use the results as one tool to help determine freshman mathematics placement. Results are communicated to the student's destination high school. In addition to the results, the report sent from the elementary school to the high school includes the student's mathematics total on the 7<sup>th</sup> grade Terra Nova test, Algebra GPA through April, and input from the 8<sup>th</sup> grade Algebra teacher. **All of this information is used to determine the student's high school mathematics placement.**

Enrollment in 8<sup>th</sup> grade Algebra does not ensure an equivalent course to 9<sup>th</sup> grade Algebra I. In some cases, students move right into the second year of high school mathematics (Algebra II, Geometry, or a combination course). In others, students are placed in an Algebra I course. A number of factors will be considered by the high school when determining the appropriate level of Algebra for the student. **The elementary school does not make this decision. The high schools make their own decisions about mathematics placement and communicate that decision to the families.**

### **Philosophy**

The program is based on the belief that mathematics literacy is a key component in preparing students for future success academically and in life situations. The local school is responsible for developing and maintaining a rigorous K-8 mathematics program that is based on standards, has clearly stated core content and outcomes, aligns instruction and assessment, and culminates in a comprehensive and rigorous eighth grade Algebra I program.

## Mathematics and Logical Thinking – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"><li>• Application of knowledge of numbers and quantities during play and activities reflects understanding.</li><li>• Mathematical reasoning is used in everyday tasks.</li><li>• Building upon the understanding of quantities leads to a stronger foundation for future mathematical learning.</li></ul>	<ul style="list-style-type: none"><li>• How can numbers be incorporated into this play activity?</li><li>• How can we use mathematical concepts to help us solve problems?</li><li>• How can we use numbers to simplify our lives?</li></ul>

Content Guidelines	Performance Standards
<p>Number Concepts and Operations</p> <p>Patterns and Relationships</p> <p>Spatial Relationships/Geometry</p> <p>Measurement</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate increasing interest in numbers and counting</li> <li>• show understanding of numbers and quantities during play and other activities</li> <li>• count by rote to 20</li> <li>• demonstrate understanding of one-to-one correspondence between objects and numbers</li> <li>• state the number that follows a number from 1-9</li> <li>• recognize numerals 0-10</li> <li>• understand concepts of more, less, and same</li> <li>• demonstrate beginning ability to add and subtract numbers with manipulatives</li> </ul> <ul style="list-style-type: none"> <li>• recognize, duplicate, and continue simple patterns using sounds, objects, and attributes of objects</li> <li>• sort objects into groups by one or more characteristics</li> <li>• order or sequence several objects on the basis of one characteristic (e.g., height, weight)</li> </ul> <ul style="list-style-type: none"> <li>• identify and name common shapes</li> <li>• identify and use common shapes and position words during play</li> <li>• understand and use words for the order of objects (e.g., first, second)</li> <li>• understand and use position words (e.g., above, below, in front of)</li> <li>• demonstrate understanding of directional movement (e.g., left, right, up, down)</li> </ul> <ul style="list-style-type: none"> <li>• measure by height, length, and weight using nonstandard and/or standard units</li> <li>• make comparisons between at least two objects (e.g., longest, shorter, thickest)</li> </ul>

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	<ul style="list-style-type: none"><li>• Base Ten</li> <li>• Fractions</li></ul>	<ul style="list-style-type: none"><li>• use concrete objects, pictures, and mental math to solve single digit addition and subtraction stories and number sentences</li><li>• write number sentences using symbols +, -, and =</li><li>• determine the number that makes ten when added to a given number (1-9)</li><li>• decompose numbers less than or equal to 10 into pairs in more than one way (e.g., <math>5 = 2 + 3</math>)</li><li>• fluently add and subtract within five</li> <li>• understand that numbers from 11 to 19 are composed of ten ones and from one to nine additional ones</li><li>• compose and decompose numbers from 11 to 19 into ten ones and some further ones</li> <li>• recognize equal parts of a whole</li><li>• identify simple fractions using pictures</li></ul>
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**Geometry – Kindergarten**

<b>Geometry – Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Geometric shapes and positions of objects are used to describe the world.</li>   <li>• Geometric shapes and relationships are used to design and create.</li> </ul>	<ul style="list-style-type: none"> <li>• How are geometric shapes used to describe things?</li> <li>• How is the location of an object described in relation to other things?</li>   <li>• What are examples of geometric shapes and relationships in architecture, art, and nature?</li> <li>• How can shapes and relationships be used to create things?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane figures (two-dimensional)</li>   <li>• Solid figures (three-dimensional)</li>   <li>• Geometric and spatial relationship concepts</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>recognize and name the attributes of these plane figures: circle, square, rectangle, triangle, oval, and hexagon</b></li>   <li>• <b>recognize solid figures: cube, sphere, cone, and cylinder</b></li>   <li>• <b>locate and describe objects and pictures using spatial relationship concepts: inside, outside, right, left, above, below, beside, near, top, middle, bottom, front, behind, over, between, under, on</b></li> <li>• <b>distinguish between two-dimensional and three-dimensional shapes</b></li> <li>• <b>analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., sides, corners, curves)</b></li> <li>• <b>model shapes in the world by building shapes from components and drawing shapes</b></li> <li>• <b>combine simple shapes to form larger shapes (e.g., use two triangles to make a rectangle)</b></li> </ul>

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<b>Measurement – Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Measurement is used to communicate about size and shape.</li> </ul>	<ul style="list-style-type: none"> <li>How are length, weight, time, and money used to describe and compare things?</li> <li>How are nonstandard and standard units used to compare things?</li> <li>When is it useful to estimate measurements?</li> <li>What kinds of tools are used to find measurements?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>Nonstandard and standard measurement</li>   <li>Money</li>   <li>Time</li>   <li>Calendar skills</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>use nonstandard and standard units to estimate, measure, and compare length and weight</b></li> <li><b>identify standard measuring tools</b></li> <li><b>describe measurable attributes of objects, such as length or weight</b></li> <li><b>directly compare two objects with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference</b></li>   <li><b>identify the name and value of a penny, nickel, dime, and quarter</b></li>   <li><b>describe the features of an analog clock</b></li> <li><b>tell time to the hour and half-hour on an analog and digital clock</b></li>   <li><b>name the days of the week and months of the year</b></li> <li><b>use a calendar</b></li> </ul>

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**Algebra – Kindergarten**

<b>Algebra – Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns are used to investigate, understand, and describe the world.</li>   <li>• Patterns and number relationships are used to understand and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• What is a pattern?</li> <li>• What kinds of patterns can be found in natural and human-designed environments?</li> <li>• How are patterns in the environment represented by such things as number, color, and shape?</li> <li>• How can objects be classified?</li> <li>• How can patterns be extended or changed?</li>   <li>• How are number patterns used to solve problems?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Patterns</li>   <li>• Classification</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>extend, describe, and create patterns using pictures, objects, colors, sounds, and movement</b></li>   <li>• <b>sort and order objects by size, color, number, and other properties</b></li> </ul>

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<b>Data Analysis and Probability – Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Data can be used to predict outcomes and support conclusions.</li> </ul>	<ul style="list-style-type: none"> <li>What kinds of data can be collected?</li> <li>How can data be organized?</li> <li>How can data be used to draw conclusions and make decisions?</li> <li>What factors need to be considered in making a prediction?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>Graphing</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>collect and organize data to create tally charts, pictographs, and bar graphs</b></li> <li><b>use graphs to answer questions</b></li> </ul>

**Archdiocese of Louisville  
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**Number and Operations – Grade One**

<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Numbers are used to name, count, and place objects in order.</li> <li>Estimation is used to approximate exact values.</li> <li>A variety of methods are used to develop understanding and skill in estimation and computation.</li> </ul>	<ul style="list-style-type: none"> <li>How are numbers used to name, count, and place objects in order?</li> <li>How do fractions describe parts of a whole?</li> <li>How does position of a digit in a multi-digit number determine its value?</li> <li>Why is it helpful to be able to count from a given number instead of from one?</li> <li>How do people know if an estimate is reasonable?</li> <li>When is it appropriate to use mental math, pencil and paper, calculators, or computers to do rounding and computation?</li> <li>How are concrete materials used to model and solve mathematical problems?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>Addition and subtraction</li> <li>Place value</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, and comparing, with unknowns in all positions</b></li> <li><b>solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20</b></li> <li>write and solve <b>vertical and horizontal</b> addition and subtraction problems</li> <li>relate counting to addition <b>and subtraction</b> (e.g., by counting to 2 to add 2)</li> <li><b>master</b> addition and subtraction facts <b>up to 12 using mental math</b></li> <li>use strategies such as counting on, making ten, decomposing a number leading to a ten, and using the relationship between addition and subtraction</li> <li>count <b>to 120</b> starting at any number</li> <li><b>estimate, compare, write, and order numbers to 120</b></li> <li>identify, count, and demonstrate tens and ones using models and pictures</li> <li>understand that the two digits of a two-digit number represent amounts of tens and ones</li> <li>compare two-digit numbers using symbols <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> based on the meanings of the tens and ones digits</li> <li><b>understand that when adding two-digit numbers, add tens with tens, ones with ones, and sometimes it is necessary to compose a ten</b></li> </ul>

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Mathematics**

	<ul style="list-style-type: none"><li>• Numbers to 120</li> <li>• Fractions</li></ul>	<ul style="list-style-type: none"><li>• <b>add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and various strategies</b></li><li>• <b>add within 100, including adding a two-digit number and a multiple of 10, using concrete models or drawings and various strategies</b></li> <li>• <b>read and order ordinal numbers from eleventh to twentieth</b></li><li>• <b>master counting and writing by ones, twos, fives, and tens increasing and decreasing the value</b></li> <li>• <b>recognize and model halves, thirds, and fourths of a whole or set understand that decomposing a whole or set into more equal shares creates smaller shares</b></li></ul>
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**Archdiocese of Louisville  
Curriculum Framework  
Mathematics**

**Geometry – Grade One**

<b>Geometry – Grade One</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Geometric shapes and positions of objects are used to describe the world.</li>   <li>• Geometric shapes and relationships are used to design and create.</li> </ul>	<ul style="list-style-type: none"> <li>• How are geometric shapes used to describe things?</li> <li>• How can three-dimensional shapes be combined to create a new shape?</li> <li>• How do plane figures differ from solid figures?</li> <li>• What distinguishes defining attributes from non-defining attributes?</li>   <li>• What are examples of geometric shapes and relationships in architecture, art, and nature?</li> <li>• How can shapes and relationships be used to create things?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane and solid figures</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• name and <b>classify</b> plane figures (rectangle, square, triangle, <b>trapezoid, and half-circle</b>) and solid figures (cone, sphere, cube, cylinder, <b>pyramid, and rectangular prism</b>)</li> <li>• <b>distinguish between defining attributes (e.g., closed, three-sided) and non-defining attributes (e.g., color, size)</b></li> <li>• <b>compose two- or three-dimensional shapes to create a composite shape and compose new shapes from the composite shapes</b></li> </ul>



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**Algebra – Grade One**

<b>Algebra – Grade One</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns are used to investigate, understand, and describe the world.</li>   <li>• Patterns and number relationships are used to understand and solve problems.</li>   <li>• Number operations are used to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• What kinds of patterns can be found in natural and human-designed environments?</li> <li>• How are patterns in the environment represented by such things as number, color, and shape?</li> <li>• How can objects be classified?</li> <li>• How can patterns be extended or changed?</li>   <li>• How are number patterns used to solve problems?</li> <li>• In an open sentence, how can the unknown number be determined from the known numbers and the operation?</li>   <li>• How do characteristics of a problem lead to a choice of a number operation?</li> <li>• What rules/properties influence the ways operations can be used to solve problems?</li> <li>• In a number sentence, what does the equal sign mean?</li> <li>• How is subtraction related to addition?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectations 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectations 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Missing addends and subtrahends</li>   <li>• Properties of operations</li>   <li>• Patterns</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false</b></li> <li>• <b>determine the missing addend or subtrahend in a problem (<math>3 + \_ = 5</math> or <math>\_ - 2 = 3</math>)</b></li> <li>• <b>understand subtraction as an unknown addend problem</b></li>   <li>• <b>add and subtract using commutative and associative properties</b></li>   <li>• <b>identify and create complex patterns using more than one attribute</b></li> </ul>

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<b>Data Analysis and Probability – Grade One</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Data can be used to predict outcomes and support conclusions.</li>   <li>• Probability describes the likelihood that an event will occur.</li> </ul>	<ul style="list-style-type: none"> <li>• How can data be organized?</li> <li>• How can data be used to draw conclusions and make decisions?</li> <li>• What factors need to be considered in making a prediction?</li>   <li>• Why are some events more likely to occur than others?</li> <li>• How is probability used to make predictions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectations 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>• Graphs and charts</li>   <li>• Prediction</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• organize, represent, and interpret data with up to three categories using charts, tables, pictographs, and bar graphs</li> <li>• answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another</li>   <li>• predict the likelihood of an event happening</li> </ul>

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<b>Number and Operations – Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Place value is used to determine the value of each digit in the number.</li> <li>• Number operations are used to solve problems.</li> <li>• A variety of methods are used to develop understanding and skill in rounding and computation.</li> <li>• Whole figures can be divided into fractional parts.</li> </ul>	<ul style="list-style-type: none"> <li>• How does position of a digit in a multi-digit number determine its value?</li> <li>• When adding two- or three-digit numbers, what happens when the two digits in the ones column equal a number greater than 10?</li> <li>• How do characteristics of a word problem lead to a choice of a number operation?</li> <li>• What rules/properties influence the ways operations can be used to solve problems?</li> <li>• When is it appropriate to use mental math, pencil and paper, and calculators or computers to do estimation and computation?</li> <li>• How are concrete materials used to model and solve mathematical problems?</li> <li>• Why is it possible for equal shares of the same whole to have different shapes?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Number sense</li> <li>• Place value</li> <li>• Addition and subtraction</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• count by one, five, ten, and <b>one hundred to 1000</b></li> <li>• round and order numbers up to <b>1000</b></li> <li>• identify even and odd numbers</li> <li>• compare numbers, including equality and inequality up to <b>three-digit numbers</b> (&lt;, &gt;, or =)</li> <li>• <b>understand that 100 can be thought of as a bundles of ten tens</b></li> <li>• show place value in standard, word, and <b>expanded</b> forms to <b>1000</b></li> <li>• <b>understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones</b></li> <li>• <b>master</b> addition and subtraction facts to <b>20</b> using mental strategies</li> <li>• <b>mentally add or subtract 10 or 100 to or from a given number between 100 and 900</b></li> <li>• <b>use addition to find the total number of objects arranged in a rectangular array with up to 5 rows and up to 5 columns</b></li> <li>• <b>understand that when adding or subtracting three-digit numbers, add or subtract hundreds and hundreds, tens and tens, ones and ones, and sometimes it is necessary to compose or decompose tens or hundreds</b></li> </ul>

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	<ul style="list-style-type: none"> <li>• Multiplication</li> <li>• Fractions</li> </ul>	<ul style="list-style-type: none"> <li>• use addition and subtraction <b>within 100</b> to solve one- and two-digit word problems involving situations of adding to, taking from, and comparing, with unknowns in all positions</li> <li>• <b>fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</b></li> <li>• solve <b>two- and three-digit</b> addition and subtraction problems <b>with</b> and without <b>regrouping within 1000</b></li> <li>• <b>add up to four two-digit numbers using strategies based on place value and properties of operations</b></li> <li>• solve one- and two-step word problems involving addition and subtraction</li> <li>• explain why addition and subtraction strategies work, using place value and the properties of operations</li>   <li>• <b>model basic multiplication concepts for 2, 5, and 10</b></li>   <li>• draw and compare fractions using models and pictures</li> <li>• recognize and model parts of a whole or set using the words halves, thirds, half of, a third of, etc.</li> <li>• <b>recognize that equal shares of identical wholes need not have the same shape</b></li> </ul>
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**Geometry – Grade Two**

<b>Geometry – Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Geometric shapes are used to describe the world.</li>   <li>• Geometric shapes and relationships are used to design and create.</li> </ul>	<ul style="list-style-type: none"> <li>• How are geometric shapes used to describe things?</li> <li>• How are symmetry and congruence used to describe and compare things?</li>   <li>• What are examples of geometric shapes and relationships in architecture, art, and nature?</li> <li>• How can shapes and relationships be used to create things?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane and solid figures</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• identify triangles, hexagons, cubes, <b>quadrilaterals, and pentagons</b></li> <li>• identify patterns, <b>symmetry, and congruency</b></li> <li>• <b>recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces</b></li> </ul>



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**Algebra – Grade Two**

<b>Algebra – Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns are used to investigate, understand, and describe the world.</li>   <li>• Patterns and number relationships are used to understand and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• What is a pattern?</li> <li>• How are patterns in the environment represented by number, color, and shape?</li> <li>• How can patterns be extended or changed?</li>   <li>• How are number patterns used to solve problems?</li> <li>• In an open sentence, how can the unknown number be determined from the known numbers and the operation?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Algebraic equations</li>   <li>• Patterns</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• calculate equations by finding missing addend and subtrahend with the unknown in all positions</li>   <li>• extend and create patterns with more than <b>two attributes</b></li> </ul>

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<b>Data Analysis and Probability – Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Data can be used to predict outcomes and support conclusions.</li>   <li>• Probability describes the likelihood that an event will occur.</li> </ul>	<ul style="list-style-type: none"> <li>• What kind of data can be collected?</li> <li>• How can data be organized?</li> <li>• How is data used to draw conclusions and make decisions?</li>   <li>• What factors need to be considered in making a prediction?</li> <li>• Why are some events more likely to occur than others?</li> <li>• How is probability used to make predictions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>• Graphs and charts</li>   <li>• Probability</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• collect, record, and interpret data (<b>up to four categories</b>) with bar graphs, pictographs, and tally charts</li>   <li>• <b>interpret data to predict probability</b></li> </ul>

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<b>Number and Operations – Grade Three</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li>   <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• What situations require the use of mathematical understanding?</li> <li>• How can concrete materials model mathematical situations?</li> <li>• How can patterns and properties of operations be used when adding and subtracting?</li> <li>• What is the relationship between multiplication and division?</li>   <li>• How can strategies be used to determine the reasonableness of an answer?</li> <li>• How do the characteristics of a problem influence the choice of numbers, operations, strategies, and tools?</li> <li>• What strategies help determine if a solution is reasonable, accurate, and complete?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Place value</li>   <li>• Addition and subtraction</li>   <li>• Multiplication and division</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interpret the value of whole numbers up to <b>100,000</b></li> <li>• order and compare whole numbers using <math>&gt;</math>, <math>&lt;</math>, or <math>=</math></li> <li>• apply place value concepts to round numbers (up to four digits) to the nearest 10 and 100</li> <li>• estimate by rounding for self-checking and approximation</li>   <li>• fluently add and subtract whole numbers with <b>three or more digits</b> (with and without regrouping) using strategies and algorithms</li> <li>• apply patterns and properties of operations as strategies to add and subtract including <b>commutative, associative, and distributive properties</b></li>   <li>• <b>apply properties of operations as strategies to multiply and divide including commutative, associative, and distributive properties</b></li> <li>• <b>master multiplication facts up to 10</b></li> <li>• <b>multiply one-digit numbers by a multiple of ten (10-90) using strategies based on place value and properties of operations</b></li> <li>• <b>interpret products of whole numbers (e.g., interpret <math>5 \times 7</math> as the total number of objects in 5 groups of 7 objects each)</b></li> <li>• <b>interpret whole number quotients (e.g., interpret <math>56 \div 8</math> as the number of objects in each share when 56 objects are partitioned equally into 8 shares)</b></li> <li>• <b>recognize that division is the inverse of multiplication and is an unknown factor problem</b></li> <li>• <b>fluently divide within 100</b></li> </ul>

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	<ul style="list-style-type: none"><li>• Problem solving</li> <li>• Fractions</li></ul>	<ul style="list-style-type: none"><li>• <b>use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities</b></li> <li>• synthesize number and operation concepts to solve <b>complex, multi-step word problems using all four operations</b></li><li>• assess the reasonableness of answers using mental computation and estimation strategies including rounding</li> <li>• understand a fraction as a quantity formed when a whole is divided into equal parts</li><li>• <b>understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line</b></li><li>• use models to compare and order <b>equivalent</b> fractions</li><li>• <b>express whole numbers as fractions and recognize fractions that are equivalent to whole numbers</b></li><li>• <b>use models to add and subtract fractions with like denominators</b></li></ul>
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<b>Geometry – Grade Three</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Attributes and relationships of shapes, objects, and patterns can be used to describe, understand, and communicate about the world.</li>   <li>• Geometry has many real-world applications including design, architecture, and art.</li> </ul>	<ul style="list-style-type: none"> <li>• How can objects in the natural and human-designed world be identified and described in geometric terms?</li> <li>• How do models and drawings enhance understanding?</li> <li>• How can shared attributes help to define categories of shapes?</li>   <li>• How do the attributes of geometric shapes and figures influence their use in aesthetic and functional designs?</li> <li>• How are geometric shapes and relationships manipulated to create different visual effects?</li> <li>• How are models and drawings used in problem solving and design?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane and solid figures</li>   <li>• Symmetry</li>   <li>• Perimeter</li>   <li>• Area</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• describe and build plane (two-dimensional) and solid (three-dimensional) figures</li> <li>• recognize and check figures for congruency and similarities</li> <li>• explain that shapes in different categories (e.g., rectangle, rhombus) may share attributes (e.g., having four sides) and that the shared attributes can define a larger category (e.g., quadrilaterals)</li> <li>• classify the subcategories of quadrilaterals (e.g., rectangle, rhombus, and square) as quadrilaterals and draw quadrilaterals that do not belong to any of these subcategories</li>   <li>• find symmetry in figures and create symmetrical drawings (line, flip, slide, rotational)</li>   <li>• recognize perimeter as an attribute of plane figures</li> <li>• calculate the perimeter of a plane figure by using whole number side lengths or finding an unknown side length</li> <li>• solve real-world problems involving perimeter</li>   <li>• recognize area as an attribute of plane figures</li> <li>• measure area by counting unit squares</li> <li>• relate area to the operations of multiplication and addition</li> <li>• <b>solve real-world problems about area</b></li> </ul>

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<b>Measurement – Grade Three</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Measurement allows description, understanding, and communication about the world.</li> </ul>	<ul style="list-style-type: none"> <li>How is measurement used to quantify information about objects and events?</li> <li>How do characteristics of objects and events influence the choice of measurement strategies and tools?</li> <li>How does the precision required for a measurement influence the choice of strategies and tools?</li> <li>How is understanding and communication about measurement used to solve problems and make decisions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>Linear measurement</li> <li>Customary and metric weight and capacity</li> <li>Temperature</li> <li>Time</li> <li>Money</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>measure using customary and metric linear units to nearest <b>1/2</b> or <b>1/4</b> or whole inch or whole centimeter</li> <li><b>measure mass of an object using customary and metric capacity units (ounces, pounds, grams, and kilograms)</b></li> <li><b>measure and estimate liquid volume using customary and metric capacity units (cups, pints, quarts, gallons, milliliters, liters)</b></li> <li><b>add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units</b></li> <li><b>read and interpret temperature using Fahrenheit scale</b></li> <li>tell and write time to the <b>nearest minute</b> using analog and digital clocks</li> <li><b>solve word problems involving addition and subtraction of elapsed time</b></li> <li>calculate the value of coins and bills and apply to real-world situations</li> <li><b>determine equivalency among coins and bills</b></li> <li><b>add and subtract decimals with money</b></li> </ul>

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<b>Algebra – Grade Three</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns aid description, understanding, and communication about the world.</li>   <li>• Patterns and number relationships can be used to investigate, understand, and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• How and why are patterns used?</li> <li>• How are patterns and number relationships represented with symbols?</li> <li>• How are tables and equations used to represent, analyze, and extend patterns?</li>   <li>• How do patterns help to solve problems and communicate information?</li> <li>• What kinds of strategies help to reveal patterns and number relationships?</li> <li>• How are tables, graphs, and equations used to discover, analyze, and extend patterns and number relationships?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Fact families</li>   <li>• Variables</li>         <li>• Equality and inequality</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use fact families <b>to relate the four operations</b></li>   <li>• solve for one variable in addition, subtraction, <b>multiplication, and division (<math>a + 4 = 12</math>)</b></li> <li>• <b>solve real-world problems involving one variable</b></li> <li>• represent word problems using equations with a letter standing for the unknown quantity</li> <li>• <b>solve simple function tables (input/output)</b></li>   <li>• <b>recognize that the equal sign means that both sides of the equation are balanced (<math>6 + 2 = 5 + 3</math>, <math>8 = 6 + 2</math>)</b></li> <li>• <b>determine the unknown number in multiplication and division equations (e.g., <math>8 \times \square = 48</math>, <math>5 = \square \div 3</math>, <math>6 \times 6 = \square</math>)</b></li> </ul>

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<b>Data Analysis and Probability – Grade Three</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Data collection and analysis can be used to predict outcomes, solve problems, and make decisions.</li>   <li>• Probability supports making predictions, drawing conclusions, and solving problems.</li> </ul>	<ul style="list-style-type: none"> <li>• What factors influence the way data is collected and organized?</li> <li>• How is the reliability of data affected by the source, quantity, and method of collection?</li> <li>• How is the analysis of data used to solve problems?</li> <li>• How is the presentation used to support different kinds of data?</li> <li>• Why would one style of graph, chart, or table be more appropriate than another when depicting data?</li>   <li>• How is the probability of an event determined and expressed?</li> <li>• What factors influence the certainty or uncertainty?</li> <li>• How is probability used to make predictions and draw conclusions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>• Data Analysis</li>   <li>• Probability</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• collect, record, and interpret data</li> <li>• build and interpret scaled graphs (pictograph, bar, <b>line, circle</b>), charts, and tables with <b>several categories</b></li>   <li>• investigate outcomes (<b>likely / unlikely, certain / impossible</b>)</li> </ul>

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<b>Number and Operations – Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li>   <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• How is mathematics used in the everyday world?</li> <li>• What situations require the use of mathematical understanding?</li> <li>• How can concrete materials model mathematical situations?</li> <li>• Using place value, what does the position of each digit reveal about its value?</li>   <li>• How do the characteristics of a problem influence the choice of numbers, operations, strategies, and tools?</li> <li>• What strategies help determine if a solution is reasonable, accurate, and complete?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Whole numbers</li>   <li>• Place value</li>         <li>• Multiplication</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use place value understanding to identify, order, round, read, and write (in all forms) numbers through <b>one million</b></li> <li>• recognize that in a multi-digit whole number, the digit in one place represents ten times what it represents in the place to its right</li> <li>• read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form</li> <li>• compare two multi-digit numbers based on meanings of the digits in each place, using <math>&gt;</math>, <math>&lt;</math>, or <math>=</math> symbols</li> <li>• fluently add and subtract <b>multi-digit</b> whole numbers using place value understanding and properties of operations</li>   <li>• calculate and explain products multiplying 2-, <b>3-</b>, and <b>4-</b> digit numbers by 1-digit numbers with regrouping, using strategies based on place value and the properties of operations</li> <li>• master multiplication facts of <b>11 and 12</b></li> <li>• <b>find all factor pairs for a whole number in the range 1-100</b></li> <li>• <b>recognize that a whole number is a multiple of each of its factors</b></li> <li>• <b>determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number</b></li> <li>• <b>determine whether a given whole number in the range 1-100 is prime or composite</b></li> <li>• apply problem solving skills in multi-step word problems, using the four operations</li> </ul>



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<b>Geometry – Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Geometry has many real-world applications including design, architecture, and art.</li> </ul>	<ul style="list-style-type: none"> <li>How do the characteristics of geometric figures influence their use in designs?</li> <li>How are models and drawings used in problem solving and design?</li> <li>How can attributes be used to classify figures?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately</p>	<ul style="list-style-type: none"> <li>Plane and solid figures</li>   <li>Triangles</li>   <li>Angles</li>           <li>Symmetry</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size</b></li> <li><b>draw and identify points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines</b></li>   <li><b>recognize right triangles as a category and identify right triangles</b></li>   <li><b>measure angles in whole number degrees using a protractor</b></li> <li><b>sketch angles of specified measures</b></li> <li><b>recognize angles as geometric shapes that are formed wherever two rays share a common endpoint</b></li> <li><b>understand that an angle is measured with reference to a circle with its center at the common endpoint of the rays</b></li> <li><b>understand that an angle that turns through <math>n</math> one-degree angles is said to have an angle measure of <math>n</math> degrees</b></li> <li><b>solve unknown angle measurements</b></li> <li><b>recognize that angle measure is additive and is the sum of the angle measures of the parts</b></li>   <li>recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into two matching parts</li> <li>identify line-symmetric figures and draw lines of symmetry</li> </ul>

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<b>Measurement– Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Measurement allows description, understanding, and communication about the world.</li> </ul>	<ul style="list-style-type: none"> <li>How do the characteristics of objects and events influence the choice of measurement strategies and tools?</li> <li>How does the precision required for a measurement influence the choice of strategies and tools?</li> <li>How is the understanding and communication about measurement used to solve problems and make decisions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately</p>	<ul style="list-style-type: none"> <li>Linear measurement</li> <li>Units of measure</li> <li>Perimeter</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>make a line plot to display a data set of measurements in fractions of a unit (<math>\frac{1}{2}, \frac{1}{4}, \frac{1}{8}</math>)</b></li> <li><b>express measurements in a larger unit in terms of a smaller unit within a single system of units</b></li> <li><b>record measurement equivalents in a conversion table</b></li> <li>use the four operations to solve word problems involving distances, <b>intervals of time</b>, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals</li> <li><b>apply the perimeter and area formulas for rectangles in real-world and mathematical problems</b></li> <li>calculate perimeter of <b>polygons</b></li> </ul>

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<b>Algebra – Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns aid description, understanding, and communication about the world.</li>   <li>• Patterns and number relationships can be used to investigate, understand, and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• How and why are patterns used?</li> <li>• How are patterns and number relationships represented symbolically?</li> <li>• How are tables and equations used to represent, analyze, and extend patterns?</li> <li>• Why do the components of a pattern continue to alternate in a particular way?</li>   <li>• How do patterns help to solve problems and communicate information?</li> <li>• What kinds of strategies help to reveal patterns and number relationships?</li> <li>• What is the meaning of a variable in an equation or number expression?</li> <li>• How are strategies used to assess the reasonableness of an answer?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Variables</li>   <li>• Patterns</li>   <li>• Order of operations</li>   <li>• Mental computation and estimation</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>differentiate between algebraic expressions and equations</b></li> <li>• use fact families to determine the value of a variable in multiplication and division equations (<math>6x = 36</math>, <math>x \div 3 = 9</math>)</li> <li>• use a letter to represent the unknown quantity in an equation</li>   <li>• <b>generate number or shape patterns that follow a given rule</b></li> <li>• <b>identify features of the pattern that are not explicit in the rule</b></li> <li>• <b>explain informally why the components of a pattern will continue to alternate in a particular way</b></li> <li>• <b>identify rules to complete function tables and understand two variable relationships</b></li>   <li>• <b>solve equations beginning with the operations inside the parentheses</b></li>   <li>• assess the reasonableness of answers using mental computation and estimation strategies, including rounding</li> </ul>

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<b>Data Analysis and Probability – Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Data collection and analysis can be used to predict outcomes, solve problems, and make decisions.</li> </ul>	<ul style="list-style-type: none"> <li>How is the analysis of data used to solve problems?</li> <li>How is the presentation of data used or misused to support an outcome or decision?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>Measures of central tendency</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li><b>define and find the mean (average), median, and mode of a set of data</b></li> </ul>

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<b>Number and Operations – Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li> <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• What situations require the use of mathematical understandings?</li> <li>• How does mathematics enable people to work with things they cannot see?</li> <li>• How do concrete materials model mathematical situations?</li> <li>• What does the position in a multi-digit number reveal about its value?</li> <li>• How do the characteristics of a situation influence the choice of numbers, operations, strategies, and tools?</li> <li>• How is a solution determined to be reasonable, accurate, and complete?</li> <li>• Why are comparisons of two fractions only valid when they refer to the same whole?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Whole numbers</li> <li>• Place value</li> <li>• Decimals</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>fluently multiply multi-digit whole numbers using the standard algorithm</b></li> <li>• find whole number quotients with <b>2-digit divisors (4-digit by 2-digit)</b> using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division</li> <li>• show remainders as <b>fractions and decimals</b></li> <li>• <b>recognize and determine the greatest common factor (GCF) and least common multiple (LCM) and interpret remainders in problem solving</b></li> <li>• estimate quotients using compatible numbers</li> <li>• <b>apply divisibility rules for 2, 3, 4, 5, 6, 9, 10</b></li> <li>• recognize that in a multi-digit number, a digit in one place represents ten times as much as it represents in the place to its right and <b>1/10 of what it represents in the place to its left</b></li> <li>• <b>explain patterns in the number of zeros of the product when multiplying a number by powers of 10</b></li> <li>• <b>explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10</b></li> <li>• read, write, compare, and order decimals to the <b>ten-thousandths place</b> using base-ten numerals, number names, and expanded form</li> <li>• compare decimals using <b>&gt;, &lt;, or =</b> and symbols</li> <li>• round decimals to the indicated place value position</li> </ul>

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	<ul style="list-style-type: none"> <li>• Fractions</li> </ul>	<ul style="list-style-type: none"> <li>• <b>add, subtract, and multiply, and divide decimals through the hundredths place</b> using concrete models or drawings and strategies based on place value, properties of operations, rounding, and/or the relationship between addition and subtraction and explain the reasoning</li> <li>• add and subtract fractions and mixed numbers with <b>unlike denominators by replacing given fractions with equivalent fractions in order to produce an equivalent sum or difference of fractions with like denominators</b></li> <li>• <b>apply greatest common factor (GCF) to express sums and differences in simplest form</b> <ul style="list-style-type: none"> <li>• recognize that comparisons are valid only when the two fractions refer to the same whole</li> </ul> </li> <li>• solve real-world problems involving addition and subtraction of fractions, <b>including cases of unlike denominators</b> (e.g., by using visual fraction models or equations)</li> <li>• <b>solve real-world problems involving multiplication of fractions and mixed numbers</b> (e.g., by using visual fraction models or equations)</li> <li>• <b>use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers</b></li> <li>• <b>interpret a fraction as division of the numerator by the denominator</b></li> <li>• <b>interpret multiplication of fractions as scaling (resizing) by comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication</b></li> <li>• <b>explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number</b></li> <li>• <b>explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number</b></li> <li>• <b>interpret division of a whole number by a unit fraction</b> (e.g., <math>4 \div \frac{1}{5} = 20</math> because <math>20 \times \frac{1}{5} = 4</math>) and a unit fraction by a whole number or non-zero number, compute, and apply to real-world problem solving</li> </ul>
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<b>Geometry – Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Attributes and relationships of shapes, objects, and patterns can be used to describe, understand, and communicate about the world.</li>   <li>• Geometry has many real-world applications including design, architecture, and art.</li> </ul>	<ul style="list-style-type: none"> <li>• How can objects in the natural and human-designed world be identified and described in geometric terms?</li> <li>• How are distance, direction, and coordinates used to understand and explain the arrangement of objects and locations?</li> <li>• How do models and drawings enhance understanding?</li>   <li>• How do the characteristics of geometric shapes and figures influence their use in aesthetic and functional designs?</li> <li>• How are geometric shapes and relationships manipulated to create a visual or emotional effect?</li> <li>• How are models and drawings used in problem solving and design?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane and solid figures</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• <b>identify the following attributes: sides, vertices, faces, edges, and angles (obtuse, acute, right, or straight)</b></li> <li>• <b>understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category (e.g., all squares are rectangles but not all rectangles are squares)</b></li> <li>• <b>classify two-dimensional figures in a hierarchy based on properties</b></li> </ul>

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<b>Measurement – Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Measurement allows description, understanding, and communication about the world.</li> </ul>	<ul style="list-style-type: none"> <li>How is measurement used to quantify information about objects and events?</li> <li>How do the characteristics of objects and events influence the choice of measurement strategies and tools?</li> <li>How does the precision required for a measurement influence the choice of strategies and tools?</li> <li>How is the understanding and communication about measurement used to solve problems and make decisions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>Customary system</li> <li>Metric system</li> <li>Area</li> <li>Volume</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>apply conversion of linear units from inches through miles</li> <li>apply conversion of mass units from ounces through tons</li> <li>apply conversion of capacity units from fluid ounces through gallons</li> <li>use conversions to solve multi-step real-world problems</li> <li>apply conversion of linear units from millimeters through kilometers, excluding decimals</li> <li>apply conversion of mass units from milligrams through kilograms, excluding decimals</li> <li>apply conversion of capacity units from milliliters through liters, excluding decimals</li> <li>use conversions to solve multi-step real-world problems</li> <li>find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths</li> <li>multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas</li> <li>recognize volume as an attribute of solid figures and understand concepts of volume measurement</li> <li>find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as it would be by multiplying the edge lengths</li> <li>develop and apply formula for volume of a rectangular prism (<math>V = l \times w</math> and <math>V = b \times h</math>) to find volumes of right rectangular prisms, using whole numbers and decimals to solve real-world and mathematical problems</li> <li>measure volume by counting unit cubes, using cubic cm., cubic in., cubic ft., and improvised units</li> <li>recognize volume as additive in three-dimensional figures</li> <li>determine volume of solid figures composed of two non-overlapping right rectangular prisms by adding the volume of the non-overlapping parts, and apply to real-world problems</li> </ul>

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<b>Algebra – Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns aid description, understanding, and communication about the world.</li>   <li>• Patterns and number relationships can be used to investigate, understand, and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• How and why are patterns used?</li> <li>• How are patterns and number relationships represented symbolically?</li> <li>• What kinds of patterns can be found in natural and human-designed environments?</li> <li>• How are tables and equations used to represent, analyze, and extend patterns?</li>   <li>• How do patterns help people to solve problems and communicate information?</li> <li>• What kinds of strategies help to reveal patterns and number relationships?</li> <li>• How are function tables and equations used to discover, analyze, and extend patterns and number relationships?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Expressions and equations</li>   <li>• Coordinate system</li>   <li>• Patterns and relationships</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• differentiate between numeric and algebraic expressions and equations</li> <li>• translate word problems into algebraic expressions</li> <li>• <b>use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols using order of operations</b></li> <li>• write and interpret simple numerical expressions</li>   <li>• <b>understand that the first number in an ordered pair indicates how far to travel from the origin along the x-axis, and the second number indicates how far to travel along the y-axis</b></li> <li>• <b>form ordered pairs consisting of corresponding terms from two patterns and graph on a coordinate plane</b></li> <li>• <b>represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation</b></li>   <li>• <b>generate two numerical patterns using two given rules</b></li> <li>• identify the apparent relationships between two corresponding terms</li> </ul>

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<b>Data Analysis and Probability – Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Data collection and analysis can be used to predict outcomes, solve problems, and make decisions.</li> </ul>	<ul style="list-style-type: none"> <li>What factors influence the way data is collected and organized?</li> <li>How is the reliability of data affected by the source, quantity, and method of collection?</li> <li>How is the analysis of data used to solve problems?</li> <li>How is the presentation of data used or misused to support different points of view?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>Data analysis</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>collect, organize, and interpret data for the creation and interpretations of <b>stem and leaf plots</b></li> <li>make a line plot to display a data set of measurements in fractions of a unit (<math>1/2, 1/4, 1/8</math>)</li> <li><b>use operations on fractions to solve problems involving information presented in line plots</b></li> <li>calculate and apply <b>range</b>, median, mode, and mean with whole numbers</li> </ul>

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<b>Number and Operations – Grade Six</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li>   <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• What situations require the use of mathematical understandings?</li> <li>• How do concrete materials model mathematical situations?</li>   <li>• How do the characteristics of a situation influence the choice of numbers, operations, strategies, and tools?</li> <li>• How is a solution determined to be reasonable, accurate, and complete?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Whole numbers</li>   <li>• Decimals</li>   <li>• Fractions</li>   <li>• Ratios</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• <b>determine the prime factorization of any whole number</b></li> <li>• determine the greatest common factor and least common multiple <b>using prime factorization</b></li>   <li>• compare and order decimals</li> <li>• multiply a whole number by a decimal or multiply two decimals using the standard algorithm</li> <li>• divide a whole number by a decimal or divide two decimals using the standard algorithm</li> <li>• <b>convert decimals to fractions</b></li>   <li>• compare and order fractions</li> <li>• multiply and divide fractions (proper, improper, mixed numbers)</li> <li>• <b>convert fractions to decimals</b></li>   <li>• <b>understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities</b></li> <li>• <b>understand and solve real-world and mathematical ratio and rate problems</b></li> <li>• <b>make tables of equivalent ratios relating quantities and use tables to compare ratios</b></li> <li>• <b>solve unit rate problems including those involving unit pricing and constant speed</b></li> </ul>

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	<ul style="list-style-type: none"><li>• Integers and rational numbers</li></ul>	<ul style="list-style-type: none"><li>• find a percent of a quantity as a rate per 100</li><li>• solve problems involving finding the whole, given a part and the percent</li><li>• use ratio reasoning to convert measurement units</li> <li>• understand that positive and negative numbers are used together to describe quantities having opposite directions or values</li><li>• use positive and negative numbers to represent quantities in real-world context</li><li>• understand the absolute value of a rational number as its distance from 0 on the number line</li><li>• understand ordering and absolute value of rational numbers</li><li>• write, interpret, and explain statements of order for rational numbers in real-world contexts</li></ul>
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<b>Geometry and Measurement – Grade Six</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Attributes and relationships of plane and solid figures, objects, and patterns can be used to describe, understand, and communicate about the world.</li>   <li>• Geometry has many real-world applications including design, architecture, and art.</li>   <li>• Measurement allows description, understanding, and communication about the world.</li> </ul>	<ul style="list-style-type: none"> <li>• How can geometry be seen in the natural and human-designed world?</li> <li>• How are distance, direction, coordinates, and scale used to understand and explain the arrangement of objects and locations?</li>   <li>• How do the characteristics of plane and solid figures influence their use in aesthetic and functional designs?</li> <li>• How can one shape be used to calculate the area of another?</li>   <li>• How is measurement used to quantify information about objects and events?</li> <li>• How do the characteristics of objects and events influence the choice of measurement strategies and tools?</li> <li>• How does the precision required for a measurement influence the choice of strategies and tools?</li> <li>• How is the understanding and communication about measurement used to solve problems and make decisions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Coordinate system</li>   <li>• Plane figures</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• locate, plot, and name ordered pairs in <b>all four quadrants</b> on the coordinate grid</li> <li>• <b>use coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate</b></li> <li>• <b>draw polygons in the coordinate plane given coordinates for the vertices</b></li>   <li>• draw angles using protractors</li> <li>• <b>calculate the sum of angle measures in triangles</b></li> <li>• <b>estimate angle measurement</b></li> <li>• <b>identify, describe, classify, name, and draw pairs of angles (adjacent, vertical, complementary, supplementary, and alternate interior and alternate exterior angles)</b></li> <li>• <b>calculate area of a right triangle, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes</b></li> </ul>

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	<ul style="list-style-type: none"><li>• Solid figures</li></ul>	<ul style="list-style-type: none"><li>• <b>calculate surface area</b> and volume <b>of simple geometric solids as they apply to real-world and mathematical problems</b></li><li>• find the volume of a right rectangular prism <b>with fractional edge lengths</b> by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as it would be by multiplying the edge lengths of the prism</li><li>• apply formula for volume of a rectangular prism (<math>V = l \times w</math> and <math>V = b \times h</math>) to find volumes of right rectangular prisms <b>with fractional edge lengths</b> to solve real-world and mathematical problems</li></ul>
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<b>Algebra – Grade Six</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns aid description, understanding, and communication about the world.</li>   <li>• Patterns and number relationships can be used to investigate, understand, and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• How and why are patterns used and where can they be found in human-designed environments?</li> <li>• How are patterns and number relationships represented symbolically (such as consecutive odd numbers)?</li> <li>• How are tables, graphs, and equations used to represent, analyze, and extend patterns?</li>   <li>• How are patterns used to solve problems and communicate information?</li> <li>• What kinds of strategies help reveal patterns and number relationships?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Order of operations</li>   <li>• Expressions</li>     <li>• Exponents</li>     <li>• One-variable linear equations</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• apply the <b>complete order</b> of operations in evaluating expressions</li>   <li>• <b>simplify and evaluate expressions using substitution, following the order of operations</b></li> <li>• translate and evaluate written and verbal expressions to algebraic expressions</li> <li>• <b>identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, and coefficient)</b></li> <li>• <b>understand that a variable can represent an unknown number</b></li> <li>• <b>evaluate expressions at specific values of their variables in formulas (<math>2x + 7</math> when <math>x = 3</math>)</b></li> <li>• <b>recognize two expressions as equivalent (e.g., <math>y + y + y</math> and <math>3y</math> are equivalent expressions)</b></li>   <li>• <b>write and evaluate numerical expressions involving whole-number exponents</b></li> <li>• <b>write in exponential format</b></li> <li>• <b>evaluate an exponential expression</b></li>   <li>• <b>apply the addition, subtraction, multiplication, and division properties of equality to solve and check one-step algebraic equations (<math>2x = 4</math>; <math>x + 5 = 8</math>)</b></li> <li>• solve real-world and mathematical problems by writing and solving equations</li> <li>• <b>recognize that inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions</b></li> <li>• <b>represent solutions of inequalities on number line diagrams</b></li> </ul>

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	<ul style="list-style-type: none"><li>• Properties</li></ul>	<ul style="list-style-type: none"><li>• <b>represent and analyze quantitative relationships between dependent and independent variables</b></li><li>• recognize, identify, and apply the inverse property of addition and multiplication</li><li>• recognize, identify, and apply the addition, subtraction, multiplication, and division properties of equality</li><li>• recognize, identify, and apply the identity properties of addition and multiplication</li><li>• identify and apply the distributive property of addition and multiplication</li></ul>
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<b>Data Analysis and Probability – Grade Six</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Data collection and analysis can be used to predict outcomes, solve problems, and make decisions.</li> </ul>	<ul style="list-style-type: none"> <li>What factors influence the way data is collected and organized?</li> <li>How is the analysis of data used to solve problems?</li> <li>How is the reliability of data affected by the source, quantity, and method of collection?</li> <li>How is the presentation of data used or misused to support different points of view?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>Graphs</li>   <li>Measures of central tendency</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>determine the appropriate or best use of bar, line, and circle graphs</li> <li>summarize, describe, and answer questions with regard to data in <b>histograms</b>, bar, line, circle, stem and leaf, <b>dot plots</b>, and <b>box and whisker graphs</b></li> <li>construct <b>complex</b> bar, line, or circle graphs on gathered or given data sets</li>   <li><b>develop an understanding of statistical variability</b></li> <li>calculate mean, median, mode, and range and <b>interpret and explain their meaning</b></li> <li><b>determine the appropriate or best use of mean, median, mode, and range</b></li> <li><b>interpret the meaning of fractional and decimal values as related to mean</b></li> </ul>

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<b>Number and Operations – Grade Seven</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li>   <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• What situations require the use of mathematical understandings?</li> <li>• How does mathematics enable people to work with intangible phenomena (such as distance, space, and nanosecond)?</li> <li>• How do concrete materials model mathematical situations?</li>   <li>• How do the characteristics of a situation influence the choice of operations, strategies, and tools?</li> <li>• How is a solution determined to be reasonable, accurate, and complete?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Integers</li>   <li>• Rational numbers</li>   <li>• Real numbers</li>   <li>• Percents</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• identify, order, and compare integers</li> <li>• <b>graph integers on a number line</b></li> <li>• <b>add, subtract, multiply, and divide integers and explain their operational processes</b></li>   <li>• identify, order, and compare rational numbers</li> <li>• <b>graph rational numbers on a number line</b></li> <li>• <b>apply properties of operations as strategies to add, subtract, multiply, and divide rational numbers and explain their operational processes</b></li> <li>• <b>describe situations in which opposite quantities combine to make 0</b></li> <li>• <b>understand subtraction of rational numbers as adding the additive inverse</b></li> <li>• <b>convert rational numbers to decimals and classify as terminating, non-terminating, and repeating</b></li> <li>• <b>solve real-world and mathematical problems involving the four operations of rational numbers</b></li>   <li>• <b>classify real numbers as rational, irrational, whole, integer, or natural</b></li>   <li>• <b>convert between decimal, fraction, and percent formats</b></li> <li>• <b>compare and order percents (including those less than one and greater than 100)</b></li> </ul>

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	<ul style="list-style-type: none"> <li>• Ratios</li>   <li>• Exponents and roots</li> </ul>	<ul style="list-style-type: none"> <li>• <b>calculate the percent of a number (20% of 50) including applications to</b> <ul style="list-style-type: none"> <li>○ <b>tax and discount</b></li> <li>○ <b>simple interest</b></li> <li>○ <b>commissions</b></li> <li>○ <b>gratuities</b></li> <li>○ <b>percent of change</b></li> </ul> </li> <li>• recognize and represent proportional relationships between quantities</li> <li>• identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships</li> <li>• solve ratio equations <b>using cross-multiplication</b></li> <li>• solve word problems involving <b>ratios and proportions, including the percent proportion</b> (16 is what percent of 90)</li> <li>• <b>apply ratios and solve problems involving scale, models, and unit rates</b></li> <li>• <b>calculate perfect square roots</b></li> <li>• <b>estimate the value of a non-perfect square root to a given decimal point value</b></li> </ul>
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<b>Geometry and Measurement – Grade Seven</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Attributes and relationships of plane and solid figures, objects, and patterns can be used to describe, understand, and communicate about the world.</li>   <li>• Geometry has many real-world applications including design, architecture, and art.</li>   <li>• Measurement allows description, understanding, and communication about the world.</li> </ul>	<ul style="list-style-type: none"> <li>• How can geometry be seen in the natural and human-designed environments?</li> <li>• How are distance, direction, coordinates, and scale used to understand and explain the arrangement of objects and locations?</li> <li>• How do models and scale drawings enhance understanding used in problem-solving and design?</li>   <li>• How do the characteristics of geometric shapes and figures influence their use in aesthetic and functional designs?</li>   <li>• How is measurement used to quantify information about objects and events?</li> <li>• How do the characteristics of objects and events influence the choice of measurement strategies and tools?</li> <li>• How does the precision required for a measurement influence the choice of strategies and tools?</li> <li>• How is the understanding and communication about measurement used to solve problems and make decisions?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Plane figures</li>   <li>• Solid figures</li>   <li>• Formulas</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• prove the similarity of plane figures <b>by identifying congruent angles and proportional sides</b></li> <li>• <b>solve problems involving scale drawings</b></li> <li>• calculate the lengths of sides of similar plane figures</li> <li>• <b>sketch, draw, and construct geometric shapes with given conditions using ruler, protractor, compass, and technology</b></li> <li>• <b>construct triangles from three measures of angles or sides</b></li> <li>• <b>verify the properties of dilations, rotations, reflections, and translations and use these properties to compare two-dimensional figures</b></li>   <li>• <b>describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids</b></li>   <li>• <b>develop and/or use formulas</b> to calculate surface area and volume for solid figures (cone, sphere, pyramid, prism, cylinders)</li> <li>• <b>develop and/or use formulas to calculate the area and circumference of circles</b></li> <li>• <b>develop and/or use formulas</b> to calculate the area and perimeter of plane figures</li> </ul>

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<b>Algebra – Grade Seven</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Patterns aid description, understanding, and communication about the world.</li>   <li>• Patterns and number relationships can be used to investigate, understand, and solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• How and why are patterns used and where can they be found in human-designed environments?</li> <li>• How are patterns and number relationships represented symbolically (such as consecutive odd numbers)?</li> <li>• How are tables, graphs, and equations used to represent, analyze, and extend patterns?</li>   <li>• How are patterns used to solve problems and communicate information?</li> <li>• What kinds of strategies help to reveal patterns and number relationships?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p>	<ul style="list-style-type: none"> <li>• Expressions</li>   <li>• One-variable linear equations and inequalities</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• <b>apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients</b></li> <li>• <b>translate an expression from written to algebraic form and from algebraic to written form</b></li> <li>• <b>identify and combine like terms</b> (<math>2x + 3x = 5x</math>)</li>   <li>• solve and check <b>two-step equations</b> (<math>2x + 3 = 5</math>) <b>using rational numbers and the distributive property</b> [<math>2(x + 3) = 8</math>]</li> <li>• <b>solve, check, and graph the solution to one- and two-step one-variable linear inequalities, excluding multiplication or division by a negative</b> [<math>2x &gt; 8</math>; <math>x - 5 &lt; -9</math>]</li> <li>• solve <b>multi-step</b> real-life mathematical problems posed with positive and negative rational numbers in any form by constructing simple equations and inequalities</li> <li>• evaluate solutions for reasonableness, accuracy, and completeness</li> </ul>



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<b>Algebra – Grade Eight</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Mathematics can be used to describe, understand, and communicate about the world in order to solve problems and make decisions.</li>   <li>• Characteristics of a situation or problem influence the choice of numbers, operations, strategies, and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• What does mathematics reveal about the world?</li> <li>• What situations require the use of mathematical understandings?</li> <li>• How does mathematics enable people to work with intangible phenomena (such as distance, space, and nanosecond)?</li> <li>• How do concrete materials model mathematical situations?</li>   <li>• How do the characteristics of a situation influence the choice of numbers, operations, strategies, and tools?</li> <li>• How is it determined that a solution is reasonable, accurate, and complete?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.9</b> Students understand space and dimensionality concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.10</b> Students understand measurement concepts and use measurements appropriately and accurately.</p>	<ul style="list-style-type: none"> <li>• Expressions</li> </ul>	<p>Student will:</p> <ul style="list-style-type: none"> <li>• <b>interpret parts of an expression, such as terms, factors, and coefficients</b></li> <li>• <b>apply the appropriate properties of real numbers and the steps for order of operations to write, evaluate, simplify, add, subtract, multiply, and divide expressions:</b> <ul style="list-style-type: none"> <li>○ polynomial</li> <li>○ rational</li> <li>○ radical</li> <li>○ exponential including concept of scientific notation</li> </ul> </li> <li>• <b>derive the formula for the sum of a finite geometric series and use to solve problems</b></li> <li>• <b>understand that a function, <math>y = f(x)</math>, is a rule that assigns to each input (domain) exactly one output (range) – the graph of a function is the set of ordered pairs consisting of an input and the corresponding output</b> <ul style="list-style-type: none"> <li>○ compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal description)</li> </ul> </li> <li>• <b>use function notation to evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context</b></li> </ul>

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<p><b>Academic Expectation 2.11</b> Students understand mathematical change concepts and use them appropriately and accurately.</p> <p><b>Academic Expectation 2.12</b> Students understand mathematical structure concepts including the properties and logic of various mathematical systems.</p> <p><b>Academic Expectation 2.13</b> Students understand and appropriately use statistics and probability.</p>	<ul style="list-style-type: none"> <li>• Equations, functions, and inequalities</li> </ul>	<ul style="list-style-type: none"> <li>• <b>solve one-variable linear equations and inequalities</b> <ul style="list-style-type: none"> <li>○ interpret the solution to identify the number of acceptable solutions (e.g., zero, one, infinitely many solutions)</li> <li>○ solve, graph, and check the solution to any one-variable linear equation or inequality</li> <li>○ solve and graph the solution to compound linear equations and inequalities including absolute value (<math>x &gt; 2</math> and <math>x &lt; 3</math>; <math> x  = 3</math>)</li> <li>○ rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations (linear equations)</li> </ul> </li> <li>• <b>analyze and solve linear equations, functions, and pairs of linear equations and functions</b> <ul style="list-style-type: none"> <li>○ understand the connections between proportional relationships, lines, linear equations, and inequalities with relation to slope</li> <li>○ solve two-variable linear equations, functions, and inequalities           <ul style="list-style-type: none"> <li>• interpret the solution to identify the number of acceptable solutions (e.g., zero, one, infinitely many solutions)</li> <li>• solve, graph, and check the solution to two-variable linear equations and inequalities including absolute value</li> <li>• understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously</li> <li>• solve, graph, and check the solution to two-variable systems of linear equations and inequalities using:               <ul style="list-style-type: none"> <li>• substitution</li> <li>• graphing</li> <li>• linear combination (elimination)</li> </ul> </li> <li>• write the equation of a line using:               <ul style="list-style-type: none"> <li>• data table</li> <li>• linear graph</li> <li>• point-slope form</li> <li>• slope-intercept form</li> <li>• standard form</li> <li>• slope formula</li> <li>• x-intercept and y-intercept</li> <li>• parallel and perpendicular slopes</li> </ul> </li> <li>• construct a viable argument to justify a solution method</li> </ul> </li> <li>• <b>solve quadratic equations</b> <ul style="list-style-type: none"> <li>○ understand that solutions to a quadratic equation correspond to the x-intercepts of their graphs</li> </ul> </li> </ul> </li></ul>
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	<ul style="list-style-type: none"> <li>• Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>○ interpret the solution to identify the number of acceptable solutions (e.g., zero, one, and two)</li> <li>○ solve and check the solution to any quadratic equation and inequality using:             <ul style="list-style-type: none"> <li>• graphing – intercepts, vertex, maxima, minima, and line of symmetry</li> <li>• quadratic formula: <math>x = [-b \pm (b^2 - 4ac)^{1/2}] / 2a</math></li> <li>• factoring</li> <li>• formula for the line of symmetry: <math>x = -b/2a</math></li> <li>• completing the square</li> <li>• standard graphing form: <math>y = a(x-b)^2 + c</math></li> <li>• standard form: <math>y = ax^2 + bx + c</math></li> </ul> </li> <li>○ construct a viable argument to justify a solution method</li> <li>○ write a quadratic equation given a graph of a parabola or set of values</li> <li>• radical equations             <ul style="list-style-type: none"> <li>○ interpret the solution to identify the number of acceptable solutions (e.g., extraneous solutions)</li> <li>○ solve and check the solution to radical equations by:                 <ul style="list-style-type: none"> <li>• completing the square</li> <li>• squaring both sides of the equation</li> <li>• applying Pythagorean Theorem</li> </ul> </li> <li>○ construct a viable argument to justify a solution method</li> </ul> </li> <li>• rational equations             <ul style="list-style-type: none"> <li>○ interpret the solution to identify the number of acceptable solutions (e.g., extraneous solutions)</li> <li>○ solve and check the solution to rational equations using the concepts of:                 <ul style="list-style-type: none"> <li>• the conjugate</li> <li>• least common denominator</li> <li>• cross-multiplication</li> </ul> </li> <li>○ construct a viable argument to justify a solution method</li> </ul> </li> <li>• create equations and inequalities in one or two variables and use them to solve problems</li> <li>• solve standard word problems using one or two variables including:             <ul style="list-style-type: none"> <li>○ uniform motion or distance</li> <li>○ consecutive integers</li> <li>○ geometric properties of perimeter, area, and Pythagorean Theorem</li> <li>○ mixture or solution</li> <li>○ work</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"><li>• Statistics and probability</li></ul>	<ul style="list-style-type: none"><li>○ combination</li><li>○ place value or digit</li><li>○ age</li><li>○ scientific notation</li><li>• interpret the solution to identify the number of acceptable solutions (e.g., extraneous solutions)</li><li>• evaluate solutions for reasonableness, accuracy, and completeness</li><li>• investigate patterns of association in two-variable data<ul style="list-style-type: none"><li>○ construct and interpret scatter plots to investigate patterns of association such as positive and negative correlation, linear and nonlinear associations, and outliers</li></ul></li></ul>
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<b>Examples of Formative and Summative Assessments</b>		
<b>Primary</b>	<b>Intermediate</b>	<b>Middle School</b>
Observations Anecdotal records Pre- and post-assessments Multiple choice assessments Open response questions Drawing software Oral presentations Graphic organizers K-W-L charts Summaries Entry / exit tickets Models Video productions Dramatizations Mobiles Brochures Diagrams Groups projects Art, dance, and music performances Math portfolio entries Math talks PowerPoint presentations Math centers Collages and posters	Pre- and post-assessments Simple Solutions (or similar type of daily spiral review) Problem solving Word problems Student generated questions "Where's the Math?" Math-related current events Estimation jars Math centers Group projects Anchor activities Open response questions Brochures Art, dance, and music performances Textbook and teacher created tests and quizzes Diagrams Persuasive, informative, and descriptive essays File folder games Concept mapping Real-life applications Function machines Problems or number of the day WebPages PowerPoint presentations Oral presentations Graphic organizers Models K-W-L charts Debates Interviews Poetry Entry / exit tickets Video productions Multiple choice assessments	Teacher created / book generated tests and quizzes Posters / graphic organizers / brochures Student created tests and quizzes Student written word problems Speeches ("How does the real world use order of operations?") Songs related to mathematical topics Real-life task performances related to taxes, cooking, sports, investments, etc. Geometric models / mobiles Essays Error analysis Student taught lessons Oral response Scale maps / drawings Cumulative exams / tests K-W-L charts Pre-assessment of prior knowledge Slide show presentations Cooperative group presentations Self-evaluation Informal observations Homework Warm-up activities Data gathered to model function rules

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**Examples of Applications for Technology/Library Media – Primary**

**General Applications**

- Use applicable software and web pages for problem solving and skills practice.
- Create multimedia presentations and web pages on topics in mathematics.
- Use alternate technologies to reinforce content curriculum (e.g., scanners, interactive whiteboards, projectors, computers, calculators, cameras, videos, and microphones).
- Use student response systems to assess student understanding.

**Number and Operations**

- Use books to expand on skills (e.g., counting books, pattern books, and shape books).
- Relate place value and ordering with call numbers.

**Geometry**

- Use content appropriate electronic tools (e.g., use camera to photograph shapes around learning environment).

**Measurement**

- Use applicable computer drawing tools (e.g., paint and graphics).

**Algebra**

- Use graphic applications (e.g., use clip art to make patterns).

**Data Analysis**

- Use database, templates, and spreadsheets (e.g., record information from class graphs, surveys, and daily observations).

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**Examples of Applications for Technology/Library Media – Intermediate**

**General Applications**

- Use grade appropriate problem solving and skills practice software.
- Create multimedia presentations on topics in mathematics.
- Use alternate technologies to reinforce content curriculum (e.g., electronic white boards, scanners, projectors, calculators, etc.).
- Use student response systems to assess student understanding.

**Number and Operations**

- Create a spreadsheet to demonstrate knowledge of operations (+, -,  $\times$ ,  $\div$ ).
- Use calculator to search for numerical patterns.
- Relate call numbers/Dewey Decimal System to ordering and place value.

**Geometry**

- Create geometric figures using a drawing program.
- Use camera to find examples of geometric shapes in the world.

**Measurement**

- Use encyclopedias, almanacs, and other reference tools to find real world measurements (e.g., perimeter, volume, area).
- Use drawing program to demonstrate knowledge of measurement (e.g., area of a room).

**Algebra**

- Use spreadsheet to create a function machine.
- Use a drawing program to design arrays to demonstrate multiplicative properties.

**Data Analysis and Probability**

- Use grade appropriate software to create different graphs/charts and compare/interpret data in multiple layouts.

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**Examples of Applications for Technology/Library Media – Middle School**

**General Applications**

- Use applicable software and online resources for problem solving, skill practice, supplemental lessons, and simple programming.
- Research mathematics topics using library media or Internet resources.
- Create multimedia presentation or web pages on topics in mathematics.
- Reinforce content using alternate technologies (e.g., scanners, electronic white boards, projection devices, computers, calculators, cameras, videos).
- Use student response systems to assess student understanding.

**Number and Operations**

- Use spreadsheet software to solve real-world or simulated real-world problems (e.g., balancing a check book, calculating credit card or loan payments with interest).

**Geometry**

- Use geometry web sites or software to demonstrate geometric principles or theorems.
- Use software to create tessellations.

**Algebra**

- Use a spreadsheet to demonstrate functional relationships.
- Use a graphing calculator for graphing equations and exploring algebraic concepts.

**Measurement**

- Use a spreadsheet to create a conversion table for different units of measurement.
- Use CAD or home design software to design a room or house and calculate area, volume, and costs.

**Data Analysis and Probability**

- Use Internet resources to gather real-world data for statistical analysis.
- Use spreadsheet software to collect and represent data in a variety of forms (e.g., compile survey results and display information in appropriate graph format).

# **Science Curriculum Framework**

# Science Curriculum Framework

## Archdiocese of Louisville

In 2010, the National Academy of Sciences, Achieve, the American Association for the Advancement of Science, and the National Science Teachers Association embarked on a two-step process to develop the *Next Generation Science Standards* (NGSS). The first step of the process was the creation of *A Framework for K-12 Science Education* report. The *Framework* is grounded in the most current research on science and scientific learning. The second step in the process was the development of the *Next Generation Science Standards*, grounded in the *Framework*.

*A Framework for K-12 Science Education* outlines the three dimensions that are needed to provide students with a high-quality science education. The integration of these three dimensions provides students with a context for the content of science, how science knowledge is acquired and understood, and how the individual sciences are connected through concepts that have universal meaning across disciplines. The three dimensions are:

- Dimension 1: Practices – Dimension 1 describes the major practices that scientists employ as they investigate and build models and theories about the world and a key set of engineering practices.
- Dimension 2: Crosscutting Concepts – The crosscutting concepts have application across all domains of science. They reflect the ideas and practices that cut across the science disciplines.
- Dimension 3: Disciplinary Core Ideas – An important role of science today is to prepare students with sufficient core knowledge so that they can later acquire additional information on their own.

Performance Expectations reflect the three dimensions. For instance, the 1<sup>st</sup> grade Performance Expectation 1-PS4-1 – Waves and Their Applications in Technologies for Information Transfer, states that:

**Students who demonstrate understanding can:**

Plan and conduct investigations (*Science and Engineering Practice – Dimension 1*)

to provide evidence that (*Crosscutting Concept – Dimension 2*)

vibrating materials can make sound and sound can make materials vibrate. (*Disciplinary Core Idea – Dimension 3*)

In addition, the Dimension Boxes located below the Performance Expectations contain the information regarding the three dimensions as they relate to a particular Performance Expectation.

A small set of core ideas in science and engineering were developed and evaluated based on four key criteria. To be regarded as core, an idea had to meet at least two of the criteria. A core idea for K-12 science instruction should:

1. Have broad importance across multiple science or engineering disciplines or be a key organizing principle of a single discipline.
2. Provide a key tool for understanding or investigating more complex ideas and solving problems.
3. Relate to the interests and life experiences of students or be connected to societal or personal concerns that require scientific or technology knowledge.
4. Be teachable and learnable over multiple grades at increasing levels of depth and sophistication. That is, the idea can be made accessible to younger students but is broad enough to sustain continued investigation over the years.

In order to create standards aligned to the *Framework*, the chief state school officers and the state board of education chairs formed a state partnership. The *Framework* formed the basis for the development of the *Next Generation Science Standards*. The NGSS writing team was composed of K-20 classroom teachers, scientists, and science education researchers.

Catholic schools have a long-standing commitment to academic excellence that is rooted in the faith-based mission of Catholic education. The Archdiocese of Louisville engaged in a period of extensive study in 2015. **The Archdiocese of Louisville Science Curriculum Framework is adapted from the *Next Generation Science Standards*.** Considerable attention was given to the connections between Catholic Identity and Science, outlining ways the particular Science Performance Expectations are lived out through our Catholic beliefs .

The Science Curriculum Framework reflects the interconnected nature of science as it is practiced and experienced in the real world. The focus is on a smaller, more teachable number of disciplinary core ideas rather than an abundance of facts and the details associated with them. The emphasis is on a deeper understanding of each. The standards are written as learning progressions that integrate the three dimensions. They serve as the guidelines for assessment, not instructional tasks or curriculum mandates. The new standards provide teachers with the opportunity to challenge learners through authentic, meaningful learning contexts through an inquiry-based approach.

Adapted from *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*,  
National Research Council of the National Academies, 2012,  
and the *Next Generation Science Standards*,  
The National Academies Press, 2013.

## Science Standards Arranged by Disciplinary Core Ideas

### Life Science

- LS1 From Molecules to Organisms: Structures and Processes
- LS2 Ecosystems: Interactions, Energy, and Dynamics
- LS3 Heredity: Inheritance and Variation of Traits
- LS4 Biological Evolution: Unity and Diversity

### Physical Science

- PS1 Matter and Its Interactions
- PS2 Motion and Stability: Forces and Interactions
- PS3 Energy
- PS4 Waves and Their Applications in Technologies for Information Transfer

### Earth Science

- ESS1 Earth's Place in the Universe
- ESS2 Earth's Systems
- ESS3 Earth and Human Activity

### Engineering and Technology

- ETS1 Engineering Design
- ETS2 Links Among Engineering, Technology, Science, and Society

## Scientific Thinking and Problem-Solving – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Using the five senses helps us to develop awareness of the world around us.</li> <li>• Learning the body parts and their functions helps to develop personal health habits.</li> <li>• The development of foundational scientific concepts helps develop critical thinking skills.</li> <li>• Self-help skills promote independence and lead to a safe environment.</li> </ul>	<ul style="list-style-type: none"> <li>• How do the five senses help us to learn more about our world?</li> <li>• How can practicing personal health habits keep us safe and healthy?</li> <li>• How can understanding specific scientific concepts help us understand the world around us?</li> <li>• Why is it important to care for ourselves?</li> </ul>
Content Guidelines	Performance Standards
<p>Observation</p> <p>Investigation</p> <p>Scientific Concepts</p> <p>Personal Health and Wellness</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use the five senses to observe and explore</li> <li>• name the five senses and their functions</li> <li>• explore the natural world by observing and making predictions</li> <li>• use the senses to investigate and describe properties of material objects (color, size, shape, texture, flexibility)</li> <li>• recognize and use a variety of tools for investigation of the environment</li> <li>• recognize and name body parts and their functions</li> <li>• understand weather and seasons</li> <li>• recognize and name the basic colors</li> <li>• participate in a variety of physical activities that enhance personal health and fitness</li> <li>• engage in active physical play indoors and outdoors</li> <li>• identify and practice personal health habits (e.g., washing hands, caring for teeth and eyes, covering coughs and sneezes, blowing nose) which affect self and others</li> <li>• demonstrate healthy eating habits by eating a variety of nutritious foods</li> <li>• exhibit ability to be separated from parent for an extended period</li> <li>• develop awareness of own needs and the ability to communicate those needs</li> <li>• develop inter-dependence in caring for self and the environment</li> <li>• demonstrate increasing independence with basic self-care skills</li> <li>• care for self in the restroom</li> </ul>

Self-Help Skills	<ul style="list-style-type: none"><li>• use fork or spoon as appropriate for eating</li><li>• clean up after work/play period</li><li>• keep track of personal belongings</li><li>• fasten and unfasten own clothing without assistance (zipper, shoes, jacket)</li></ul>
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<b>K-PS2-1 Motion and Stability: Forces and Interactions</b>		
<p>Students who demonstrate understanding can:</p> <p><b>K-PS2-1 Plan and conduct investigations to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</b></p> <p><i>Clarification Statement: Examples of pushes or pulls could include a string attached to an object being pulled, a person pushing an object, a person stopping a rolling ball, and two objects colliding and pushing on each other.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* With guidance, plan and conduct an investigation in collaboration with peers.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Investigations Use a Variety of Methods</b> * Scientists use different ways to study the world.</p>	<p><b>PS2.A Forces and Motion</b> * Pushes and pulls can have different strengths and directions. * Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.</p> <p><b>PS2.B Types of Interactions</b> * When objects touch or collide, they push on one another and can change motion.</p> <p><b>PS3.C Relationship Between Energy and Forces</b> * A bigger push or pull makes things speed up or slow down more quickly. <i>(secondary emphasis)</i></p>	<p><b>Cause and Effect</b> * Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>
<b>Guided Questions</b>		
<p>* How does the motion of the object change based on the strength of the push or pull? * How does the motion of the object change based on the direction of the push or pull?</p>		
<b>Catholic Identity Connections</b>		
<p>* We are sometimes pushed from the path of doing what is right and pulled toward making bad decisions. * Choices are made for the good of all.</p>		

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<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>	
<b>ELA Literacy</b>	
<b>W.K.7</b>	<i>Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).</i>
<b>Mathematics</b>	
<b>MP</b>	<i>Reason abstractly and quantitatively.</i>
<b>M</b>	<i>Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</i>
<b>M</b>	<i>Directly compare two objects with a measurable attribute in common to see which object has "more of"/"less of" the attribute, and describe the difference.</i>
<b>Connections to Other DCIs in Kindergarten</b>	
<b>NA</b>	
<b>Articulation to DCIs across Grade Levels</b>	
<b>3.PS2.A; 3.PS2.B; 4.PS2.B</b>	

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**K-PS2-2 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.**

*Clarification Statement: Examples of problems requiring a solution could include having a marble or other object move a certain distance, follow a particular path, and knock down other objects. Examples of solutions could include tools such as a ramp to increase the speed of the object and a structure that would cause an object such as a marble or ball to turn.*

*Assessment Boundary: Assessment does not include friction as a mechanism for change in speed.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <p>* Analyze data from tests of an object or tool to determine if it works as intended.</p>	<p><b>PS2.A Forces and Motion</b> * Pushes and pulls can have different strengths and directions. * Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.</p> <p><b>ETS1.A Defining Engineering Problems</b> * A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have acceptable solutions.</p>	<p><b>Cause and Effect</b> * Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>

**Guided Questions**

\* With the help of Jesus, we are able to follow the path in the direction of love and kindness.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.K.1** *With prompting and support, ask and answer questions about key details in a text.*

**SL.K.3** *Ask and answer questions in order to seek help, get information, or clarify something that is not understood.*

**Connections to Other DCIs in Kindergarten**

**K.ETS1.A; K.ETS1.B**

**Articulation to DCIs across Grade Levels**

**2.ETS1.B; 2.PS2.A; 4.ETS1.A**

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**K-PS3-1 Energy**

Students who demonstrate understanding can:

**K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.**

*Clarification Statement: Examples of Earth's surface could include sand, soil, rocks, and water.*

*Assessment Boundary: Assessment of temperature is limited to relative measures such as warmer/cooler.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Make observations (firsthand or from media) to collect data that can be used to make comparisons.</p> <p style="text-align: center;">----- <b>Connections to Nature of Science</b></p> <p><b>Scientific Investigations Use a Variety of Methods</b> * Scientists use different ways to study the world.</p>	<p><b>PS3.B Conservation of Energy and Energy Transfer</b> * Sunlight warms Earth's surface.</p>	<p><b>Cause and Effect</b> * Events have causes that generate observable patterns.</p>

**Guided Questions**

- \* What are ways to reduce the warming effect of sunlight on Earth's surfaces?
- \* What are positive effects of the sun's warmth on the Earth?

**Catholic Identity Connections**

- \* God created the sun to provide the Earth with warmth and light.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**W.K.7** *Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).*

**Mathematics**  
**M** *Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.*

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<b>Connections to Other DCIs in Kindergarten</b>
<b>NA</b>
<b>Articulation to DCIs across Grade Levels</b>
<b>1.PS4.B; 3.ESS2.D</b>

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<b>K-PS3-2 Energy</b>		
Students who demonstrate understanding can: <b>K-PS3-2 Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface.</b> <i>Clarification Statement: Examples of structures could include umbrellas, canopies, and tents that minimize the warming effect of the sun.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.  * Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem.	<b>PS3.B Conservation of Energy and Energy Transfer</b> * Sunlight warms the Earth's surface.	<b>Cause and Effect</b> * Events have causes that generate observable patterns.
<b>Guided Questions</b>		
* We each have a responsibility to do our part to make the world a better place.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>W.K.7</b> <i>Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).</i>		
<b>Mathematics</b>		
<b>M</b> <i>Directly compare two objects with a measurable attribute in common to see which object has "more of"/"less of" the attribute, and describe the difference.</i>		
<b>Connections to Other DCIs in Kindergarten</b>		
<b>K.ETS1.A; K.ETS1.B</b>		
<b>Articulation to DCIs across Grade Levels</b>		
<b>1.PS4.B; 2.ETS1.B; 4.ETS1.A</b>		

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**K-LS1-1 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.**

*Clarification Statement: Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and, that all living things need water.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <p>* Use observations (firsthand and from media) to describe patterns in the natural world in order to answer scientific questions.</p> <p style="text-align: center;">----- <b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Scientists look for patterns and order when making observations about the world.</p>	<p><b>LS1.C Organization for Matter and Energy Flow in Organisms</b> * All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.</p>	<p><b>Patterns</b> * Patterns in the natural and human-designed world can be observed and used as evidence.</p>

**Guided Questions**

- \* What do plants and animals need to survive?
- \* How are plants and animals interdependent?

**Catholic Identity Connections**

- \* We are called to respect and care for all creation because it is a gift of God's love.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.K.7** *Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).*

**Mathematics**

**M** *Directly compare two objects with a measurable attribute in common to see which object has "more of"/"less of" the attribute, and describe the difference.*

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<b>Connections to Other DCIs in Kindergarten</b>
NA
<b>Articulation to DCIs across Grade Levels</b>
1.LS1.A; 2.LS2.A; 3.LS2.C; 5.LS1.C; 5.LS2.A

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**K-ESS2-1 Earth's Systems**

Students who demonstrate understanding can:

**K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.**

*Clarification Statement: Examples of qualitative observations could include descriptions of the weather (such as sunny, cloudy, rainy, and warm); examples of quantitative observations could include numbers of sunny, windy, and rainy days in a month. Examples of patterns could include that it is usually cooler in the morning than in the afternoon and the number of sunny days versus cloudy days is different in different months.*

*Assessment Boundary: Assessment of quantitative observations are limited to whole numbers and relative measures such as warmer/cooler.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <p>* Use observations (firsthand and from media) to describe patterns in the natural world in order to answer scientific questions.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Knowledge Is Based on Empirical Evidence</b> * Scientists look for patterns and order when making observations about the world.</p>	<p><b>ESS2.D Weather and Climate</b> * Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.</p>	<p><b>Patterns</b> * Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.</p>
<b>Guided Questions</b>		
<p>* How does the weather change throughout the year? * How can knowing about the weather of a certain time of year in the past help us to predict the weather for that same time this year?</p>		
<b>Catholic Identity Connections</b>		
<p>* The world God created for us has various types of weather at various times of the year.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.K.7** *Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**N&O** *Read numerals up to 100.*

**N&O** *Count by ones, fives, and tens to 100.*

**M** *Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.*

**M** *Sort and order objects by size, color, number, and other properties.*

**Connections to Other DCIs in Kindergarten**

**NA**

**Articulation to DCIs across Grade Levels**

**2.ESS2.A; 3.ESS2.D**

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**K-ESS2-2 Earth's Systems**

Students who demonstrate understanding can:

**K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.**

*Clarification Statement: Examples of plants and animals changing their environment could include that a squirrel digs in the ground to hide its food and tree roots can break concrete.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in K-2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world.</p> <p>* Construct an argument with evidence to support a claim.</p>	<p><b>ESS2.E Biogeology</b> * Plants and animals can change the environment.</p> <p><b>ESS3.C Human Impacts on Earth Systems</b> * Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, and air, and other living things.</p>	<p><b>Systems and System Models</b> * Systems in the natural and designed world have parts that work together.</p>
<b>Guided Questions</b>		
* How do plants, animals, and people change their environment?		
<b>Catholic Identity Connections</b>		
* We are called to respect and care for all creation because it is a gift of God's love. * The choices we make can affect the world that God has created for us.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b></p> <p><b>RI.K.1</b> <i>With prompting and support, ask and answer questions about key details in a text.</i></p> <p><b>W.K.1</b> <i>Use a combination of drawing, dictating, pre-writing, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book.</i></p> <p><b>W.K.2</b> <i>Use a combination of drawing, dictating, pre-writing, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.</i></p>		
<b>Connections to Other DCIs in Kindergarten</b>		
NA		
<b>Articulation to DCIs across Grade Levels</b>		
4.ESS2.E; 5.ESS2.A		

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**K-ESS3-1 Earth and Human Activity**

Students who demonstrate understanding can:

**K-ESS3-1 Use a model to represent the relationship between the needs of different plants and animals.**

*Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas; and, grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, storyboard) that represent concrete events or design solutions.</p> <p>* Use a model to represent relationships in the natural world.</p>	<p><b>ESS3.A Natural Resources</b> * Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.</p>	<p><b>Systems and System Models</b> * Systems in the natural and designed world have parts that work together.</p>

**Guided Questions**

- \* How are the needs of different plants and animals met by the various places in which they live?
- \* What factors determine the optimal environment for a living thing?

**Catholic Identity Connections**

- \* We must use God's gifts responsibly, seeing them as a reflection of God's love.
- \* We are called to care for the world around us.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.K.5** *Add drawings or other visual displays to descriptions as desired to provide additional detail.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**Connections to Other DCIs in Kindergarten**

**NA**

**Articulation to DCIs across Grade Levels**

**1.LS1.A; 5.LS2.A; 5.ESS2.A**

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**K-ESS3-2 Earth and Human Activity**

Students who demonstrate understanding can:

**K-ESPS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.**

*Clarification Statement: Emphasis is on local forms of severe weather.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in grades K-2 builds on prior experiences and progresses to simple descriptive questions that can be tested.</p> <p>* Ask questions based on observations to find more information about the designed world.</p> <p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.</p> <p>* Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.</p>	<p><b>ESS3.B Natural Hazards</b> * Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.</p> <p><b>ETS1.A Defining and Delimiting an Engineering Problem</b> * Asking questions, making observations, and gathering information are helpful in thinking about problems. <i>(secondary emphasis)</i></p>	<p><b>Cause and Effect</b> * Events have causes that generate observable patterns. ----- <b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * People encounter questions about the natural world every day.</p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People depend on various technologies in their lives; human life would be very different without technology.</p>
<b>Guided Questions</b>		
<p>* How can weather forecasting help people plan for, and respond to, specific types of local weather? * How can practice severe weather drills help us to be prepared?</p>		
<b>Catholic Identity Connections</b>		
<p>* Through prayer, we can ask for God's help and protection when we are frightened.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>Connections to Other DCIs in Kindergarten</b>		
<b>K.ETS1.A</b>		
<b>Articulation to DCIs across Grade Levels</b>		
<b>2.ESS1.C; 3.ESS3.B; 4.ESS3.B</b>		

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**K-ESS3-3 Earth and Human Activity**

Students who demonstrate understanding can:

**K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.**

*Clarification Statement: Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.</p> <p>* Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas.</p>	<p><b>ESS3.C Human Impacts on Earth Systems</b> * Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.</p> <p><b>ETS1.B Developing Possible Solutions</b> * Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. <i>(secondary emphasis)</i></p>	<p><b>Cause and Effect</b> * Events have causes that generate observable patterns.</p>

**Guided Questions**

- \* How can humans cause change to the local environment?
- \* What choices can people make to reduce negative impacts on the local environment?

**Catholic Identity Connections**

- \* God counts on us to make good decisions when it comes to taking care of our place in the world.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.K.2** *Use a combination of drawing, dictating, pre-writing, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.*

**Connections to Other DCIs in Kindergarten**

**K.ETS1.A**

**Articulation to DCIs across Grade Levels**

**2.ETS1.B; 4.ESS3.A; 5.ESS3.C**

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**Kindergarten Standards**

**K-PS2 Motion and Stability: Forces and Interactions**

**K-PS2-1** Plan and conduct an investigation to compare the effects of different strengths on different directions of pushes and pulls on the motion of an object.

**K-PS2-2** Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or pull.

**K-PS3 Energy**

**K-PS3-1** Make observations to determine the effect of sunlight on Earth's surface.

**K-PS3-2** Use tools and materials to design and build a structure that will reduce the warming effects of sunlight on an area.

**K-LS1 From Molecules to Organisms: Structures and Processes**

**K-LS1-1** Use observations to describe patterns of what plants and animals (including humans) need to survive.

**K-ESS2 Earth's Systems**

**K-ESS2-1** Use and share observations of local weather conditions to describe patterns over time.

**K-ESS2-2** Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

**K-ESS3 Earth and Human Activity**

**K-ESS3-1** Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

**K-ESS3-2** Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

**K-ESS3-3** Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

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**K-2-ETS1 Engineering Design**

Students who demonstrate understanding can:

- K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.**
  
- K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.**
  
- K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.**

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in K-2 builds on prior experiences and progresses to simple descriptive questions.</p> <ul style="list-style-type: none"> <li>* Ask questions based on observations to find more information about the natural and/or designed world.</li> <li>* Define a simple problem that can be solved through the development of a new or improved object or tool.</li> </ul> <p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, or storyboard) that represent concrete events or design solutions.</p> <ul style="list-style-type: none"> <li>* Develop a simple model based on evidence to represent a proposed object or tool.</li> </ul> <p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <ul style="list-style-type: none"> <li>* Analyze data from tests of an object or tool to determine if it works as intended.</li> </ul>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b></p> <ul style="list-style-type: none"> <li>* A situation that people want to change or create can be approached as a problem to be solved through engineering.</li> <li>* Asking questions, making observations, and gathering information are helpful in thinking about problems.</li> <li>* Before beginning to design a solution, it is important to clearly understand the problem.</li> </ul> <p><b>ETS1.B Developing Possible Solutions</b></p> <ul style="list-style-type: none"> <li>* Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.</li> </ul> <p><b>ETS1.C Optimizing the Design Solution</b></p> <ul style="list-style-type: none"> <li>* Because there is always more than one possible solution to a problem, it is useful to compare and test designs.</li> </ul>	<p><b>Structure and Function</b></p> <ul style="list-style-type: none"> <li>* The shape and stability of structures of natural and designed objects are related to their function(s).</li> </ul>

**Guided Questions**

- \* How can creativity and curiosity help people to solve problems?

**Catholic Identity Connections**

- \* God has given each of us talents that allow us to make the world a better place.

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**1-PS4-1 Waves and Their Applications in Technologies for Information Transfer**

Students who demonstrate understanding can:  
**1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.**  
*Clarification Statement: Examples of vibrating materials that make sound include tuning forks and plucking a stretched string. Examples of how sound can make matter vibrate could include holding a piece of paper near a speaker making sound and holding an object near a vibrating tuning fork.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b>            Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Plan and conduct investigations collaboratively to produce evidence to answer a question.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Investigations Use a Variety of Methods</b>            * Science investigations begin with a question.            * Scientists use different ways to study the world.</p>	<p><b>PS4.A Wave Properties</b>            * Sound can make matter vibrate, and vibrating matter can make sound.</p>	<p><b>Cause and Effect</b>            * Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>

**Guided Questions**

- \* How do vibrating materials cause sound?
- \* How does sound cause materials to vibrate?

**Catholic Identity Connections**

- \* God gave us our senses which allow us to hear sound and see and feel vibrations.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- W.1.7** *Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).*
  - W.1.8** *With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.*
  - SL.1.1** *Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.*

**Connections to Other DCIs in First Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**NA**

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<b>1-PS4-2 Waves and Their Applications in Technologies for Information Transfer</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-PS4-2 Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.</b></p> <p><i>Clarification Statement: Examples of observations could include those made in a completely dark room, a pinhole box, and a video of a cave explorer with a flashlight. Illumination could be from an eternal light source or by an object giving off its own light.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b></p> <p>Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.</p>	<p><b>PS4.B Electromagnetic Radiation</b></p> <p>* Objects can be seen if light is available to illuminate them or if they give off their own light.</p>	<p><b>Cause and Effect</b></p> <p>* Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>
Guided Questions		
<p>* Why is light necessary for us to see objects?</p>		
Catholic Identity Connections		
<p>* God gave us the gift of sight so that we can see and appreciate the world around us.</p> <p>* We delight in the world around us.</p>		
Archdiocese of Louisville ELA and Mathematics Standards Connections		
<p><b>ELA Literacy</b></p> <p><b>W.1.2</b> Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</p> <p><b>W.1.7</b> Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</p> <p><b>W.1.8</b> With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p><b>SL.1.1</b> Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p>		
Connections to Other DCIs in First Grade		
<p>NA</p>		
Articulation to DCIs across Grade Levels		
<p><b>4.PS4.B</b></p>		

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<b>1-PS4-3 Waves and Their Applications in Technologies for Information Transfer</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-PS4-3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.</b>  <i>Clarification Statement: Examples of materials could include those that are transparent (such as clear plastic), translucent (such as wax paper), opaque (such as cardboard) and reflective (such as a mirror).</i>  <i>Assessment Boundary: Assessment does not include the speed of light.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b>            Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Plan and conduct investigations collaboratively to produce evidence to answer a question.</p>	<p><b>PS4.B Electromagnetic Radiation</b>            * Some materials allow light to pass through them, others allow only some light through, and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam. <i>(Boundary: The idea that light travels from place to place is developed through experiences with light sources, mirrors, and shadows, but no attempt is made to discuss the speed of light.)</i></p>	<p><b>Cause and Effect</b>            * Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>
Guided Questions		
<p>* What happens when light is directed toward different types of materials?</p>		
Catholic Identity Connections		
<p>* We are each called to let our light shine for all to see.</p>		
Archdiocese of Louisville ELA and Mathematics Standards Connections		
<p><b>ELA Literacy</b>  <b>W.1.7</b> <i>Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</i>  <b>W.1.8</b> <i>With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</i></p>		
Connections to Other DCIs in First Grade		
<p><b>NA</b></p>		
Articulation to DCIs across Grade Levels		
<p><b>2.PS1.A</b></p>		

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<b>1-PS4-4 Waves and Their Applications in Technologies for Information Transfer</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.</b></p> <p><i>Clarification Statement: Examples of devices could include a light source to send signals, paper cup and string "telephones", and a pattern of drum beats.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Use tools and materials provided to design a device that solves a specific problem.</p> <p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in K-2 builds on prior experiences and progresses to simple descriptive questions.</p> <p>* Define a simple problem that can be solved through the development of a new or improved object or tool.</p>	<p><b>PS4.C Information Technologies and Instrumentation</b> * People use a variety of devices to communicate (send and receive information) over long distances.</p>	<p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People depend on various technologies in their lives; human life would be very different without technology.</p>
<b>Guided Questions</b>		
<p>* How can people communicate over a long distance using light or sound? * How does communicating over long distances help people?</p>		
<b>Catholic Identity Connections</b>		
<p>* We demonstrate our love for others through respectful communication. * Prayer is the way we communicate with God.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>W.1.7</b> <i>Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</i></p> <p><b>Mathematics</b> <b>MP</b> <i>Use appropriate tools strategically.</i> <b>M</b> <i>Order three objects by length; compare the lengths of two objects indirectly by using a third object.</i> <b>M</b> <i>Understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.</i></p>		

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<b>Connections to Other DCIs in First Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade Levels</b>
<b>K.ETS1.A, 2.ETS1.B, 4.PS4.C, 4.ETS1.A</b>

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<b>1-LS1-1 From Molecules to Organisms: Structures and Processes</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.</b></p> <p><i>Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Use materials to design a device that solves a specific problem or a solution to a specific problem.</p>	<p><b>LS1.A Structure and Function</b> * All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.</p> <p><b>LS1.D Information Processing</b> * Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs.</p>	<p><b>Structure and Function</b> * The shape and stability of structures of natural and designed objects are related to their function(s). -----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.</p>
<b>Guided Questions</b>		
<p>* How do plants and animals respond to information they receive from the environment? * How do their external structures help plants and animals survive? * What human problem could be solved by mimicking plant or animal parts?</p>		
<b>Catholic Identity Connections</b>		
<p>* God's gifts can be used by all living things daily. * God has given plants and animals the capabilities to survive.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>W.1.7</b> <i>Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</i></p>		

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<b>Connections to Other DCIs in First Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade Levels</b>
<b>K.ETS1.A; 4.LS1.A; 4.LS1.D; 4.ETS1.A</b>

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<b>1-LS1-2 From Molecules to Organisms: Structures and Processes</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.</b></p> <p><i>Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, chirping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.</p> <p>* Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Scientists look for patterns and order when making observations about the world.</p>	<p><b>LS1.B Growth and Development of Organisms</b> * Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.</p>	<p><b>Patterns</b> * Patterns in the natural and human-designed world can be observed, used to describe phenomena, and used as evidence.</p>
<b>Guided Questions</b>		
<p>* What patterns are observed that demonstrate the care of an offspring in order to help it survive?</p>		
<b>Catholic Identity Connections</b>		
<p>* God, our Heavenly Father, helps us to live happy, healthy lives. * God provides animal parents with the necessary behaviors to help their offspring survive and thrive.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b>  <b>RI.1.1</b> Ask and answer questions about key details in a text.  <b>RI.1.2</b> Identify the main topic and retell key details of a text.  <b>RI.1.10</b> With prompting and support, read informational texts appropriately complex for grade.  <b>W.1.7</b> Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</p>		

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<i>Connections to Other DCIs in First Grade</i>	
<b>NA</b>	
<i>Articulation to DCIs across Grade Levels</i>	
<b>3.LS2.D</b>	

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<b>1-LS3-1 Heredity: Inheritance and Variation of Traits</b>		
<p>Students who demonstrate understanding can:</p> <p><b>1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.</b></p> <p><i>Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include that leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.</i></p> <p><i>Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b></p> <p>Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Make observations (firsthand and from media) to construct an evidence-based account for natural phenomena.</p>	<p><b>LS3.A Inheritance of Traits</b></p> <p>* Young animals are very much, but not exactly, like their parents. Plants also are very much, but not exactly, like their parents.</p> <p><b>LS3.B Variation of Traits</b></p> <p>* Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.</p>	<p><b>Patterns</b></p> <p>* Patterns in the natural and human-designed world can be observed, used to describe phenomena, and used as evidence.</p>
Guided Questions		
<p>* How are plants and animals like and different from their parents?</p>		
Catholic Identity Connections		
<p>* Students demonstrate an understanding that God is the creator of all things.</p> <p>* God made all people in His likeness.</p>		
Archdiocese of Louisville ELA and Mathematics Standards Connections		
<p><b>ELA Literacy</b></p> <p><b>RI.1.1</b> Ask and answer questions about key details in a text.</p> <p><b>W.1.7</b> Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).</p> <p><b>W.1.8</b> With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p><b>Mathematics</b></p> <p><b>MP.2</b> Reason abstractly and quantitatively.</p> <p><b>MP.5</b> Use appropriate tools strategically.</p> <p><b>M</b> Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>		
Connections to Other DCIs in First Grade		
NA		
Articulation to DCIs across Grade Levels		
3.LS2.A; 3.LS3.B		

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**1-ESS1-2 Earth's Place in the Universe**

Students who demonstrate understanding can:  
**1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.**  
*Clarification Statement: Emphasis is on relative comparisons of the amount of daylight in the winter to the amount in the spring or fall.*  
*Assessment Boundary: Assessment is limited to relative amounts of daylight, not quantifying the hours or time of daylight.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b>            Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Make observations (firsthand or from media) to collect data that can be used to make comparisons.</p>	<p><b>ESS1.B Earth and the Solar System</b>            * Seasonal patterns of sunrise and sunset can be observed, described, and predicted.</p>	<p><b>Patterns</b>            * Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.</p>

**Guided Questions**

\* How does the relative length of the day change compared to the amount of daylight at different times of the year?

**Catholic Identity Connections**

\* Signs of God's love are abundant in the universe.  
 \* God created the world in a way that different times of the year experience different amounts of daylight and dark.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**W.1.7** *Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).*  
**W.1.8** *With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.*

**Mathematics**  
**MP** *Reason abstractly and quantitatively.*  
**MP** *Model with mathematics.*  
**MP** *Use appropriate tools strategically.*  
**N&O** *Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and composing, with unknowns in all positions (e.g., by using objects, drawings, and equations to represent the problem).*  
**DA&P** *Organize, represent, and interpret data with up to three categories using charts, tables, pictographs, and bar graphs.*  
**DA&P** *Answer questions about the total number of data points, know how many in each category, and how many more or less in one category than in another.*

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<b>Connections to Other DCIs in First Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade Levels</b>
<b>5.PS2.B; 5.ESS1.B</b>

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**First Grade Standards**

**1-PS4 Waves and Their Applications in Technologies for Information Transfer**

- 1-PS4-1** Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.
- 1-PS4-2** Make observations to construct an evidence-based account that objects can be seen only when illuminated.
- 1-PS4-3** Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.
- 1-PS4-4** Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.

**1-LS1 From Molecules to Organisms: Structures and Processes**

- 1-LS1-1** Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- 1-LS1-2** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

**1-LS3 Heredity: Inheritance and Variation of Traits**

- 1-LS3-1** Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

**1-ESS1 Earth's Place in the Universe**

- 1-ESS1-1** Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 1-ESS1-2** Make observations at different times of year to relate the amount of daylight to the time of year.

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<b>K-2-ETS1 Engineering Design</b>		
<p>Students who demonstrate understanding can:</p> <p><b>K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</b></p> <p><b>K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</b></p> <p><b>K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</b></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in K-2 builds on prior experiences and progresses to simple descriptive questions.</p> <ul style="list-style-type: none"> <li>* Ask questions based on observations to find more information about the natural and/or designed world.</li> <li>* Define a simple problem that can be solved through the development of a new or improved object or tool.</li> </ul> <p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, or storyboard) that represent concrete events or design solutions.</p> <ul style="list-style-type: none"> <li>* Develop a simple model based on evidence to represent a proposed object or tool.</li> </ul> <p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <ul style="list-style-type: none"> <li>* Analyze data from tests of an object or tool to determine if it works as intended.</li> </ul>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b></p> <ul style="list-style-type: none"> <li>* A situation that people want to change or create can be approached as a problem to be solved through engineering.</li> <li>* Asking questions, making observations, and gathering information are helpful in thinking about problems.</li> <li>* Before beginning to design a solution, it is important to clearly understand the problem.</li> </ul> <p><b>ETS1.B Developing Possible Solutions</b></p> <ul style="list-style-type: none"> <li>* Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.</li> </ul> <p><b>ETS1.C Optimizing the Design Solution</b></p> <ul style="list-style-type: none"> <li>* Because there is always more than one possible solution to a problem, it is useful to compare and test design.</li> </ul>	<p><b>Structure and Function</b></p> <ul style="list-style-type: none"> <li>* The shape and stability of structures of natural and designed objects are related to their function(s).</li> </ul>

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**Guided Questions**

\* How can creativity and curiosity help people to solve problems?

**Catholic Identity Connections**

\* God has given each of us talents that allow us to make the world a better place.

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<b>2-PS1-1 Matter and Its Interactions</b>		
<p>Students who demonstrate understanding can:</p> <p><b>2-PS1-1 Plan and conduct investigations to describe and classify different kinds of materials by their observable properties.</b></p> <p><i>Clarification Statement: Observations could include color, texture, hardness, and flexibility. Patterns could include the similar properties that different materials share.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Planning and Carrying Out Investigations</b></p> <p>Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.</p>	<p><b>PS1.A Structure and Properties of Matter</b></p> <p>* Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties.</p>	<p><b>Patterns</b></p> <p>* Patterns in the natural and human-designed world can be observed.</p>
<b>Guided Questions</b>		
<p>* How can materials be described by their observable properties?</p> <p>* How can materials be classified by the pattern of the properties?</p>		
<b>Catholic Identity Connections</b>		
<p>* God is the creator of all things.</p> <p>* The value of things and people comes from being created by God.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b></p> <p><b>W.2.7</b> <i>Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).</i></p> <p><b>W.2.8</b> <i>Recall information from experiences or gather information from provided sources to answer a question.</i></p> <p><b>Mathematics</b></p> <p><b>MP</b> <i>Model with mathematics.</i></p> <p><b>DA&amp;P</b> <i>Collect, record, and interpret data (up to four categories) with bar graphs, pictographs, and tally charts.</i></p>		
<b>Connections to Other DCIs in Second Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade Levels</b>		
<b>5.PS1.A</b>		

**Archdiocese of Louisville  
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**2-PS1-2 Matter and Its Interactions**

Students who demonstrate understanding can:

**2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.**

*Clarification Statement: Examples of properties could include strength, flexibility, hardness, texture, and absorbency.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <p>* Analyze data from tests of an object or tool to determine if it works as intended.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * Different properties are suited to different purposes.</p>	<p><b>Cause and Effect</b> * Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influences of Engineering, Technology, and Science on Society and the Natural World</b> * Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.</p>

**Guided Questions**

- \* What properties could be used in determining how suitable an object is for a given purpose?

**Catholic Identity Connections**

- \* Students will explore man-made products using natural materials created by God.
- \* God gives us the freedom to make choices.

**Archdiocese of Louisville  
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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.2.8** *Describe how reasons support specific points the author makes in a text.*
- W.2.7** *Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).*
- W.2.8** *Recall information from experiences or gather information from provided sources to answer a question.*
- SL.1.1** *Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- MP** *Use appropriate tools strategically.*
- DA&P** *Collect, record, and interpret data (up to four categories) with bar graphs, pictographs, and tally charts.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**S.PS1.A**

**Archdiocese of Louisville  
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**2-PS1-3 Matter and Its Interactions**

Students who demonstrate understanding can:

**2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.**

*Clarification Statement: Examples of pieces could include building blocks or other assorted small objects.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * Different properties are suited to different purposes. * A great variety of objects can be built from a small set of pieces.</p>	<p><b>Energy and Matter</b> * Objects may break into smaller pieces and be put together into larger pieces, or change shapes.</p>

**Guided Questions**

- \* How can a set of materials be reassembled to make a new object?
- \* How are the characteristics of two objects built from the same materials alike and different?

**Catholic Identity Connections**

- \* People use the talents given by God to create objects for the betterment of the world around them.
- \* When we reuse items and create new ones with recycled materials, we show our care for our environment.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- W.1.7** *Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).*
- W.1.8** *With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.*

**Connections to Other DCIs in Second Grade**

NA

**Articulation to DCIs across Grade Levels**

4.ESS2.A; 5.PS1.A; 5.LS2.A

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**2-PS1-4 Matter and Its Interactions**

Students who demonstrate understanding can:

**2-PS1-4 Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.**

*Clarification Statement: Examples of reversible changes could include materials such as water and butter at different temperatures. Examples of irreversible changes could include cooking an egg or freezing a plant leaf.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in K-2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world.</p> <ul style="list-style-type: none"> <li>* Construct an argument with evidence to support a claim.</li> </ul> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena</b></p> <ul style="list-style-type: none"> <li>* Scientists search for cause and effect relationships to explain natural events.</li> </ul>	<p><b>PS1.B Chemical Reactions</b></p> <ul style="list-style-type: none"> <li>* Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.</li> </ul>	<p><b>Cause and Effect</b></p> <ul style="list-style-type: none"> <li>* Events have causes that generate observable patterns.</li> </ul>

**Guided Questions**

- \* How do heating and cooling change the characteristics of materials?
- \* What are some examples of changes that can be reversed by heating and cooling?
- \* What are some examples of changes that cannot be reversed by heating and cooling?

**Catholic Identity Connections**

- \* Some of the changes we make to the world around us can be reversed and some can't.
- \* We have a responsibility to respect all of God's creation.
- \* God gives us the freedom to make choices.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- RI.2.3** Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
- RI.2.8** Describe how reasons support specific points the author makes in a text.
- W.2.1** Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section).

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Science**

<b>Connections to Other DCIs in Second Grade</b>
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<b>NA</b>
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<b>Articulation to DCIs across Grade Levels</b>
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<b>5.PS1.B</b>
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**Archdiocese of Louisville  
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Science**

**2-LS2-1 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow.**

*Assessment Boundary: Assessment is limited to testing one variable at a time.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.</p>	<p><b>LS2.A Interdependent Relationships in Ecosystems</b> * Plants depend on water and light to grow.</p>	<p><b>Cause and Effect</b> * Events have causes that generate observable patterns.</p>

**Guided Questions**

- \* What do plants need to survive and thrive?
- \* How do light and darkness affect the growth of a plant?
- \* How does withholding water affect the growth of a plant?

**Catholic Identity Connections**

- \* Plant growth is dependent on God's gifts of light and water.
- \* Students understand God created what our world needs.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.2.7** *Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).*

**W.2.8** *Recall information from experiences or gather information from provided sources to answer a question.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**MP** *Use appropriate tools strategically.*

**DA&P** *Collect, record, and interpret data (up to four categories) with bar graphs, pictographs, and tally charts.*

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<b>Connections to Other DCIs in Second Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade Levels</b>
<b>K.LS1.C; K.ESS3.A; 5.LS1.C</b>

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Science**

**2-LS2-2 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, or storyboard) that represent concrete events or design solutions.</p> <p>* Develop a simple model based on evidence to represent a proposed object or tool.</p>	<p><b>LS2.A Interdependent Relationships in Ecosystems</b> * Plants depend on animals for pollination or to move their seeds around.</p> <p><b>ETS1.B Developing Possible Solutions</b> * Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. <i>(secondary emphasis)</i></p>	<p><b>Structure and Function</b> * The shape and stability of structures of natural and designed objects are related to their functions.</p>

**Guided Questions**

- \* How do animals help disperse seeds or pollinate plants?
- \* How do models help us learn about the function of a structure?

**Catholic Identity Connections**

- \* Animals are created in ways that allow them to help plants.
- \* God made plants and animals dependent on each other for regrowth.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.2.5** *Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.*

**Mathematics**

**MP** *Model with mathematics.*

**DA&P** *Collect, record, and interpret data (up to four categories) with bar graphs, pictographs, and tally charts.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**K.ETS1.A; 5.LS1.C; 5.LS2.A**

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Science**

**2-LS4-1 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.**

*Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.*

*Assessment Boundary: Assessment does not include specific animal and plant names in specific habitats.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.</p> <p>* Make observations (firsthand or from media) to collect data which can be used to make comparisons.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Scientists look for patterns and order when making observations about the world.</p>	<p><b>LS4.D Biodiversity and Humans</b> * There are many different kinds of living things in any area, and they exist in different places on land and in water.</p>	

**Guided Questions**

- \* How do habitats differ to support different types of plants and animals?
- \* What types of living things are found in different habitats?

**Catholic Identity Connections**

- \* Diversity is found in the plants and animals that God created.
- \* The various habitats created by God are suited to the plants and animals found in them.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.2.7** *Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).*

**W.2.8** *Recall information from experiences or gather information from provided sources to answer a question.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**DA&P** *Collect, record, and interpret data (up to four categories) with bar graphs, pictographs, and tally charts.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**3.LS4.C; 3.LS4.D; 5.LS2.A**

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**2-ESS1-1 Earth's Place in the Universe**

Students who demonstrate understanding can:

**2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.**

*Clarification Statement: Examples of events and timescales could include volcanic explosions and earthquakes, which happen quickly, and erosion of rocks, which occurs slowly.*

*Assessment Boundary: Assessment does not include quantitative measurements of timescales.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Make observations from several sources to construct an evidence-based account for natural phenomena.</p>	<p><b>ESS1.C The History of Planet Earth</b> * Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.</p>	<p><b>Stability and Change</b> * Things may change slowly or rapidly.</p>

**Guided Questions**

- \* How can Earth events change the Earth's surface?
- \* What are some changes that happen quickly?
- \* What are some changes that happen slowly?
- \* What are effects of Earth events?

**Catholic Identity Connections**

- \* Students, with guidance and support, will find comfort with prayer and God's presence.
- \* Natural Earth events happen that are out of our control and so are placed in the hands of God.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.2.1** *Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.*
- RI.2.3** *Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.*
- W.2.6** *With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.*
- W.2.7** *Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).*
- W.2.8** *Recall information from experiences or gather information from provided sources to answer a question.*
- SL.2.2** *Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**3.LS2.C; 4.ESS1.C; 4.ESS2.A**

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**2-ESS2-1 Earth's Systems**

Students who demonstrate understanding can:

**2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.**

*Clarification Statement: Examples of solutions could include different designs of dikes and windbreaks to hold back wind and water, and different designs for using shrubs, grass, and trees to hold back the land.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.</p> <p>* Compare multiple solutions to a problem.</p>	<p><b>ESS2.A Earth Materials and Systems</b> * Wind and water can change the shape of the land.</p> <p><b>ETS1.C Optimizing the Design Solution</b> * Because there is always more than one possible solution to a problem, it is useful to compare and test designs. <i>(secondary emphasis)</i></p>	<p><b>Stability and Change</b> * Things may change slowly or rapidly.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influences of Engineering, Technology, and Science on Society and the Natural World</b> * Developing and using technology has impacts on the natural world.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Addresses Questions About the Natural and Material World</b> * Scientists study the natural and material world.</p>

**Guided Questions**

\* How can changes caused by wind or water in the shape of the land be slowed or prevented?

**Catholic Identity Connections**

- \* God's world is ever changing.
- \* God's presence is everywhere.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.2.3** *Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.*

**RI.2.9** *Compare and contrast the most important points presented by two texts on the same topic.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**MP** *Use appropriate tools strategically.*

**N&O** *Use addition and subtraction within 100 to solve one- and two-digit word problems involving situations of adding to, taking from, and comparing, with unknowns in all positions.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**K.ETS1.A; 4.ESS2.A; 4.ETS1.A; 4.ETS1.B; 4.ETS1.C; 5.ESS2.A**

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**2-ESS2-2 Earth's Systems**

Students who demonstrate understanding can:

**2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.**

*Assessment Boundary: Assessment does not include quantitative scaling in models.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, or storyboard) that represent concrete events or design solutions.</p> <p>* Develop a model to represent patterns in the natural world.</p>	<p><b>ESS2.B Plate Tectonics and Large-Scale System Interactions</b> * Maps show where things are located. One can map the shapes and kinds of land and water in any area.</p>	<p><b>Patterns</b> * Patterns in the natural world can be observed.</p>

**Guided Questions**

\* What is the relationship between shapes and kinds of land and bodies of water within a given area?

**Catholic Identity Connections**

\* Various kinds of land and bodies of water were created by God.  
\* All creation is a gift from God.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.2.5** *Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**Connections to Other DCIs in Second Grade**

**NA**

**Articulation to DCIs across Grade Levels**

**4.ESS2.B; 5.ESS2.C**

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**Second Grade Standards**

**2-PS1 Matter and Its Interactions**

- 2-PS1-1** Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- 2-PS1-2** Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- 2-PS1-3** Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.
- 2-PS1-4** Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

**2-LS2 Ecosystems: Interactions, Energy, and Dynamics**

- 2-LS2-1** Plan and conduct an investigation to determine if plants need sunlight and water to grow.
- 2-LS2-2** Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

**2-LS4 Biological Evolution: Unity and Diversity**

- 2-LS4-1** Make observations of plants and animals to compare the diversity of life in different habitats.

**2-ESS1 Earth's Place in the Universe**

- 2-ESS1-1** Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

**2-ESS2 Earth's Systems**

- 2-ESS2-1** Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
- 2-ESS2-2** Develop a model to represent the shapes and kinds of land and bodies of water in an area.
- 2-ESS2-3** Obtain information to identify where water is found on Earth and that it can be solid or liquid.

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**K-2-ETS1 Engineering Design**

Students who demonstrate understanding can:

- K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.**
  
- K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.**
  
- K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.**

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in K-2 builds on prior experiences and progresses to simple descriptive questions.</p> <ul style="list-style-type: none"> <li>* Ask questions based on observations to find more information about the natural and/or designed world.</li> <li>* Define a simple problem that can be solved through the development of a new or improved object or tool.</li> </ul> <p><b>Developing and Using Models</b> Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, dramatization, or storyboard) that represent concrete events or design solutions.</p> <ul style="list-style-type: none"> <li>* Develop a simple model based on evidence to represent a proposed object or tool.</li> </ul> <p><b>Analyzing and Interpreting Data</b> Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.</p> <ul style="list-style-type: none"> <li>* Analyze data from tests of an object or tool to determine if it works as intended.</li> </ul>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b></p> <ul style="list-style-type: none"> <li>* A situation that people want to change or create can be approached as a problem to be solved through engineering.</li> <li>* Asking questions, making observations, and gathering information are helpful in thinking about problems.</li> <li>* Before beginning to design a solution, it is important to clearly understand the problem.</li> </ul> <p><b>ETS1.B Developing Possible Solutions</b></p> <ul style="list-style-type: none"> <li>* Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.</li> </ul> <p><b>ETS1.C Optimizing the Design Solution</b></p> <ul style="list-style-type: none"> <li>* Because there is always more than one possible solution to a problem, it is useful to compare and test designs.</li> </ul>	<p><b>Structure and Function</b></p> <ul style="list-style-type: none"> <li>* The shape and stability of structures of natural and designed objects are related to their function(s).</li> </ul>
<b>Guided Questions</b>		
* How can creativity and curiosity help people to solve problems?		
<b>Catholic Identity Connections</b>		
* God has given each of us talents that allow us to make the world a better place.		

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**3-PS2-1 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.**

*Clarification Statement: Examples could include that an unbalanced force on one side of a ball can make it start moving; and, balanced forces pushing on a box from both sides will not produce any motion at all.*

*Assessment Boundary: Assessment is limited to gravity being addressed as a force that pulls objects down.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Investigations Use a Variety of Methods</b> * Science investigations use a variety of methods, tools, and techniques.</p>	<p><b>PS2.A Forces and Motion</b> * Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion. <i>(Boundary: Qualitative and conceptual, but not quantitative addition of forces, are used at this level.)</i></p> <p><b>PS2.B Types of Interactions</b> * Objects in contact exert forces on each other.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified.</p>

**Guided Questions**

- \* How do you explain and investigate the effect of balanced and unbalanced forces on an object?
- \* Why don't balanced forces pushing on an object result in any motion?

**Catholic Identity Connections**

- \* God calls each of us to constantly move toward a life of grace.
- \* All creation is a system of interrelated parts.

**Archdiocese of Louisville  
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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- W.3.7** *Conduct short research projects that build knowledge about a topic.*
- W.3.8** *Recall information from experiences or legally and ethically gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Use appropriate tools strategically.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**K.PS2.A; K.PS2.B; K.PS3.C; 5.PS2.B; MS.ESS1.B; MS.ESS2.C**

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**3-PS2-2 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.**

*Clarification Statement: Examples of motion with a predictable pattern could include a child swinging in a swing, a ball rolling back and forth in a bowl, and two children on a see-saw.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Knowledge is Based on Empirical Evidence</b> * Science findings are based on recognizing patterns.</p>	<p><b>PS2.A Forces and Motion</b> * The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. <i>(Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.)</i></p>	<p><b>Patterns</b> * Patterns of change can be used to make predictions.</p>
<b>Guided Questions</b>		
<p>* How do you explain and investigate the effect of an outside force on an object's pattern of motion? * How do you predict the future motion of an object based on past patterns of motion?</p>		
<b>Catholic Identity Connections</b>		
<p>* God created a world in which predictable patterns can be observed all around us. * We live in a world of harmony and balance.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.3.7** *Conduct short research projects that build knowledge about a topic.*

**W.3.8** *Recall information from experiences or legally and ethically gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**1.ESS1.A; 4.PS2.2; MS.PS2.A; MS.ESS1.B**

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**3-PS2-3 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**3-PS2-3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.**

*Clarification Statement: Examples of an electric force could include the force on hair from an electrically charged balloon and the electrical forces between a charged rod and pieces of paper; examples of a magnetic force could include the force between two permanent magnets, the force between an electromagnet and steel paperclips, and the force exerted by one magnet versus the force exerted by two magnets. Examples of cause and effect relationships could include how the distance between objects affects strength of the force and how the orientation of magnets affects the direction of the magnetic force.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Ask questions that can be investigated based on patterns such as cause and effect relationships.</p>	<p><b>PS2.B Types of Interactions</b> * Electric forces, and magnetic forces between a pair of objects, do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified, tested, and used to explain change.</p>

**Guided Questions**

- \* How do variables affect the relationship between electric and magnetic forces?
- \* How can you determine the cause and effect relationships of electric and magnetic interactions between two objects not in contact with each other?

**Catholic Identity Connections**

- \* Even when we are not in direct contact with another, our actions can still have an impact.
- \* All creation is interdependent.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- RI.3.3** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

**Connections to Other DCIs in Third Grade**

NA

**Articulation to DCIs across Grade-Levels**

**MS.PS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**3-PS2-4 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.**

*Clarification Statement: Examples of problems could include constructing a latch to keep a door shut and creating a device to keep two moving objects from touching each other.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Define a simple problem that can be solved through the development of a new or improved object or tool.</p>	<p><b>PS2.B Types of Interactions</b> * Electric, and magnetic forces between a pair of objects, do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other.</p>	<p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Scientific discoveries about the natural world can often lead to new and improved technologies, which are developed through the engineering design process.</p>

**Guided Questions**

- \* How do you create a simple design to explain and apply understanding of magnetic forces?
- \* How can objects not in contact with each other still demonstrate the effects of magnetic force?

**Catholic Identity Connections**

- \* God has given us the capabilities to examine and consider problems from multiple perspectives.
- \* God gives us the freedom to make choices.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**K.ETS1.A; 4.ETS1.A; MS.PS2.B**

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**3-LS1-1 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.**

*Clarification Statement: Changes organisms go through during their life form a pattern.*

*Assessment Boundary: Assessment of plant life cycles is limited to those of flowering plants. Assessment does not include details of human reproduction.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.</p> <p>* Develop models to describe phenomena.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge is Based on Empirical Evidence</b> * Science findings are based on recognizing patterns.</p>	<p><b>LS1.B Growth and Development of Organisms</b> * Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.</p>	<p><b>Patterns</b> * Patterns of change can be used to make predictions.</p>
<b>Guided Questions</b>		
<p>* How does the life cycle of a plant or animal support the continuation of the species?</p>		
<b>Catholic Identity Connections</b>		
<p>* We are interconnected with all creation. * Without birth, growth, and reproduction, plants and animals created by God would cease to exist.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.7** *Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).*
- SL.3.5** *Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.*

**Mathematics**

- MP** *Model with mathematics.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**MS.LS1.B**

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**3-LS2-1 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**3-LS2-1 Construct an argument that some animals form groups to help members survive.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.</p> <p>* Construct an argument with evidence, data, and/or a model.</p>	<p><b>LS2.D Social Interactions and Group Behavior</b> * Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.</p>
<b>Guided Questions</b>		
<p>* What are the factors that enable groups to survive while those alone become extinct or endangered? * How can organisms interact in groups to benefit individuals?</p>		
<b>Catholic Identity Connections</b>		
<p>* Animals, including humans, can experience positive results when they live in groups and work for the good of each other. * All creation is mutually dependent for survival.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*

**RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*

**W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*

**Mathematics**

**MP** *Model with mathematics.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**1.LS1.B; MS.LS2.A**

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**3-LS3-1 Heredity: Inheritance and Variation of Traits**

Students who demonstrate understanding can:

**3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.**

*Clarification Statement: Patterns are the similarities and differences in traits shared between offspring and their parents, or among siblings. Emphasis is on organisms other than humans.*

*Assessment Boundary: Assessment does not include genetic mechanisms of inheritance and prediction of traits. Assessment is limited to non-human examples.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.</p> <p>* Analyze and interpret data to make sense of the phenomena using logical reasoning.</p>	<p><b>LS3.A Inheritance of Traits</b> * Many characteristics of organisms are inherited from their parents.</p> <p><b>LS3.B Variation of Traits</b> * Different organisms vary in how they look and function because they have different inherited information.</p>	<p><b>Patterns</b> * Similarities and differences in patterns can be used to sort and classify natural phenomena.</p>
<b>Guided Questions</b>		
<p>* How do you organize data using graphical displays to identify and explain the idea that plants and animals have traits inherited from parents, including similarities and variances of these traits?</p>		
<b>Catholic Identity Connections</b>		
<p>* Plants and animals inherit traits from their parents, yet life is varied and sacred.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- M** *Measure using customary and linear units to nearest 1/2 or 1/4 or whole inch or whole centimeter.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**1.LS3.A; 1.LS3.B; MS.LS3.A; MS.LS3.B**

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**3-LS3-2 Heredity: Inheritance and Variation of Traits**

Students who demonstrate understanding can:

**3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.**

*Clarification Statement: Examples of the environment affecting a trait could include normally tall plants grown with insufficient water are stunted; and, a pet dog that is given too much food and little exercise may become overweight.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Use evidence (e.g., observations, patterns) to support an explanation.</p>	<p><b>LS3.A Inheritance of Traits</b> * Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment.</p> <p><b>LS3.B Variation of Traits</b> * The environment also affects the traits that an organism develops.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.</p>

**Guided Questions**

- \* What evidence can you use to explain how different environmental factors influence traits of an organism?

**Catholic Identity Connections**

- \* The growth and development of plants and animals depends on their ability to find sufficient types and amounts of the things they need.
- \* God is always present in creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- M** *Measure using customary and linear units to nearest 1/2 or 1/4 or whole inch or whole centimeter.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**1.LS3.A; 1.LS3.B; MS.LS3.A; MS.LS3.B**

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**3-LS4-1 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**3-LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.**

*Clarification Statement: Examples of data could include type, size, and distributions of fossil organisms. Examples of fossils and environments could include marine fossils found on dry land, tropical plant fossils found in Arctic areas, and fossils of extinct organisms.*

*Assessment Boundary: Assessments do not include identification of specific fossils or present plants and animals. Assessment is limited to major fossil types and relative ages.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.</p> <p>* Analyze and interpret data to make sense of phenomena using logical reasoning.</p>	<p><b>LS4.A Evidence of Common Ancestry and Diversity</b> * Some kinds of plants and animals that once lived on Earth are no longer found anywhere. * Fossils provide evidence about all types of organisms that lived long ago and also about the nature of their environments.</p>	<p><b>Scale, Proportion, and Quantity</b> * Observable phenomena exist from very short to very long time periods.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes consistent patterns in natural systems.</p>

**Guided Questions**

- \* How do you use graphic displays to describe and analyze data on fossils from long ago?
- \* How do fossil records show patterns of change over time?

**Catholic Identity Connections**

- \* God is the creator of all things.
- \* Fossils provide evidence that God created a world that continues to change over time.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- W.3.8** *Recall information from experiences or legally and ethically gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- MP** *Use appropriate tools strategically.*
- DA&P** *Build and interpret scaled graphs (pictograph, bar, line, circle), charts, and tables with several categories.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**4.ESS1.C; MS.LS2.A; MS.LS4.A; MS.ESS1.C; MS.ESS2.B**

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**3-LS4-2 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.**

*Clarification Statement: Examples of cause and effect relationships could be plants that have longer thorns than other plants may be less likely to be eaten by predators; and, animals that have better camouflage coloration than other animals may be more likely to survive and therefore more likely to leave offspring.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Use evidence (e.g., observations, patterns) to construct an explanation.</p>	<p><b>LS4.B Natural Selection</b> * Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.</p>

**Guided Questions**

- \* How does the unique design of an organism enable the survival in a specific environment?
- \* How do adaptations and characteristics provide organisms advantages for survival?

**Catholic Identity Connections**

- \* We are called to care for and respect all creation.
- \* Some plants and animals were created with characteristics that make it easier for them to survive than other plants and animals.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- DA&P** *Build and interpret scaled graphs (pictograph, bar, line, circle), charts, and tables with several categories.*
- M** *Measure using customary and linear units to nearest 1/2 or 1/4 or whole inch or whole centimeter.*

**Connections to Other DCIs in Third Grade**

**3.LS4.C**

**Articulation to DCIs across Grade-Levels**

**MS.LS2.A; MS.LS3.B; MS.LS4.B**

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**3-LS4-3 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.**

*Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.</p> <p>* Construct an argument with evidence.</p>	<p><b>LS4.C Adaptation</b> * For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.</p>
<b>Guided Questions</b>		
<p>* How do you explain the idea that an organism may or may not survive in a given environment, depending on the needs of the organism and characteristics of the environment? * How do the parts of living systems work together to sustain life?</p>		
<b>Catholic Identity Connections</b>		
<p>* God is the creator of all things. * Various plants and animals are more or less suited to the diverse habitats that God created. * We live in a world of balance.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*
- DA&P** *Build and interpret scaled graphs (pictograph, bar, line, circle), charts, and tables with several categories.*

**Connections to Other DCIs in Third Grade**

**3.ESS2.D**

**Articulation to DCIs across Grade-Levels**

**K.ESS3.A; 3.LS2.A; 2.LS4.D; MS.LS2.A; MS.LS4.B; MS.LS4.C; MS.ESS1.C**

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**3-LS4-4 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there change.**

*Clarification Statement: Examples of environmental changes could include changes in land characteristics, water distribution, temperature, food, and other organisms.*

*Assessment Boundary: Assessment is limited to a single environmental change. Assessment does not include the greenhouse effect or climate change.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.</p> <p>* Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem.</p>	<p><b>LS4.D Biodiversity and Humans</b> * Populations live in a variety of habitats, and change in those habitats affects the organisms living there.</p> <p><b>LS2.C Ecosystem Dynamics, Functioning, and Resilience</b> * When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. <i>(secondary emphasis)</i></p>	<p><b>Systems and System Models</b> * A system can be described in terms of its components and their interactions.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Engineering, Technology, and Science on Society and the Natural World</b> * Knowledge of relevant scientific concepts and research findings is important in engineering.</p>

**Guided Questions**

- \* Why do changes to a given environment impact the plants and animals living there?
- \* What can humans do about the changes they cause to the environment?

**Catholic Identity Connections**

- \* God calls each of us to consider the well-being of other people, as well as plants, animals, and the environment when making choices.
- \* Choices must be made for the good of God's creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*
- RI.3.2** *Determine the main idea of a text; recount the key details and explain how they support the main idea.*
- RI.3.3** *Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*
- W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*
- W.3.2** *Write informative/explanatory texts to examine a topic and convey ideas and information clearly.*
- SL.3.4** *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

**Mathematics**

- MP** *Reason abstractly and quantitatively.*
- MP** *Model with mathematics.*

**Connections to Other DCIs in Third Grade**

**3.ESS3.B**

**Articulation to DCIs across Grade-Levels**

**K.ESS3.A; K.ETS1.A; 2.LS2.A; 2.LS4.D; 4.ESS3.B; 4.ETS1.A; MS.LS2.A; MS.LS2.C; MS.LS4.B; MS.LS4.C; MS.ESS1.C; MS.ESS3.C**

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**3-ESS2-1 Earth's Systems**

Students who demonstrate understanding can:

**3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.**

*Clarification Statement: Examples of data could include average temperature, precipitation, wind direction, and understanding of the water cycle.*

*Assessment Boundary: Assessment does not include climate change.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.</p> <p>* Represent data in tables and various graphical displays (bar graphs and pictographs) to reveal patterns that indicate relationships.</p>	<p><b>ESS2.D Weather and Climate</b> * Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next.</p>	<p><b>Patterns</b> * Patterns of change can be used to make predictions.</p>

**Guided Questions**

- \* How do you use graphical displays to organize weather data by season in a particular area?
- \* How can weather cycles and patterns be used to understand history or predict future events?

**Catholic Identity Connections**

- \* God created a world in which weather conditions vary by season and location.
- \* God's presence is everywhere.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**Mathematics**

- MP** Reason abstractly and quantitatively.
- MP** Model with mathematics.
- M** Measure and estimate liquid volume using customary and metric capacity units (cups, pints, quarts, gallons, milliliters, liters).
- M** Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.
- DA&P** Build and interpret scaled graphs (pictograph, bar, line, circle), charts, and tables with several categories.

**Connections to Other DCIs in Third Grade**

NA

**Articulation to DCIs across Grade-Levels**

**K.ESS2.D; 4.ESS2.A; 5.ESS2.A; MS.ESS2.C; MS.ESS2.D**

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**3-ESS2-2 Earth's Systems**

Students who demonstrate understanding can:

**3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 3-5 builds on K-2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.</p> <p>* Obtain and combine information from books and other reliable media to explain phenomena.</p>	<p><b>ESS2.D Weather and Climate</b> * Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years.</p>	<p><b>Patterns</b> * Patterns of change can be used to make predictions.</p>
<b>Guided Questions</b>		
<p>* How can you use reliable media, tools, and technology to gather information and describe climate in different regions of the world?</p>		
<b>Catholic Identity Connections</b>		
<p>* The climate in different regions of the world that God created for us varies, and the climate within a given region also varies. * God gives us the freedom to make choices.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.3.1** *Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.*

**RI.3.2** *Compare and contrast the most important points and key details presented in two texts on the same topic.*

**W.3.8** *Recall information from experiences or legally and ethically gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**MS.ESS2.C; MS.ESS2.D**

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**3-ESS3-1 Earth and Human Activity**

Students who demonstrate understanding can:

**3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.**

*Clarification Statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding, wind resistant roofs, and lightning rods.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.</p> <p>* Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem.</p>	<p><b>ESS3.B Natural Hazards</b> * A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified, tested, and used to explain change.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones).</p> <p style="text-align: center;">-----</p> <p><b>Science Is a Human Endeavor</b> * Science affects everyday life.</p>

**Guided Questions**

\* Given a solution to a problem caused by a weather-related hazard, how can you support or contradict the merit of the solution?

**Catholic Identity Connections**

- \* By using their God-given talents, people can design solutions that reduce the impact of weather-related hazards.
- \* We have a responsibility to respect all of God's creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.3.1** *Write opinion pieces on topics or texts, supporting a point of view with reasons.*

**W.3.7** *Conduct short research projects that build knowledge about a topic.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**Connections to Other DCIs in Third Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**K.ESS3.B; K.ETS1.A; 4.ESS3.B; 4.ETS1.A; MS.ESS3.B**

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**Third Grade Standards**

**3-PS2 Motion and Stability: Forces and Interactions**

- 3-PS2-1** Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.
- 3-PS2-2** Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.
- 3-PS2-3** Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.
- 3-PS2-4** Define a simple design problem that can be solved by applying scientific ideas about magnets.

**3-LS1 From Molecules to Organisms: Structures and Processes**

- 3-LS1-1** Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

**3-LS2 Ecosystems: Interactions, Energy, and Dynamics**

- 3-LS2-1** Construct an argument that some animals form groups that help members survive.

**3-LS3 Heredity: Inheritance and Variation of Traits**

- 3-LS3-1** Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- 3-LS3-2** Use evidence to support the explanation that traits can be influenced by the environment.

**3-LS4 Biological Evolution: Unity and Diversity**

- 3-LS4-1** Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.
- 3-LS4-2** Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.
- 3-LS4-3** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
- 3-LS4-4** Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there change.

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**3-ESS2 Earth's Systems**

**3-ESS2-1** Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

**3-ESS2-2** Obtain and combine information to describe climates in different regions of the world.

**3-ESS3 Earth and Human Activity**

**3-ESS3-1** Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

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**3-5-ETS1 Engineering Design**

Students who demonstrate understanding can:

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for successes and constraints on materials, time, or cost.**
- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.**
- 3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.**

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost.</p> <p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to save as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.</p> <p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.</p> <p><b>ETS1.B Developing Possible Solutions</b> * Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. * At whatever stage, communicating with peers about proposed solutions to an important part of the design process, and shared ideas can lead to improved designs. * Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.</p> <p><b>ETS1.C Optimizing the Design Solution</b> * Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.</p>	<p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People's needs and wants change over time, as do their demands for new and improved technologies. * Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.</p>

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**Guided Questions**

- \* How have engineers developed new products and technologies to meet the ever-changing needs and wants of people?
- \* How have the needs and wants of people changed over time?
- \* How can we distinguish between our wants and our needs?
- \* Why is it important to consider multiple solutions before determining the best possible solution for a given problem?

**Catholic Identity Connections**

- \* God has given different people different gifts and talents which allow some to design solutions to problems that exist in the world.
- \* God has given us the mental capacity to consider solutions from various angles to determine which best meets the criteria and constraints of the problem.

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<b>4-PS3-1 Energy</b>		
Students who demonstrate understanding can:		
<b>4-PS3-1 Use evidence to construct an explanation relating the speed of an object to the energy of that object.</b>		
<i>Assessment Boundary: Assessment does not include quantitative measures of changes in the speed of an object or on any precise or quantitative definition of energy.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.  * Use evidence (e.g., measurements, observations, patterns) to construct an explanation.	<b>PS3.A Definitions of Energy</b> * The faster a given object is moving, the more energy it possesses.	<b>Energy and Matter</b> * Energy can be transferred in various ways and between objects.
<b>Guided Questions</b>		
* How is the speed of an object related to the energy of that object?		
<b>Catholic Identity Connections</b>		
* All creation is a system of interrelated parts. * We live in a world of balance and harmony.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>RI.4.1</b> <i>Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</i> <b>RI.4.3</b> <i>Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.</i> <b>RI.4.9</b> <i>Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</i> <b>W.4.2</b> <i>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</i> <b>W.4.8</b> <i>Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes, categorize information, and provide a list of sources.</i> <b>W.4.9</b> <i>Draw evidence from literary or informational texts to support analysis, reflection, and research.</i>		
<b>Connections to Other DCIs in Fourth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>MS.PS3.A</b>		

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<b>4-PS3-2 Energy</b>		
Students who demonstrate understanding can: <b>4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.</b> <i>Assessment Boundary: Assessment does not include quantitative measurements of energy.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Make observations to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.</p>	<p><b>PS3.A Definitions of Energy</b> * Energy can be moved from place to place by moving objects or through sound, light, or electric currents.</p> <p><b>PS3.B Conservation of Energy and Energy Transfer</b> * Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result, the air gets heated and sound is produced. * Light also transfers energy from place to place. * Energy can also be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light. The currents may have been produced to begin with by transforming the energy of motion into electrical energy.</p>	<p><b>Energy and Matter</b> * Energy can be transferred in various ways and between objects.</p>
<b>Guided Questions</b>		
* Using an investigation plan, how can you describe and provide evidence to support that energy can be transferred from place to place by sound, light, heat, and electrical currents?		
<b>Catholic Identity Connections</b>		
<p>* God has given us our senses, allowing us to see, hear, and feel the transfer of energy.</p> <p>* We are called to be totally present to the world around us.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>Connections to Other DCIs in Fourth Grade</b>		
NA		
<b>Articulation to DCIs across Grade-Levels</b>		
MS.PS2.B; MS.PS3.A; MS.PS3.B; MS.PS4.B		

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<b>4-PS3-3 Energy</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-PS3-3 Ask questions and predict outcomes about the changes in energy that occur when objects collide.</b></p> <p><i>Clarification Statement: Emphasis is on the change in the energy due to the change in speed, not on the forces, as objects interact.</i></p> <p><i>Assessment Boundary: Assessment does not include quantitative measurements of energy.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b></p> <p>Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Ask questions that can be investigated and predict reasonable outcomes based on patterns such as cause and effect relationships.</p>	<p><b>PS3.A Definitions of Energy</b></p> <p>* Energy can be moved from place to place by moving objects or through sound, light, or electric currents.</p> <p><b>PS3.B Conservation of Energy and Energy Transfer</b></p> <p>* Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result, the air gets heated and sound is produced.</p> <p><b>PS3.C Relationship Between Energy and Forces</b></p> <p>* When objects collide, the contact forces transfer energy so as to change the objects' motions.</p>	<p><b>Energy and Matter</b></p> <p>* Energy can be transferred in various ways and between objects.</p>
<b>Guided Questions</b>		
<p>* How is energy transferred when objects collide?</p> <p>* What predictions can you make about the changes in energy when two objects collide?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has given us the ability to reason and predict the outcome when objects collide.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.4.7** *Conduct short research projects that build knowledge through investigation of different aspects of a topic.*

**W.4.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and organize information, and provide a list of sources.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**K.PS2.B; 3.PS2.A; MS.PS2.A; MS.PS2.B; MS.PS3.A; MS.PS3.B; MS.PS3.C**

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<b>4-PS3-4 Energy</b>		
Students who demonstrate understanding can:		
<b>4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.</b>		
<i>Clarification Statement: Examples of devices could include electric circuits that convert electrical energy into motion energy of a vehicle, light, or sound; and a passive solar heater that converts light into heat. Examples of constraints could include the materials, cost, or time to design the device.</i>		
<i>Assessment Boundary: Devices should be limited to those that convert motion energy to electric energy or use stored energy to cause motion or produce light or sound.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Apply scientific ideas to solve design problems.</p>	<p><b>PS3.B Conservation of Energy and Energy Transfer</b> * Energy can be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light. The currents may have been produced to begin with by transforming the energy of motion into electrical energy.</p> <p><b>PS3.D Energy in Chemical Processes and Everyday Life</b> * The expression "produce energy" typically refers to the conversion of stored energy into a desired form for practical use.</p> <p><b>ETS1.A Defining Engineering Problems</b> * Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. <i>(secondary emphasis)</i></p>	<p><b>Energy and Matter</b> * Energy can be transferred in various ways and between objects.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * Engineers improve existing technologies or develop new ones.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Is a Human Endeavor</b> * Most scientists and engineers work in teams. * Science affects everyday life.</p>
<b>Guided Questions</b>		
<p>* How would you design, analyze, and test devices that convert energy from one form to another?</p> <p>* What is required of a device to convert energy from one form to another?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has given us the inquisitiveness and persistence necessary to work with others to design an effective solution to a problem.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.4.7** *Conduct short research projects that build knowledge through investigation of different aspects of a topic.*

**W.4.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.*

**Mathematics**

**NO** *Apply problem-solving skills in multi-step word problems, including problems in which remainders must be interpreted, using the four operations.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**K.ETS1.A; 2.ETS1.B; 5.PS3.D; 5.LS1.C; MS.PS3.A; MS.PS3.B; MS.ETS1.B; MS.ETS1.C**

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**4-PS4-1 Waves and Their Applications in Technologies for Information Transfer**

Students who demonstrate understanding can:

**4-PS4-1 Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.**

*Clarification Statement: Examples of models could include diagrams, analogies, and physical models using wire to illustrate wavelength and amplitude of waves.*

*Assessment Boundary: Assessment does not include interference effects, electromagnetic waves, non-periodic waves, or qualitative models of amplitude and wavelength.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.</p> <p>* Develop a model using an analogy, example, or abstract representation to describe a scientific principle.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science findings are based on recognizing patterns.</p>	<p><b>PS4.A Wave Properties</b> * Waves, which are regular patterns of motion, can be made in water by disturbing the surface. When waves move across the surface of deep water, the water goes up and down in place; there is no net motion in the direction of the wave except when the water meets a beach. * Waves of the same type can differ in amplitude (height of the wave) and wavelength (spacing between wave peaks).</p>	<p><b>Patterns</b> * Similarities and differences in patterns can be used to sort, classify, and analyze simple rates of change for natural phenomena.</p>
<b>Guided Questions</b>		
<p>* How do you develop a model that describes patterns in wave behavior that cause motion?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has created bodies of water that produce waves, and bodies of water that don't produce waves. * God is always present in creation.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.4.5** *Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.*

**Mathematics**

**MP** *Model with mathematics.*

**G** *Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines.*

**Connections to Other DCIs in Fourth Grade**

**4.PS3.A; 4.PS3.B**

**Articulation to DCIs across Grade-Levels**

**MS.PS4.A**

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<b>4-PS4-2 Waves and Their Applications in Technologies for Information Transfer</b>		
Students who demonstrate understanding can: <b>4-PS4-2 Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.</b> <i>Assessment Boundary: Assessment does not include knowledge of specific colors reflected and seen, the cellular mechanisms of vision, or how the retina works.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.  * Develop a model to describe phenomena.	<b>PS4.B Electromagnetic Radiation</b> * An object can be seen when light reflected from its surface enters the eyes.	<b>Cause and Effect</b> * Cause and effect relationships are routinely identified.
<b>Guided Questions</b>		
* How do you develop a model that demonstrates the relationship between light reflecting from an object and what is seen by the eye? * What needs to happen in order for us to be able to see an object that does not produce its own light?		
<b>Catholic Identity Connections</b>		
* God has given us the gift of sight which allows us to see objects that receive light from various sources.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>SL.4.5</b> <i>Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</i>		
<b>Mathematics</b> <b>MP</b> <i>Model with mathematics.</i> <b>G</b> <i>Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.</i>		
<b>Connections to Other DCIs in Fourth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>1.PS4.B; MS.PS4.B; MS.LS1.D</b>		

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<b>4-PS4-3 Waves and Their Applications in Technologies for Information Transfer</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-PS4-3 Generate and compare multiple solutions that use patterns to transfer information.</b></p> <p><i>Clarification Statement: Examples of solutions could include drums sending coded information through sound waves, using a grid of 1's and 0's representing black and white to send information about a picture, and using Morse code to send text.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution.</p>	<p><b>PS4.C Information Technologies and Instrumentation</b> * Digitalized information can be transmitted over long distances without significant degradation. High-tech devices, such as computers or cell phones, can receive and decode information - convert it from digitized form to voice - and vice versa.</p> <p><b>ETS1.C Optimizing the Design Solution</b> * Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. <i>(secondary emphasis)</i></p>	<p><b>Patterns</b> * Similarities and differences in patterns can be used to sort and classify designed products.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Knowledge of relevant scientific concepts and research findings is important in engineering.</p>
Guided Questions		
<p>* How do tools and technology transfer information?</p> <p>* How do you design and test a system that uses patterns to transfer information?</p>		
Catholic Identity Connections		
<p>* We have a responsibility to communicate with others verbally, in print, and digitally in a respectful and considerate manner.</p> <p>* We are called to care for and respect all creation.</p>		
Archdiocese of Louisville ELA and Mathematics Standards Connections		
<p><b>ELA Literacy</b></p> <p><b>RI.4.1</b> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>RI.4.9</b> Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</p>		
Connections to Other DCIs in Fourth Grade		
<b>4.PS4.3</b>		
Articulation to DCIs across Grade-Levels		
<b>K.ETS1.A; 1.PS4.C; 2.ETS1.B; 2.ETS1.C; 3.PS2.A; MS.PS4.C; MS.ETS1.B</b>		

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<b>4-LS1-1 From Molecules to Organisms: Structures and Processes</b>		
Students who demonstrate understanding can:		
<b>4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.</b>		
<i>Clarification Statement: Examples of structures could include thorns, stems, roots, colored petals, heart, stomach, lung, brain, skin, and body systems.</i>		
<i>Assessment Boundary: Assessment is limited to macroscopic structures within plant and animal systems.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.  * Construct an argument with evidence, data, and/or a model.	<b>LS1.A Structure and Function</b> * Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.	<b>Systems and System Models</b> * A system can be described in terms of its components and their interactions.
<b>Guided Questions</b>		
* How do you support an argument that parts of living systems work together to sustain life?		
<b>Catholic Identity Connections</b>		
* We are called to exercise responsible stewardship toward all creation. * Plants and animals were created with internal and external structures that work together for the good of the plant or animal.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>W.4.1</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		
<b>Mathematics</b>		
<b>G</b> Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded across the line into matching parts.		
<b>G</b> Identify line-symmetric figures and draw lines of symmetry.		
<b>Connections to Other DCIs in Fourth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>1.LS1.A; 3.LS3.B; MS.LS1.A</b>		

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<b>4-LS1-2 From Molecules to Organisms: Structures and Processes</b>		
Students who demonstrate understanding can:		
<b>4-LS1-2 Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.</b>		
<i>Clarification Statement: Emphasis is on systems of information transfer.</i>		
<i>Assessment Boundary: Assessment does not include the mechanisms by which the brain stores and recalls information or the mechanisms of how sensory receptors function.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.  * Use a model to test interactions concerning the functioning of a natural system.	<b>LS1.C Information Processing</b> * Different sense receptors are specialized to particular kinds of information, which may then be processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions.	<b>Systems and System Models</b> * A system can be described in terms of its components and their interactions.
<b>Guided Questions</b>		
* How do you analyze sensory information, skills, and experiences to apply them to real-world situations?		
<b>Catholic Identity Connections</b>		
* God has given animals (including humans) senses that allow them to process information. * God has given animals (including humans) the ability to use memories to guide future actions.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>SL.4.5</b> <i>Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</i>		
<b>Connections to Other DCIs in Fourth Grade</b>		
NA		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>1.LS1.D; MS.LS1.A; MS.LS1.D</b>		

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<b>4-ESS1-1 Earth's Place in the Universe</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-ESS1-1 Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.</b></p> <p><i>Clarification Statement: Examples of evidence from patterns could include rock layers with marine shell fossils above rock layers with plant fossils and no shells, indicating a change from land to water over time, and, a canyon with different rock layers in the walls and a river in the bottom, indicating that over time a river cut through the rock.</i></p> <p><i>Assessment Boundary: Assessment does not include specific knowledge of the mechanism of rock formation or memorization of specific rock formations and layers. Assessment is limited to relative time.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Constructing Explanations and Designing Solutions</b></p> <p>Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables, that describe and predict phenomena, and in designing multiple solutions to design problems.</p> <p>* Identify the evidence that supports particular points in an explanation.</p>	<p><b>ESS1.C The History of Planet Earth</b></p> <p>* Local, regional, and global patterns of rock formations reveal changes over time due to earth forces, such as earthquakes. The presence and location of certain fossil types indicate the order in which rock layers were formed.</p> <p><b>ETS1.C Optimizing the Design Solution</b></p> <p>* Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.</p>	<p><b>Patterns</b></p> <p>* Patterns can be used as evidence to support an explanation.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to the Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b></p> <p>* Science assumes consistent patterns in natural systems.</p>
<b>Guided Questions</b>		
<p>* How do patterns in rock formations and fossils in rock layers show changes in landscape over time?</p>		
<b>Catholic Identity Connections</b>		
<p>* God created the Earth and all its systems in different phases.</p> <p>* We are called to exercise responsible stewardship toward all creation.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.4.7** *Conduct short research projects that build knowledge through investigation of different aspects of a topic.*

**W.4.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and organize information, and provide a list of sources.*

**W.4.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**M** *Express measurements in a larger unit in terms of a smaller unit within a single system of units.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**2.ESS1.C; 3.LS4.A; MS.LS1.C; MS.ESS2.A; MS.ESS2.B**

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<b>4-ESS2-1 Earth's Systems</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-ESS2-1 Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.</b></p> <p><i>Clarification Statement: Examples of variables to test could include angle of slope in the downhill movement of water, amount of vegetation, speed of wind, relative rate of deposition, cycles of freezing and thawing of water, cycles of heating and cooling, and volume of water flow.</i></p> <p><i>Assessment Boundary: Assessment is limited to a single form of weathering or erosion.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon.</p>	<p><b>ESS2.A Earth Materials and Systems</b> * Rainfall helps to shape the land and affects the types of living things found in a region. Water, ice, wind, living organisms, and gravity break rocks, soils, and sediments into smaller particles and move them around.</p> <p><b>ESS2.E Biogeology</b> * Living things affect the physical characteristics of their regions.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified, tested, and used to explain change.</p>
<b>Guided Questions</b>		
<p>* Given an investigation plan, what observations and/or measurements can you provide to identify the effects of weathering and erosion?</p>		
<b>Catholic Identity Connections</b>		
<p>* We are called to delight in and care for creation. * God created a world filled with various land and rock formations that are affected by weathering and erosion.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.4.7** *Conduct short research projects that build knowledge through investigation of different aspects of a topic.*

**W.4.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and organize information, and provide a list of sources.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**M** *Express measurements in a larger unit in terms of a smaller unit within a single system of units.*

**M** *Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, and money, including problems involving simple fractions or decimals.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**2.ESS1.C; 2.ESS2.A; 5.ESS2.A**

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<b>4-ESS2-2 Earth's Systems</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-ESS2-2 Analyze and interpret data from maps to describe patterns of Earth's features.</b></p> <p><i>Clarification Statement: Maps can include topographic maps of Earth's land and ocean floor, as well as maps of the locations of mountains, continental boundaries, volcanoes, and earthquakes.</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.</p> <p>* Analyze and interpret data to make sense of phenomena using logical reasoning.</p>	<p><b>ESS2.B Plate Tectonics and Large-Scale System Interactions</b> * The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features of Earth.</p>	<p><b>Patterns</b> * Patterns can be used as evidence to support an explanation.</p>
<b>Guided Questions</b>		
<p>* How can topographical maps of various regions help us to determine patterns in Earth's features? * When looking at maps of areas of the world, how can we predict the likely locations for certain landforms?</p>		
<b>Catholic Identity Connections</b>		
<p>* God created a world that is constantly changing. * We live in a world of diverse features that can be identified according to pattern.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.4.7** *Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.*

**Mathematics**

**M** *Express measurements in a larger unit in terms of a smaller unit within a single system of units.*

**M** *Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, and money, including problems involving simple fractions or decimals.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**2.ESS2.B; 2.ESS2.C; 5.ESS2.C; MS.ESS1.C; MS.ESS2.A; MS.ESS2.B**

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<b>4-ESS3-1 Earth and Human Activity</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.</b></p> <p><i>Clarification Statement: Examples of renewable energy resources could include wind energy, water behind dams, and sunlight; non-renewable energy resources are fossil fuels and fissile materials. Examples of environmental effects could include loss of habitat due to dams, loss of habitat due to surface mining, and air pollution from burning of fossil fuels.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 3-5 builds on K-2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.</p> <p>* Obtain and combine information from books and other reliable media to explain phenomena.</p>	<p><b>ESS3.A Natural Resources</b> * Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Knowledge of relevant scientific concepts and research findings is important in engineering.</p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * Over time, people's needs and wants change, as do their demands for new and improved technologies.</p>
<b>Guided Questions</b>		
<p>* How does our use of energy and fuels impact the environment? * How do renewable and non-renewable sources of energy differ?</p>		
<b>Catholic Identity Connections</b>		
<p>* We have a responsibility to use of energy and fuels in a way that promotes the common good. * God gives us the freedom to make choices.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.4.7** *Conduct short research projects that build knowledge through investigation of different aspects of a topic.*

**W.4.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and organize information, and provide a list of sources.*

**Connections to Other DCIs in Fourth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**5.ESS3.C; MS.PS3.D; MS.ESS2.A; MS.ESS3.A; MS.ESS3.C; MS.ESS3.D**

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<b>4-ESS3-2 Earth and Human Activity</b>		
<p>Students who demonstrate understanding can:</p> <p><b>4-ESS3-2 Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</b></p> <p><i>Clarification Statement: Examples of solutions could include designing an earthquake resistant building and improving monitoring of volcanic activity.</i></p> <p><i>Assessment Boundary: Assessment is limited to earthquakes, floods, tsunamis, and volcanic eruptions.</i></p>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Constructing Explanations and Designing Solutions</b></p> <p>Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution.</p>	<p><b>ESS3.B Natural Hazards</b></p> <p>* A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts.</p> <p><b>ETS1.B Designing Solutions to Engineering Problems</b></p> <p>* Testing a solution involves investigating how well it performs under a range of likely conditions. <i>(secondary emphasis)</i></p>	<p><b>Cause and Effect</b></p> <p>* Cause and effect relationships are routinely identified, tested, and used to explain change.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b></p> <p>* Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands.</p>
<b>Guided Questions</b>		
<p>* What solutions could be designed to reduce the impact of a natural Earth process on people?</p> <p>* How would design solutions differ based on the natural hazard?</p>		
<b>Catholic Identity Connections</b>		
<p>* Although we cannot eliminate the natural hazards, God has given humans the wisdom to determine solutions to reduce the impact.</p> <p>* We are called to make choices that take the good of all creation into consideration.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.4.1** *Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.*

**RI.4.9** *Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**M** *Express measurements in a larger unit in terms of a smaller unit within a single system of units.*

**Connections to Other DCIs in Fourth Grade**

**4.ETS1.C**

**Articulation to DCIs across Grade-Levels**

**K.ETS1.A; 2.ETS1.B; 2.ESS1.C; MS.ESS2.A; MS.ESS3.B; MS.ETS1.B**

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**Fourth Grade Standards**

**4-PS3 Energy**

- 4-PS3-1** Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- 4-PS3-2** Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- 4-PS3-3** Ask questions and predict outcomes about the changes in energy that occur when objects collide.
- 4-PS3-4** Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

**4-PS4 Waves and Their Applications to Technologies for Information Transfer**

- 4-PS4-1** Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.
- 4-PS4-2** Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.
- 4-PS4-3** Generate and compare multiple solutions that use patterns to transfer information.

**4-LS1 From Molecules to Organisms: Structures and Processes**

- 4-LS1-1** Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
- 4-LS1-2** Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

**4-ESS1 Earth's Place in the Universe**

- 4-ESS1-1** Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

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**4-ESS2 Earth's Systems**

- 4-ESS2-1** Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
- 4-ESS2-2** Analyze and interpret data from maps to describe patterns of Earth's features.

**4-ESS3 Earth and Human Activity**

- 4-ESS3-1** Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.
- 4-ESS3-2** Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

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**3-5-ETS1 Engineering Design**

Students who demonstrate understanding can:

**3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for successes and constraints on materials, time, or cost.**

**3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.**

**3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.**

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost.</p> <p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to save as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.</p> <p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.</p> <p><b>ETS1.B Developing Possible Solutions</b> * Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. * At whatever stage, communicating with peers about proposed solutions to an important part of the design process, and shared ideas can lead to improved designs. * Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.</p> <p><b>ETS1.C Optimizing the Design Solution</b> * Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.</p>	<p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People's needs and wants change over time, as do their demands for new and improved technologies. * Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.</p>

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**Guided Questions**

- \* Why is it important to consider multiple solutions before determining the best possible solution for a given problem?
- \* How have engineers developed new products and technologies to meet the ever-changing needs and wants of people?
- \* How have the needs and wants of people changed over time?
- \* How can we distinguish between our needs and wants?

**Catholic Identity Connections**

- \* God has given us the mental capacity to consider solutions from various angles to determine which best meets the criteria and constraints of the problem.
- \* God has given different people different gifts and talents which allow some to design solutions to problems that exist in the world.

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Science**

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Science**

<b>5-PS1-1 Matter and Its Interactions</b>		
Students who demonstrate understanding can:		
<b>5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.</b>		
<i>Clarification Statement: Examples of evidence supporting a model could include adding air to expand a basketball, dissolving sugar in water, and evaporating salt water.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.  * Use models to describe phenomena.	<b>PS1.A Structure and Properties of Matter</b> * Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.	<b>Scale, Proportion, and Quantity</b> * Natural objects exist from the very small to the immensely large.
<b>Guided Questions</b>		
* How do you develop a model to demonstrate that matter is made of particles too small to be seen? * How do you provide evidence from the model to support what happens when matter changes?		
<b>Catholic Identity Connections</b>		
* Students recognize that God is the creator of all things seen and unseen. * Students recognize the interconnectedness of humans with all creation.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.7</b> <i>Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</i>		
<b>Mathematics</b> <b>MP</b> <i>Reason abstractly and quantitatively.</i> <b>MP</b> <i>Model with mathematics.</i> <b>NO</b> <i>Explain patterns in the number of zeroes of the product when multiplying a number by powers of 10.</i> <b>NO</b> <i>Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</i>		
<b>Connections to Other DCIs in Fifth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>2.PS1.A; MS.PS1.A</b>		

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**5-PS1-2 Matter and Its Interactions**

Students who demonstrate understanding can:

**5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.**

*Clarification Statement: Examples of reactions or changes could include phase changes, dissolving, and mixing that form new substances.*

*Assessment Boundary: Assessment does not include distinguishing mass and weight.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Using Mathematics and Computational Thinking</b> Mathematical and computational thinking in 3-5 builds on K-2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.</p> <p>* Make observations to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish.</p> <p><b>PS1.B Chemical Reactions</b> * No matter what reaction or change in properties occurs, the total weight of the substances does not change. <i>(Boundary: Mass and weight are not distinguished at this grade level.)</i></p>	<p><b>Scale, Proportion, and Quantity</b> * Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to the Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes consistent patterns in natural systems.</p>

**Guided Questions**

\* How do you measure and graph quantities to provide evidence to show what happens to the total weight of matter when substances react and change?

**Catholic Identity Connections**

\* Students recognize that God is the creator of all things seen and unseen.  
\* We live in a world of harmony and balance.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.5.7** *Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.*

**W.5.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.*

**W.5.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**MP** *Use appropriate tools strategically.*

**M** *Apply conversion of linear units from millimeters through kilometers, excluding decimals.*

**M** *Use conversions to solve multi-step real-world problems.*

**Connections to Other DCIs in Fifth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**2.PS1.A; 2.PS1.B; MS.PS1.A; MS.PS1.B**

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**5-PS1-3 Matter and Its Interactions**

Students who demonstrate understanding can:

**5-PS1-3 Make observations and measurements to identify materials based on their properties.**

*Clarification Statement: Examples of materials to be identified could include baking soda and other powders, metals, minerals, and liquids. Examples of properties could include color, hardness, reflectivity, electrical conductivity, thermal conductivity, response to magnetic forces, and solubility; density is not intended as an identifiable property.*

*Assessment Boundary: Assessment does not include density or distinguishing mass and weight.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * Measurements of a variety of properties can be used to identify materials. <i>(Boundary: At this grade level, mass and weight are not distinguished, and no attempt is made to define the unseen particles or explain the atomic-scale mechanism of evaporation and condensation.)</i></p>	<p><b>Scale, Proportion, and Quantity</b> * Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.</p>

**Guided Questions**

\* How do you measure and compare data to identify materials based on properties of matter?

**Catholic Identity Connections**

\* God has given us the gift of sight which enables us to identify materials based on observed properties.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**W.5.7** *Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.*

**W.5.8** *Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.*

**W.5.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**MP** *Use appropriate tools strategically.*

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<b>Connections to Other DCIs in Fifth Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade-Levels</b>
<b>2.PS1.A; MS.PS1.A</b>

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<b>5-PS1-4 Energy</b>		
Students who demonstrate understanding can: <b>5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.</b>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.  * Conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.	<b>PS1.B Chemical Reactions</b> * When two or more different substances are mixed, a new substance with different properties may be formed.	<b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.
<b>Guided Questions</b>		
* How do you design an investigation to determine what happens when two or more substances are mixed?		
<b>Catholic Identity Connections</b>		
* God has given us the ability to examine substances in order to determine whether mixing two of them results in a new substance. * All creation is a system of interrelated parts.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>W.5.7</b> <i>Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</i>		
<b>W.5.8</b> <i>Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</i>		
<b>W.5.9</b> <i>Draw evidence from literary or informational texts to support analysis, reflection, and research.</i>		
<b>Connections to Other DCIs in Fifth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>2.PS1.B; MS.PS1.A; MS.PS1.B</b>		

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<b>5-PS2-1 Motion and Stability: Forces and Interaction</b>		
Students who demonstrate understanding can: <b>5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.</b> <i>Clarification Statement: "Down" is a local description of the direction that points toward the center of the spherical Earth.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.  * Support an argument with evidence, data, or a model.	<b>PS2.B Types of Interactions</b> * The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.	<b>Cause and Effect</b> * Cause and effect relationships are routinely identified and used to explain change.
<b>Guided Questions</b>		
* How can you provide the evidence to explain the effect of Earth's gravitational force on objects towards the center of the Earth?		
<b>Catholic Identity Connections</b>		
* God gives us the ability to reason and observe. * We are called to be totally present to the world around us.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.1</b> <i>Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</i> <b>RI.5.9</b> <i>Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</i> <b>W.5.1</b> <i>Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</i>		
<b>Connections to Other DCIs in Fifth Grade</b>		
NA		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>3.PS2.A; 3.PS2.B; MS.PS2.B; MS.ESS1.B; MS.ESS1.C</b>		

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<b>5-PS3-1 Energy</b>		
Students who demonstrate understanding can: <b>5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.</b> <i>Clarification Statement: Examples of models could include diagrams and flow charts.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.  * Use models to describe phenomena.	<b>PS3.D Energy in Chemical Processes and Everyday Life</b> * The energy released from food was once energy from the sun that was captured by plants in the chemical process that forms plant matter from air and water.  <b>LS1.C Organization for Matter and Energy Flow in Organisms</b> * Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion. ( <i>secondary emphasis</i> )	<b>Energy and Matter</b> * Energy can be transferred in various ways and between objects.
<b>Guided Questions</b>		
* How can you create a model to demonstrate that energy obtained from food was originally energy from the sun?		
<b>Catholic Identity Connections</b>		
* God created a world in which warmth from the sun and energy from food help maintain an animals' bodily functions. * Students recognize the interconnectedness of humans with all creation.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.7</b> Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. <b>SL.5.8</b> Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.		
<b>Connections to Other DCIs in Fifth Grade</b>		
NA		
<b>Articulation to DCIs across Grade-Levels</b>		
K.LS1.C; 2.LS2.A; 4.PS3.A; 4.PS3.B; 4.PS3.D; MS.PS3.D; MS.PS4.B; MS.LS1.C; MS.LS2.B		

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<b>5-LS1-1 From Molecules to Organisms: Structures and Processes</b>		
Students who demonstrate understanding can: <b>5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.</b> <i>Clarification Statement: Emphasis is on the idea that plant matter comes mostly from air and water, not from the soil. Emphasis includes photosynthesis.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.  * Support an argument with evidence, data, or a model.	<b>LS1.C Organization for Matter and Energy Flow in Organisms</b> * Plants acquire their material for growth chiefly from air and water.	<b>Energy and Matter</b> * Matter is transported into, out of, and within systems.
<b>Guided Questions</b>		
* How do you critique evidence to explain where plants acquire what they need for growth?		
<b>Catholic Identity Connections</b>		
* Plants were created with the ability to get the materials they need for growth from air and water. * We delight in the world around us.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.1</b> <i>Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</i> <b>RI.5.9</b> <i>Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</i> <b>W.5.1</b> <i>Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</i>  <b>Mathematics</b> <b>MP</b> <i>Reason abstractly and quantitatively.</i> <b>MP</b> <i>Model with mathematics.</i> <b>MP</b> <i>Use appropriate tools strategically.</i> <b>M</b> <i>Apply conversion of linear units from millimeters through kilometer, excluding decimals.</i> <b>M</b> <i>Use conversions to solve multi-step real-world problems.</i>		
<b>Connections to Other DCIs in Fifth Grade</b>		
<b>5.PS1.A</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>K.LS1.C; 2.LS2.A; MS.LS1.C</b>		

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**5-LS2-1 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:  
**5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.**  
*Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b>            Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.</p> <p>* Develop a model to describe phenomena.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to the Nature of Science</b></p> <p><b>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena</b>            * Science explanations describe the mechanisms for natural events.</p>	<p><b>LS2.A Interdependent Relationships in Ecosystems</b>            * The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plant parts and animals) and therefore operate as "decomposers". Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.</p> <p><b>LS2.B Cycles of Matter and Energy Transfer in Ecosystems</b>            * Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases and water from the environment and release waste matter (gas, liquid, or solid) back into the environment.</p>	<p><b>Systems and System Models</b>            * A system can be described in terms of its components and their interactions.</p>

**Guided Questions**

\* How do you develop a model to describe the movement of matter within an ecosystem and the relationship between the components of the ecosystem?

**Catholic Identity Connections**

\* From the tiniest organism to the most enormous creature, we are all in this together.  
 \* All creation is a system of interrelated parts.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RI.5.7** *Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.*

**SL.5.5** *Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.*

**Mathematics**

**MP** *Reason abstractly and quantitatively.*

**MP** *Model with mathematics.*

**Connections to Other DCIs in Fifth Grade**

**5.PS1.A; 5.ESS2.A**

**Articulation to DCIs across Grade-Levels**

**2.PS1.A; 2.LS4.D; 4.ESS2.E; MS.PS3.D; MS.LS1.C; MS.LS2.A; MS.LS2.B**

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<b>5-ESS1-1 Earth's Place in the Universe</b>		
<p>Students who demonstrate understanding can:</p> <p><b>5-ESS1-1 Support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth.</b></p> <p><i>Assessment Boundary: Assessment is limited to relative distances, not sizes, of stars. Assessment does not include other factors that affect brightness (such as stellar masses, ages, stages).</i></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world.</p> <p>* Support an argument with evidence, data, or a model.</p>	<p><b>ESS1.A The Universe and Its Stars</b> * The sun is a star that appears larger and brighter than other stars because it is closer. Stars range greatly in their distance from Earth.</p>	<p><b>Scale, Proportion, and Quantity</b> * Natural objects exist from the very small to the immensely large.</p>
<b>Guided Questions</b>		
<p>* How do you support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has given us the ability to view objects in the sky, including the sun and stars. * The innate value of objects comes from being created by God.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b></p> <p><b>RI.5.1</b> <i>Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</i></p> <p><b>RI.5.7</b> <i>Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</i></p> <p><b>RI.5.8</b> <i>Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).</i></p> <p><b>RI.5.9</b> <i>Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</i></p> <p><b>W.5.1</b> <i>Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</i></p> <p><b>Mathematics</b></p> <p><b>MP</b> <i>Reason abstractly and quantitatively.</i></p> <p><b>MP</b> <i>Model with mathematics.</i></p> <p><b>NO</b> <i>Explain patterns in the number of zeroes of the product when multiplying a number by powers of 10.</i></p> <p><b>NO</b> <i>Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.</i></p>		

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<b>Connections to Other DCIs in Fifth Grade</b>
<b>NA</b>
<b>Articulation to DCIs across Grade-Levels</b>
<b>MS.ESS1.A; MS.ESS1.B</b>

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<b>5-ESS1-2 Earth's Place in the Universe</b>		
Students who demonstrate understanding can: <b>5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</b>		
<i>Clarification Statement: Examples of patterns could include the position and motion of Earth with respect to the sun and selected stars that are visible only in particular months.</i>		
<i>Assessment Boundary: Assessment does not include causes of seasons.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.</p> <p>* Represent data in graphical displays (bar graphs, pictographs, and/or pie charts) to reveal patterns that indicate relationships.</p>	<p><b>ESS1.B Earth and the Solar System</b> * The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year.</p>	<p><b>Patterns</b> * Similarities and differences in patterns can be used to sort, classify, communicate, and analyze simple rates of change for natural phenomena.</p>
<b>Guided Questions</b>		
<p>* How do you represent in a graphical display the observable changes due to Earth's rotation and orbit around the sun? * Why are we only able to see some stars in the night sky during particular seasons?</p>		
<b>Catholic Identity Connections</b>		
* For us, the length of daylight hours shortens as we move toward Jesus' birthday.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>SL.5.5</b> <i>Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</i></p> <p><b>Mathematics</b> <b>MP</b> <i>Reason abstractly and quantitatively.</i> <b>MP</b> <i>Model with mathematics.</i> <b>G</b> <i>Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</i></p>		

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**Connections to Other DCIs in Fifth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**1.ESS1.A; 1.ESS1.B; 3.PS2.A; MS.ESS1.A; MS.ESS1.B**

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<b>5-ESS2-1 Earth's Systems</b>		
Students who demonstrate understanding can:		
<b>5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</b>		
<i>Clarification Statement: Examples could include the influence of the ocean on ecosystems, landform shape, and climate; the influence of the atmosphere on landforms and ecosystems through weather and climate; and the influence of mountain ranges on winds and clouds in the atmosphere. The geosphere, biosphere, hydrosphere, and atmosphere are each a system.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Developing and Using Models</b> Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.  * Develop a model using an example to describe a scientific principle.	<b>ESS2.A Earth Materials and Systems</b> * Earth's major systems are the geosphere (solid and molten rock, soil, and sediments), the biosphere (living things, including humans), the hydrosphere (water and ice), and the atmosphere (air). These systems interact in multiple ways to affect Earth's surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.	<b>Systems and System Models</b> * A system can be described in terms of its components and their interactions.
<b>Guided Questions</b>		
* How do you develop a model to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact?		
<b>Catholic Identity Connections</b>		
* God has created a universe in which various systems interact to protect and enhance Earth's processes.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>Mathematics</b> <b>MP</b> <i>Model with mathematics.</i> <b>G</b> <i>Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</i>		
<b>Connections to Other DCIs in Fifth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>2.ESS2.A; 3.ESS2.D; 4.ESS2.A; MS.ESS2.A; MS.ESS2.C; MS.ESS2.D</b>		

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<b>5-ESS2-2 Earth's Systems</b>		
Students who demonstrate understanding can: <b>5-ESS2-2 Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</b>		
<i>Assessment Boundary: Assessment is limited to oceans, lakes, rivers, glaciers, ground water, and polar ice caps, and does not include the atmosphere.</i>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Using Mathematics and Computational Thinking</b> Mathematical and computational thinking in 3-5 builds on K-2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.  * Describe and graph quantities such as area and volume to address scientific questions.	<b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * Nearly all of Earth's available water is in the ocean. Most fresh water is in glaciers or underground; only a tiny fraction is in the streams, lakes, wetlands, and the atmosphere.	<b>Scale, Proportion, and Quantity</b> * Standard units are used to measure and describe physical quantities such as weight and volume.
<b>Guided Questions</b>		
* How do you describe and graph the amounts of salt water and fresh water in reservoirs to provide evidence about the distribution of water on Earth?		
<b>Catholic Identity Connections</b>		
* We thank God for the life-giving and healing nature of water that is so abundant on our planet. * All creation is mutually dependent for survival.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.7</b> Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. <b>SL.5.5</b> Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. <b>W.5.8</b> Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.		
<b>Mathematics</b> <b>MP</b> Reason abstractly and quantitatively. <b>MP</b> Model with mathematics.		
<b>Connections to Other DCIs in Fifth Grade</b>		
<b>NA</b>		
<b>Articulation to DCIs across Grade-Levels</b>		
<b>2.ESS2.C; MS.ESS2.C; MS.ESS3.A</b>		

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<b>5-ESS3-1 Earth and Human Activity</b>		
Students who demonstrate understanding can:		
<b>5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.</b>		
<b>Science and Engineering Practices</b>	<b>Disciplinary Core Ideas</b>	<b>Crosscutting Concepts</b>
<b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 3-5 builds on K-2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.  * Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.	<b>ESS3.C Human Impacts on Earth Systems</b> * Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.	<b>Systems and System Models</b> * A system can be described in terms of its components and their interactions.  -----  <b>Connections to Nature of Science</b>  <b>Science Addresses Questions About the Natural and Material World</b> * Science findings are limited to questions that can be answered with empirical evidence.
<b>Guided Questions</b>		
* Using books and reliable media, how do you explain how communities use scientific ideas to protect Earth's resources and environment? * How do you explain positive and negative effects of human activity on the environment?		
<b>Catholic Identity Connections</b>		
* God calls us to delight in and care for creation. * Individuals and communities have the skills and talents necessary to protect Earth's resources and environments.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b> <b>RI.5.1</b> <i>Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</i> <b>RI.5.7</b> <i>Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</i> <b>RI.5.9</b> <i>Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</i> <b>W.5.8</b> <i>Recall relevant information from experiences or legally and ethically gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</i> <b>W.5.9</b> <i>Draw evidence from literary or informational texts to support analysis, reflection, and research.</i>		
<b>Mathematics</b> <b>MP</b> <i>Reason abstractly and quantitatively.</i> <b>MP</b> <i>Model with mathematics.</i>		

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**Connections to Other DCIs in Fifth Grade**

**NA**

**Articulation to DCIs across Grade-Levels**

**MS.ESS3.A; MS.ESS3.C; MS.ESS3.D**

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**Fifth Grade Standards**

**5-PS1 Matter and Its Interactions**

- 5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.
- 5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
- 5-PS1-3 Make observations and measurements to identify materials based on their properties.
- 5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

**5-PS2 Motion and Stability: Forces and Interactions**

- 5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.

**5-PS3 Energy**

- 5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

**5-LS1 From Molecules to Organisms: Structures and Processes**

- 5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.

**5-LS2 Ecosystems: Interactions, Energy, and Dynamics**

- 5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

**5-ESS1 Earth's Place in the Universe**

- 5-ESS1-1 Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth..
- 5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

**5-ESS2 Earth's Systems**

- 5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- 5-ESS2-2 Describe and graph the amounts and percentages of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

**5-ESS3 Earth and Human Activity**

- 5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

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<b>3-5-ETS1 Engineering Design</b>		
<p>Students who demonstrate understanding can:</p> <p><b>3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for successes and constraints on materials, time, or cost.</b></p> <p><b>3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</b></p> <p><b>3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</b></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in grades 3-5 builds on grades K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost.</p> <p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.</p> <p>* Plan and conduct an investigation collaboratively to produce data to save as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.</p> <p><b>ETS1.B Developing Possible Solutions</b> * Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. * At whatever stage, communicating with peers about proposed solutions to an important part of the design process, and shared ideas can lead to improved designs. * Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.</p>	<p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People's needs and wants change over time, as do their demands for new and improved technologies. * Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.</p>

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.</p> <p>* Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem.</p>	<p><b>ETS1.C Optimizing the Design Solution</b> * Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.</p>	<p><b>Influence of Engineering, Technology, and Science on Society and the Natural World</b> * People's needs and wants change over time, as do their demands for new and improved technologies. * Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.</p>
<b>Guided Questions</b>		
<p>* How have engineers developed new products and technologies to meet the ever-changing needs and wants of people? * How have the needs and wants of people changed over time? * How can we distinguish between our needs and wants? * Why is it important to consider multiple solutions before determining the best possible solution for a given problem?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has given different people different gifts and talents which allow some to design solutions to problems that exist in the world. * God has given us the mental capacity to consider solutions from various angles to determine which best meets the criteria and constraints of the problem.</p>		

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**6-ESS1-1 Earth's Place in the Universe**

Students who demonstrate understanding can:

**6-ESS1-1 Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases.**

*Clarification Statement: Examples of models can be physical, graphical, or conceptual.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>ESS1.A The Universe and Its Stars</b> * Patterns of the apparent motion of the sun, the moon, and stars in the sky can be observed, described, predicted, and explained with models.</p> <p><b>ESS1.B Earth and the Solar System</b> * This model of the solar system can explain eclipses of the sun and the moon. Earth's spin axis is fixed in direction over the short-term but tilted relative to its orbit around the sun. The seasons are a result of the tilt and are caused by the differential intensity of sunlight on different areas of Earth across the year.</p>	<p><b>Patterns</b> * Patterns can be used to identify cause and effect relationships.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation.</p>
<b>Guided Questions</b>		
* How do the relative positions of the sun, Earth, and moon to each other affect their physical phenomena (i.e., moon phases, eclipses, light, and seasons)?		
<b>Catholic Identity Connections</b>		
* God is the creator of the universe including the Earth, sun, and moon systems which allow for sustainable life. * All creation is a system of interrelated parts.		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>SL.8.5</b> <i>Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</i></p> <p><b>Mathematics</b> <b>MP.4</b> <i>Model with mathematics.</i> <b>NO.6</b> <i>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</i> <b>NO.7</b> <i>Recognize and represent proportional relationships between quantities.</i></p>		
<b>Connections to Other DCIs in Sixth Grade</b>		
MS.PS2.A; MS.PS2.B		
<b>Articulation to DCIs across Grade-Bands</b>		
3.PS2.A; 5.PS2.B; 5.ESS1.B		

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**6-ESS1-2 Earth's Place in the Universe**

Students who demonstrate understanding can:

**6-ESS1-2 Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.**

*Clarification Statement: Emphasis for the model is on gravity as the force that holds together the solar system and Milky Way galaxy and controls orbital motions within them. Examples of models can be physical (such as the analogy of distance along a football field or computer visualizations of elliptical orbits) or conceptual (such as mathematical proportions relative to the size of familiar objects such as students' school or state).*

*Assessment Boundary: Assessment does not include Kepler's Laws of orbital motion or the apparent retrograde motion of the planets as viewed from Earth.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>ESS1.A The Universe and Its Stars</b> * Earth and its solar system are part of the Milky Way galaxy, which is one of the many galaxies in the universe.</p> <p><b>ESS1.B Earth and the Solar System</b> * The solar system consists of the sun and a collection of objects, including planets, their moons, and asteroids that are held in orbit around the sun by its gravitational pull on them. * The solar system appears to have formed from a disk of dust and gas, drawn together by gravity.</p>	<p><b>Systems and System Models</b> * Models can be used to represent systems and their interactions.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation.</p>
<b>Guided Questions</b>		
<p>* How can the position and mass of a solar body affect the gravity on that body? * How does gravity affect orbital motion within small or large systems?</p>		
<b>Catholic Identity Connections</b>		
<p>* God is the creator of the universe and the laws that govern it, including gravity.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>SL.8.5</b> <i>Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</i></p> <p><b>Mathematics</b> <b>MP.4</b> <i>Model with mathematics.</i> <b>NO.6</b> <i>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</i> <b>NO.7</b> <i>Recognize and represent proportional relationships between quantities.</i></p>		

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**Connections to Other DCIs in Sixth Grade**

**MS.PS2.A; MS.PS2.B**

**Articulation to DCIs across Grade-Bands**

**3.PS2.A; 5.PS2.B; 5.ESS1.B**

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**6-ESS1-3 Earth's Place in the Universe**

Students who demonstrate understanding can:

**6-ESS1-3 Analyze and interpret data to determine scale properties of objects in the solar system.**

*Clarification Statement: Emphasis is on the analysis of data from Earth-based instruments, space-based telescopes, and spacecraft to determine similarities and differences among solar system objects. Examples of scale properties include the sizes of an object's layers (such as crust and atmosphere), surface features (such as volcanoes), and orbital radius. Examples of data include statistical information, drawings and photographs, and models.*

*Assessment Boundary: Assessment does not include recalling facts about properties of the planets and other solar system bodies.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p>	<p><b>ESS1.B Earth and the Solar System</b> * The solar system consists of the sun and a collection of objects, including planets, their moons, and asteroids that are held in orbit around the sun by its gravitational pull on them.</p>	<p><b>Scale, Proportion, and Quantity</b> * Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems.</p>

**Guided Questions**

- \* How is technology used to gather information about solar bodies in relation to the Earth and its physical/chemical features?
- \* What technology can be used in space exploration to gather information?

**Catholic Identity Connections**

- \* God gives us the intelligence and resources necessary to explore and broaden our understanding of the universe.
- \* The Holy Spirit helps us with moral decision-making.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*

**NO.7** *Recognize and represent proportional relationships between quantities.*

**Connections to Other DCIs in Sixth Grade**

**MS.ESS2.A**

**Articulation to DCIs across Grade-Bands**

**5.ESS1.B**

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**6-ESS1-4 Earth's Place in the Universe**

Students who demonstrate understanding can:

**6-ESS1-4 Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.**

*Clarification Statement: Emphasis is on how analyses of rock formations and the fossils they contain are used to establish relative ages of major events in Earth's history. Examples of Earth's major events could range from being very recent (such as the last Ice Age or the earliest fossils of homo sapiens) to very old (such as the formation of Earth or the earliest evidence of life). Examples can include the formation of mountain chains and ocean basins, the evolution or extinction of particular living organisms, or significant volcanic eruptions.*

*Assessment Boundary: Assessment does not include recalling the names of specific periods or epochs and events within them.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.</p>	<p><b>ESS1.C The History of Planet Earth</b> * The geologic time scale interpreted from rock strata provides a way to organize Earth's history. Analyses of rock strata and the fossil record provide only relative dates, not an absolute scale.</p>	<p><b>Scale, Proportion, and Quantity</b> * Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.</p>
<b>Guided Questions</b>		
<p>* How do you determine the age of rock strata? * What does the age of rock strata reveal about Earth's history?</p>		
<b>Catholic Identity Connections</b>		
<p>* The universe was created by God in stages that built upon one another over a period of time. * God continues to create in the world.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>RST.6-8.1</b> <i>Cite specific textual evidence to support analysis of science and technical texts.</i> <b>WHST.6-8.2</b> <i>Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.</i></p>		
<b>Connections to Other DCIs in Sixth Grade</b>		
MS.LS4.A; MS.LS4.C		
<b>Articulation to DCIs across Grade-Bands</b>		
3.LS4.A; 3.LS4.C; 4.ESS1.C		

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**6-ESS2-1 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.**

*Clarification Statement: Emphasis is on the processes of melting, crystallization, weathering, deformation, and sedimentation, which act together to form minerals and rocks through the cycling of Earth's materials (e.g., rock cycle).*

*Assessment Boundary: Assessment does not include the identification and naming of minerals.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>ESS2.A Earth's Materials and Systems</b> * All Earth processes are the result of energy flowing and matter cycling within and among the planet's systems. This energy is derived from the sun and the Earth's hot interior. The energy that flows and matter that cycles produce chemical and physical changes in Earth's materials and living organisms.</p>	<p><b>Stability and Change</b> * Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and processes at different scales, including the atomic scale.</p>
<b>Guided Questions</b>		
<p>* How does energy change Earth's materials? * How does energy drive the processes that change Earth's materials?</p>		
<b>Catholic Identity Connections</b>		
<p>* God is the creator of all geological processes.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<p><b>ELA Literacy</b> <b>SL.8.5</b> <i>Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</i></p>		
<b>Connections to Other DCIs in Sixth Grade</b>		
<p><b>MS.PS3.B; MS.LS2.B; MS.LS2.C; MS.ESS1.B; MS.ESS3.C</b></p>		
<b>Articulation to DCIs across Grade-Bands</b>		
<p><b>4.PS3.B; 4.ESS2.A; 5.ESS2.A</b></p>		

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**6.ESS2-2 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.**

*Clarification Statement: Emphasis is on how processes change Earth's surface at time and spatial scales that can be large (such as slow plate motions or the uplift of large mountain ranges) or small (such as rapid landslides or microscopic geochemical reactions), and how many geoscience processes (such as earthquakes, volcanoes, and meteor impacts) usually behave gradually but are punctuated by catastrophic events. Examples of geoscience processes include surface weathering and deposition by the movements of water, ice, and wind. Emphasis is on geoscience processes that shape local geographic features, where appropriate.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe nature operate today as they did in the past and will continue to do so in the future.</p>	<p><b>ESS2.A Earth's Materials and Systems</b> * The planet's systems interact over scales that range from microscopic to global in size, and they operate over fractions of a second to billions of years. These interactions have shaped Earth's history and will determine its future.</p> <p><b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * Water's movements - both on the land and underground - cause weathering and erosion, which change the land's surface features and create underground formations.</p>	<p><b>Scale, Proportion, and Quantity</b> * Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.</p>
<b>Guided Questions</b>		
<p>* What processes can explain the changing of the Earth's surface? * How do catastrophic events help shape/change Earth's constant processes?</p>		
<b>Catholic Identity Connections</b>		
<p>* The universe is ordered and good. * There is evidence of the presence and power of God in the world.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>ELA Literacy</b>		
<b>RST.6-8.1</b> <i>Cite specific textual evidence to support analysis of science and technical texts.</i>		
<b>RST.6-8.7</b> <i>Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</i>		
<b>SL.8.5</b> <i>Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</i>		
<b>Mathematics</b>		
<b>MP.2</b> <i>Reason abstractly and quantitatively.</i>		

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**Connections to Other DCIs in Sixth Grade**

**MS.PS1.B; MS.LS2.B**

**Articulation to DCIs across Grade-Bands**

**4.ESS1.C; 4.ESS2.A; 4.ESS2.E; 5.ESS2.A**

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**6-ESS2-3 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.**

*Clarification Statement: Examples of data include similarities of rock and fossil types on different continents, the shapes of the continents (including continental shelves), and the locations of ocean structures (such as ridges, fracture zones, and trenches).*

*Assessment Boundary: Paleomagnetic anomalies in oceanic and continental crust are not assessed.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to provide evidence for phenomena.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Open to Revision in Light of New Evidence</b> * Science findings are frequently revised and/or reinterpreted based on new evidence.</p>	<p><b>ESS2.B Plate Tectonics and Large-Scale System Interactions</b> * Maps of ancient land and water patterns, based on investigations of rocks and fossils, make clear how Earth's plates have moved great distances, collided, and spread apart.</p> <p><b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * Water's movements - both on the land and underground - cause weathering and erosion, which change the land's surface features and create underground formations.</p>	<p><b>Patterns</b> * Patterns in rates of change and other numerical relationships can provide information about natural systems.</p>

**Guided Questions**

\* What are the pieces of evidence that show that Earth's plates are in constant motion?

**Catholic Identity Connections**

\* God is the creator of all geological processes and fossils and rocks, continental shapes, and seafloor structures provide evidence of changes over time.  
\* God's love is a sign of trust in all creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**RST.6-8.9** *Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**Connections to Other DCIs in Sixth Grade**

**MS.LS4.A**

**Articulation to DCIs across Grade-Bands**

**3.LS4.A; 3.ESS3.B; 4.ESS1.C; 4.ESS2.B; 4.ESS3.B**

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**6-ESS2-4 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-4 Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.**

*Clarification Statement: Emphasis is on the ways water changes its state as it moves through the multiple pathways of the hydrologic cycle. Examples of models can be conceptual or physical.*

*Assessment Boundary: A quantitative understanding of the latent heats of vaporization and fusion is not assessed.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to describe unobservable mechanisms.</p>	<p><b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation, crystallization, and precipitation as well as downhill flows on land. * Global movements of water and its changes in form are propelled by sunlight and gravity.</p>	<p><b>Energy and Matter</b> * Within a natural or designed system, the transfer of energy drives the motion and/or cycling of matter.</p>
<b>Guided Questions</b>		
<p>* What are the driving forces of the hydrologic cycle? * How does the energy of the sun affect biological/physical relationships on Earth?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has created a process that allows living and nonliving things to utilize the Earth. * All creation is interdependent.</p>		
<b>Archdiocese of Louisville ELA and Mathematics Standards Connections</b>		
<b>Connections to Other DCIs in Sixth Grade</b>		
MS.PS1.A; MS.PS2.B; MS.PS3.A; MS.PS3.D		
<b>Articulation to DCIs across Grade-Bands</b>		
3.PS2.A; 4.PS3.B; 5.PS2.B; 5.ESS2.C		

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**6.ESS2-5 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.**

*Clarification Statement: Emphasis is on how air masses flow from regions of high pressure to low pressure, causing weather (defined by temperature, pressure, humidity, precipitation, and wind) at a fixed location to change over time, and how sudden changes in weather can result when different air masses collide. Emphasis is on how weather can be predicted within probabilistic ranges. Examples of data can be provided to students (such as weather maps, diagrams, and visualizations) or obtained through laboratory experiments (such as with condensation).*

*Assessment Boundary: Assessment does not include recalling the names of cloud types or weather symbols used on weather maps or the reported diagrams from weather stations.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or solutions.</p> <p>* Collect data to produce data to serve as the basis for evidence to answer scientific questions or test design solutions under a range of conditions.</p>	<p><b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * The complex patterns of the changes and the movement of water in the atmosphere, determined by winds, landforms, and ocean temperatures and currents, are major determinants of local weather patterns.</p> <p><b>ESS2.D Weather and Climate</b> * Because these patterns are so complex, weather can only be predicted probabilistically.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p>
<b>Guided Questions</b>		
<p>* How do weather factors influence each other to create a climate? * How is data collected to determine the weather in an area?</p>		
<b>Catholic Identity Connections</b>		
<p>* God has created a world of harmony and balance. * All creation is a gift from God.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.9** *Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.*

**WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using research terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.*

**NO.6** *Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.*

**Connections to Other DCIs in Sixth Grade**

**MS.PS1.B; MS.PS2.A; MS.PS3.A; MS.PS3.B**

**Articulation to DCIs across Grade-Bands**

**3.ESS2.D; 5.ESS2.A**

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**6-ESS2-6 Earth's Systems**

Students who demonstrate understanding can:

**6-ESS2-6 Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.**

*Clarification Statement: Emphasis is on how patterns vary by latitude, altitude, and geographic land distribution. Emphasis of atmospheric circulation is on the sunlight-driven latitudinal banding, the Coriolis effect, and resulting prevailing winds; emphasis of ocean circulation is on the transfer of heat by the global ocean convection cycle, which is constrained by the Coriolis effect and the outlines of continents. Examples of models can be diagrams, maps and globes, or digital representations.*

*Assessment Boundary: Assessment does not include the dynamics of the Coriolis effect.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>ESS2.C The Roles of Water in Earth's Surface Processes</b> * Variations in density due to variations in temperature and salinity drive a global pattern of interconnected ocean currents.</p> <p><b>ESS2.D Weather and Climate</b> * Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things. These interactions vary with latitude, altitude, and local and regional geography, all of which can affect oceanic and atmospheric flow patterns. * The ocean exerts a major influence on weather and climate by absorbing energy from the sun, releasing it over time, and globally redistributing it through ocean currents.</p>	<p><b>Systems and System Models</b> * Models can be used to represent systems and their interactions - such as inputs, processes, and outputs - and energy, matter, and information flows within systems.</p>

**Guided Questions**

- \* What is the driving force behind atmospheric and oceanic circulation?
- \* What contributes to the differences in circulation in different regions?

**Catholic Identity Connections**

- \* God created a world with variations in regional climates due to patterns and the interconnectedness of Earth processes.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.*

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**Connections to Other DCIs in Sixth Grade**

**MS.PS2.A; MS.PS3.B; MS.PS4.B**

**Articulation to DCIs across Grade-Bands**

**3.PS2.A; 3.ESS2.D; 5.ESS2.A**

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**6.ESS3-1 Earth and Human Activity**

Students who demonstrate understanding can:

**6-ESS3-1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.**

*Clarification Statement: Emphasis is on how these resources are limited and typically non-renewable, and how their distributions are significantly changing as a result of removal by humans. Examples of uneven distributions of resources as a result of past processes include, but are not limited to, petroleum (locations of the burial of organic marine sediments and subsequent geologic traps), metal ores (locations of past volcanic and hydrothermal activity associated with subduction zones), and soil (locations of active weathering and/or deposition of rock).*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe nature operate today as they did in the past and will continue to do so in the future.</p>	<p><b>ESS3.A Natural Resources</b> * Humans depend on Earth's land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment.</p>

**Guided Questions**

- \* What causes the uneven distribution of Earth's resources?
- \* How do humans impact the amounts of renewable and non-renewable resources available?

**Catholic Identity Connections**

- \* God is the creator of all things and has given us the responsibility to use and reuse resources wisely.
- \* God calls us to delight in and care for creation.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*
- WHST.6-8.9** *Draw evidence from informational texts to support analysis, reflection, and research.*

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<b>Connections to Other DCIs in Sixth Grade</b>
<b>MS.PS1.A; MS.PS1.B; MS.ESS2.D</b>
<b>Articulation to DCIs across Grade-Bands</b>
<b>4.PS3.D; 4.ESS3.A</b>

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**6-ESS3-2 Earth and Human Activity**

Students who demonstrate understanding can:

**6-ESS3-2 Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.**

*Clarification Statement: Emphasis is on how some natural hazards, such as volcanic eruptions and severe weather, are preceded by phenomena that allow for reliable predictions, but others, such as earthquakes, occur suddenly with no notice, and thus are not yet predictable. Examples of natural hazards can be taken from interior processes (such as earthquakes and volcanic eruptions), surface processes (such as mass wasting and tsunamis), or severe weather events (such as hurricanes, tornadoes, and floods). Examples of data can include the locations, magnitudes, and frequencies of the natural hazards. Examples of technologies can be global (such as satellite systems to monitor hurricanes or forest fires) or local (such as building basements in tornado-prone regions or reservoirs to mitigate droughts).*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p>	<p><b>ESS3.B Natural Hazards</b> * Mapping the history of natural hazards in a region, combined with an understanding of related geologic forces can help forecast the locations and likelihoods of future events.</p>	<p><b>Patterns</b> * Graphs, charts, and images can be used to identify patterns in data.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time.</p>

**Guided Questions**

\* How is data collected to predict the risk or impact on an area due to a natural hazard event?

**Catholic Identity Connections**

- \* God gives humans the intelligence and resources needed to respond to the environment.
- \* Christian values and decision-making skills are applied to moral judgment questions.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Connections to Other DCIs in Sixth Grade**

**MS.PS3.C**

**Articulation to DCIs across Grade-Bands**

**3.ESS3.B; 4.ESS3.B**

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**6-ESS3-3 Earth and Human Activity**

Students who demonstrate understanding can:

**6-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.**

*Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Apply scientific principles to design an object, tool, process, or system.</p>	<p><b>ESS3.C Human Impacts on Earth Systems</b> * Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things. * Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise.</p>	<p><b>Cause and Effect</b> * Relationships can be classified as causal or correlational, and correlation does not necessarily imply causations.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time.</p>

**Guided Questions**

\* How do humans impact the Earth's environment?

**Catholic Identity Connections**

- \* As stewards of the Earth, God has entrusted us to authentically and responsibly use resources.
- \* We are called to care for and respect and sacredness of all creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*
- WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using research terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Mathematics**

- NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*
- NO.7** *Recognize and represent proportional relationships between quantities.*

**Connections to Other DCIs in Sixth Grade**

**MS.LS2.A; MS.LS2.C; MS.LS4.D**

**Articulation to DCIs across Grade-Bands**

**3.LS2.C; 3.LS4.D; 5.ESS3.C**

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**6-ESS3-4 Earth and Human Activity**

Students who demonstrate understanding can:

**6-ESS3-4 Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.**

*Clarification Statement: Examples of evidence include grade-appropriate databases on human populations and the rates of consumption of food and natural resources (such as freshwater, minerals, and energy). Examples of impacts can include changes to the appearance, composition, and structure of Earth's systems as well as the rates at which they change. The consequences of increases in human populations and consumption of natural resources are described by science, but science does not make the decisions for the actions society takes.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.</p>	<p><b>ESS3.C Human Impacts on Earth Systems</b> * Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Addresses Questions About the Natural and Material World</b> * Scientific knowledge can describe the consequences of actions but does not necessarily prescribe the decisions that society makes.</p>

**Guided Questions**

\* What is the relationship between human population and the consumption of natural resources?

**Catholic Identity Connections**

- \* God has entrusted humans as stewards of the Earth.
- \* From the tiniest organism to the most enormous creature, we are all in this together.
- \* We have a responsibility to respect the sacredness of all of God's creation.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- WHST.6-8.1** *Write arguments focused on discipline-specific content.*
- WHST.6-8.9** *Draw evidence from informational texts to support analysis, reflection, and research.*

**Mathematics**

- NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*
- NO.7** *Recognize and represent proportional relationships between quantities.*

**Connections to Other DCIs in Sixth Grade**

**MS.LS2.A; MS.LS2.C; MS.LS4.D**

**Articulation to DCIs across Grade-Bands**

**3.LS2.C; 3.LS4.D; 5.ESS3.C**

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**6.ESS3-5 Earth and Human Activity**

Students who demonstrate understanding can:

**6-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.**

*Clarification Statement: Examples of factors include human activities (such as fossil fuel combustion, cement production, and agricultural activity) and natural processes (such as changes in incoming solar radiation or volcanic activity). Examples of evidence can include tables, graphs, and maps of global and regional temperatures, atmospheric levels of gases such as carbon dioxide and methane, and the rate of human activities. Emphasis is on the major role that human activities play in causing the rise of global features.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 3-5 builds on K-2 experiences and progresses to specifying qualitative relationships.</p> <p>* Ask questions to identify and clarify evidence of an argument.</p>	<p><b>ESS3.D Global Climate Change</b> * Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in the current rise in Earth's mean surface temperature. Reducing the level of climate change and reducing human vulnerability to whatever climate changes do occur depend on the understanding of climate science, engineering capabilities, and other kinds of knowledge, such as understanding of human behavior and on applying that knowledge wisely in decisions and activities.</p>	<p><b>Stability and Change</b> * Stability might be disturbed either by sudden events or gradual changes that accumulate over time.</p>

**Guided Questions**

- \* What factors contribute to global temperature change?

**Catholic Identity Connections**

- \* God has entrusted humans as stewards of the Earth and as such we have a responsibility to be mindful of the impact of our decisions and actions on the Earth .
- \* Right and wrong are distinct.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using research terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Mathematics**

**NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*

**NO.7** *Recognize and represent proportional relationships between quantities.*

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<b>Connections to Other DCIs in Sixth Grade</b>	
<b>MS.PS3.A</b>	
<b>Articulation to DCIs across Grade-Bands</b>	
<b>NA</b>	

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**Sixth Grade Standards**

**6-ESS1 Earth's Place in the Universe**

- 6-ESS1-1** Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
- 6-ESS1-2** Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.
- 6-ESS1-3** Analyze and interpret data to determine scale properties of objects in the solar system.
- 6-ESS1-4** Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.

**6-ESS2 Earth's Systems**

- 6-ESS2-1** Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
- 6-ESS2-2** Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
- 6-ESS2-3** Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.
- 6-ESS2-4** Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.
- 6-ESS2-5** Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.
- 6-ESS2-6** Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determines regional climates.

**6-ESS3 Earth and Human Activity**

- 6-ESS3-1** Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.
- 6-ESS3-2** Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- 6-ESS3-3** Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.
- 6-ESS3-4** Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.
- 6-ESS3-5** Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

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<b>MS-ETS Engineering Design</b>		
Students who demonstrate understanding can:		
<b>MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</b>		
<b>MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.</b>		
<b>MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</b>		
<b>MS-ETS1-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.</b>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 6-8 builds on K-5 experiences and progresses to specifying relationships between variables, and clarifying arguments and models.</p> <p>* Define a design problem that can be solved through the development of an object, tool, process, or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions.</p> <p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to generate data to test ideas about designed systems, including those representing inputs and outputs.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that are likely to limit possible solutions.</p> <p><b>ETS1.B Developing Possible Solutions</b> * A solution needs to be tested, and then modified on the basis of the test results, in order to improve it. * There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. * Sometimes parts of different solutions can be combined to create a solution that is better than any of its predecessors. * Models of all kinds are important for testing solutions.</p>	<p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment. * The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p> <p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Evaluate competing design solutions based on jointly developed and agreed upon design criteria.</p>	<p><b>ETS1.C Optimizing the Design Solution</b> * Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process - that is, some of those characteristics may be incorporated into the new design. * The iterative process of testing the most promising solutions and modifying what is proposed on the basis of the test results leads to greater refinement and ultimately to an optimal solution.</p>	<p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment. * The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>
<b>Guided Questions</b>		
<p>* What factors affect the design process? <i>(ETS1-1)</i></p> <p>* How are potential design processes evaluated? <i>(ETS1-2)</i></p> <p>* How are differing possible solutions evaluated to determine the best possible outcome? <i>(ETS1-2)</i></p> <p>* How can data from a test be organized, analyzed, and interpreted? <i>(ETS1-3)</i></p> <p>* How can multiple data sets be used to redesign a better solution? <i>(ETS1-3)</i></p> <p>* How can models be used to demonstrate solutions and gather data? <i>(ETS1-4)</i></p>		
<b>Catholic Identity Connections</b>		
<p>* Catholics should take into consideration all moral and environmental implications in the design process. <i>(ETS1-1, ETS1-2, ETS1-3, ETS1-4)</i></p>		

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Curriculum Framework  
Science**

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Science**

<b>7-LS1-1 From Molecules to Organisms: Structures and Processes</b>		
<p>Students who demonstrate understanding can:</p> <p><b>7-LS1-1 Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.</b></p>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b>            Planning and carrying out investigations in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or solutions.</p> <p>* Conduct an investigation to produce data to serve as the basis for evidence that meet the goals of an investigation.</p>	<p><b>LS1.A Structure and Function</b>            * All living things are made up of cells, which is the smallest unit that can be said to be alive. An organism may consist of one single cell (unicellular) or many different numbers and types of cells (multicellular).</p>	<p><b>Scale, Proportion, and Quantity</b>            * Phenomena that can be observed at one scale may not be observable at another scale.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p style="text-align: center;"><b>Interdependence of Science, Engineering, and Technology</b>            * Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems.</p>
<b>Guided Questions</b>		
<p>* What is the basic structure of living things?</p>		
<b>Catholic Identity Connections</b>		
<p>* God created the structure and function of all living things.            * All creation is a system of interrelated parts.</p>		

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**WHST.6-8.2** *Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

NA

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS1-2 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-2 Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.**

*Clarification Statement: Emphasis is on the cell functioning as a whole system and the primary role of identified parts of the cell, specifically the nucleus, chloroplasts, mitochondria, cell membrane, and cell wall.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>LS1.A Structure and Function</b> * Within cells, special structures are responsible for particular functions, and the cell membrane forms the boundary that controls what enters and leaves the cell.</p>	<p><b>Structure and Function</b> * Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the relationships among its parts; therefore complex natural structures/systems can be analyzed to determine how they function.</p>

**Guided Questions**

\* How do the individual components of a cell function and interact?

**Catholic Identity Connections**

- \* God created the structure and function of all living things.
- \* Signs of God's love are abundant in the universe.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points..*

**Connections to Other DCIs in Seventh Grade**

**MS.LS3.A**

**Articulation to DCIs across Grade-Bands**

**4.LS1.A**

**Archdiocese of Louisville  
Curriculum Framework  
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**7-LS1-3 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.**

*Clarification Statement: Emphasis is on the conceptual understanding that cells form tissues and tissues form organs specialized for particular body functions. Examples could include the interaction of subsystems within a system and the normal functioning of those systems.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Use an oral and written argument supported by evidence to support or refute an explanation or a model for a phenomenon.</p>	<p><b>LS1.A Structure and Function</b> * In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions.</p>	<p><b>Systems and System Models</b> * Systems may interact with other systems; they may have subsystems and be a part of larger complex systems.</p>

**Guided Questions**

- \* What is the interaction of cells or groups of cells within a system or sub-system?
- \* How are cells organized into tissues, organs, and organ systems to form the organism?

**Catholic Identity Connections**

- \* We are many parts but one body.
- \* All creation is interdependent.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RI.6.8** *Delineate and evaluate the argument and specify claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.*
- WHST.6-8.1** *Write arguments focused on discipline-specific content.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

NA

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS1-4 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-4 Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Use an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.</p>	<p><b>LS1.B Growth and Development of Organisms</b> * Animals engage in characteristic behaviors that increase the odds of reproduction. * Plants reproduce in a variety of ways, sometimes depending on animal behavior and specialized features for reproduction.</p>	<p><b>Cause and Effect</b> * Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described by using probability.</p>

**Guided Questions**

- \* How does the structure of plants contribute to reproduction?
- \* How do animal behaviors contribute to reproduction?

**Catholic Identity Connections**

- \* God created all living things to be fruitful and multiply.
- \* God is always present in creation.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RI.6.8** *Delineate and evaluate the argument and specify claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.*

**WHST.6-8.1** *Write arguments focused on discipline-specific content.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Mathematics**

**6.SP.B.4** *Summarize, describe, and answer questions with regard to data in histograms, bar, line, circle, stem and leaf, dot plots, and box and whisker graphs.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS2.A**

**Articulation to DCIs across Grade-Bands**

**3.LS1.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS1-5 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.**

*Clarification Statement: Examples of local environmental conditions could include availability of food, light, space, and water.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.</p>	<p><b>LS1.B Growth and Development of Organisms</b> * Genetic factors as well as local conditions affect the growth of the adult plant.</p>	<p><b>Cause and Effect</b> * Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described by using probability.</p>

**Guided Questions**

- \* How do environmental and genetic factors influence the growth of organisms?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation.
- \* All creation is mutually dependent for survival.
- \* From the tiniest organism to the most enormous creature, we are all in this together.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RST.6-8.2** *Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.*
- WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*

**Mathematics**

- 6.SP.B.4** *Summarize, describe, and answer questions with regard to data in histograms, bar, line, circle, stem and leaf, dot plots, and box and whisker graphs.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS2.A**

**Articulation to DCIs across Grade-Bands**

**3.LS1.B; 3.LS3.A**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS1-6 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-6 Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.**

*Clarification Statement: Emphasis is on tracing movement of matter and flow of energy.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical connections between evidence and explanations.</p>	<p><b>LS1.C Organization for Matter and Energy Flow in Organization</b> * Plants, algae (including phytoplankton), and many microorganisms use the energy from light to make sugars (food) from carbon dioxide from the atmosphere and water through the process of photosynthesis, which also releases oxygen. These sugars can be used immediately or stored for growth or later use.</p> <p><b>PS3.D Energy in Chemical Processes and Everyday Life</b> * The chemical reaction by which plants produce complex food molecules (sugars) requires an energy input (i.e., from sunlight) to occur. In this reaction, carbon dioxide and water combine to form carbon-based organic molecules and release oxygen. <i>(secondary emphasis)</i></p>	<p><b>Energy and Matter</b> * Within a natural system, the transfer of energy drives the motion and/or cycling of matter.</p>

**Guided Questions**

\* What is the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation.
- \* We live in a world of harmony and balance.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RST.6-8.2** *Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.*
- WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*
- WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Connections to Other DCIs in Seventh Grade**

**MS.PS1.B; MS.ESS2.A**

**Articulation to DCIs across Grade-Bands**

**5.PS3.D; 5.LS1.C; 5.LS2.A**

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**7-LS1-7 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-7 Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to describe unobservable mechanisms.</p>	<p><b>LS1.C Organization for Matter and Energy Flow in Organisms</b> * Within individual organisms, food moves through a series of chemical reactions in which it is broken down and rearranged to form new molecules, to support growth, or to release energy.</p> <p><b>PS3.D Energy in Chemical Processes and Everyday Life</b> * Cellular respiration in plants and animals involve chemical reactions with oxygen that release stored energy. In these processes, complex molecules containing carbon react with oxygen to produce carbon dioxide and other materials. <i>(secondary emphasis)</i></p>	<p><b>Energy and Matter</b> * Matter is conserved because atoms are conserved in physical and chemical processes.</p>

**Guided Questions**

- \* How do cells release energy from food?
- \* How do cells transport materials?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation, including respiration.
- \* Signs of God's love are abundant.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.*

**Connections to Other DCIs in Seventh Grade**

**MS.PS1.B**

**Articulation to DCIs across Grade-Bands**

**5.PS3.D; 5.LS1.C; 5.LS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS1-8 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS1-8 Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 6-8 builds on K-5 experiences and progresses to evaluating the merit and validity of ideas and methods.</p> <p>* Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence.</p>	<p><b>LS1.D Information Processing</b> * Each sense receptor responds to different inputs (electromagnetic, mechanical, chemical), transmitting them as signals that travel along nerve cells to the brain. The signals are then processed in the brain, resulting in immediate behaviors or memories.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural systems.</p>

**Guided Questions**

\* What factors affect animal behavior?

**Catholic Identity Connections**

\* We are called to be totally present to the world around us.  
\* All creation is a gift.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

**4.LS1.D**

**Archdiocese of Louisville  
Curriculum Framework  
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**7-LS2-1 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**7-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.**

*Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing and interpreting data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to provide evidence for phenomena.</p>	<p><b>LS2.A Interdependent Relationships in Ecosystems</b> * Organisms, and populations of organisms, are dependent on their environmental interactions both with other living things and with nonliving factors. * In an ecosystem, organisms and populations with similar requirements for food, water, oxygen, or other resources may compete with each other for limited resources, access to which consequently constrains their growth and reproduction. * Growth of organisms and population increases are limited by access to resources.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p>

**Guided Questions**

\* What are the effects of resource availability on organisms in an ecosystem?

**Catholic Identity Connections**

- \* We are called to exercise responsible stewardship toward the Earth's resources.
- \* There are responsible ways to use and reuse resources.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Connections to Other DCIs in Seventh Grade**

**MS.ESS3.A; MS.ESS3.C**

**Articulation to DCIs across Grade-Bands**

**3.LS2.C; 3.LS4.D; 5.LS2.A**

**Archdiocese of Louisville  
Curriculum Framework  
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**7-LS2-2 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**7-LS2-2 Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.**

*Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct an explanation that includes qualitative or quantitative relationships between variables that predict phenomena.</p>	<p><b>LS2.A Interdependent Relationships in Ecosystems</b> * Predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. Mutually beneficial interactions, in contrast, may become so interdependent that each organism requires the other for survival. Although the species involved in these competitive, predatory, and mutually beneficial interactions vary across ecosystems, the patterns of interactions of organisms with their environments, both living and nonliving, are shared.</p>	<p><b>Patterns</b> * Patterns can be used to identify cause and effect relationships.</p>

**Guided Questions**

\* What patterns can be predicted about the interactions among organisms across multiple ecosystems?

**Catholic Identity Connections**

\* We are called to delight in and care for creation.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*
- WHST.6-8.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*
- SL.8.1** *Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.*
- SL.8.4** *Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS1.B**

**Articulation to DCIs across Grade-Bands**

**1.LS1.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS2-3 From Molecules to Organisms: Structures and Processes**

Students who demonstrate understanding can:

**7-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.**

*Clarification Statement: Emphasis is on describing the conservation of matter and flow of energy into and out of various ecosystems, and on defining the boundaries of the system.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to describe phenomena.</p>	<p><b>LS2.B Cycle of Matter and Energy Transfer in Ecosystems</b> * Food webs are models that demonstrate how matter and energy are transferred between producers, consumers, and decomposers as the three groups interact within an ecosystem. Transfers of matter into and out of the physical environment occur at every level. Decomposers recycle nutrients from dead plant or animal matter back to the soil in terrestrial environments or to the water in aquatic environments. The atoms that make up the organisms in an ecosystem are cycled repeatedly between the living and nonliving parts of the ecosystem.</p>	<p><b>Energy and Matter</b> * The transfer of energy can be tracked as energy flows through a natural system.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation.</p>

**Guided Questions**

- \* How do matter and energy flow among living and nonliving parts of an ecosystem?
- \* How do cells transport materials?

**Catholic Identity Connections**

- \* Our world is safely held in the loving hands of God.
- \* God continues to create in the world.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points..*

**Connections to Other DCIs in Seventh Grade**

**MS.PS1.B; MS.ESS2.A**

**Articulation to DCIs across Grade-Bands**

**5.LS2.A; 5.LS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS2-4 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**7-LS2-4 Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.**

*Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes in ecosystems.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomena or a solution to a problem.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science disciplines share common rules of obtaining and evaluating empirical evidence.</p>	<p><b>LS2.C Ecosystem Dynamics, Functioning, and Resilience</b> * Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations.</p>	<p><b>Stability and Change</b> * Small changes in one part of a system might cause large changes in another part.</p>

**Guided Questions**

\* How do physical or biological changes affect the populations of an ecosystem?

**Catholic Identity Connections**

- \* We are called to exercise responsible stewardship toward the Earth's resources.
- \* God's love is a sign of trust in us.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RI.6.8** *Delineate and evaluate the argument and specify claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.*
- WHST.6-8.1** *Write arguments focused on discipline-specific content.*
- WHST.6-8.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS4.C; MS.LS4.D; MS.ESS2.A; MS.ESS3.A; MS.ESS3.C**

**Articulation to DCIs across Grade-Bands**

**3.LS2.C; 3.LS4.D**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS2-5 Ecosystems: Interactions, Energy, and Dynamics**

Students who demonstrate understanding can:

**7-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.**

*Clarification Statement: Examples of ecosystem services could include water purification, nutrient recycling, and prevention of soil erosion. Examples of design solution constraints could include scientific, economic, and social considerations.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Evaluate competing design solutions based on jointly developed and agreed-upon design criteria.</p>	<p><b>LS2.C Ecosystem Dynamics, Functioning, and Resilience</b> * Biodiversity describes the variety of species found in Earth's terrestrial and oceanic ecosystems. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of its health.</p> <p><b>LS4.D Biodiversity and Humans</b> * Changes in biodiversity can influence humans' resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on - for example, water purification and recycling. <i>(secondary emphasis)</i></p> <p><b>ETS1.B Developing Possible Solutions</b> * There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. <i>(secondary emphasis)</i></p>	<p><b>Stability and Change</b> * Small changes in one part of a system might cause large changes in another part.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * The use of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Addresses Questions About the Natural and Material World</b> * Scientific knowledge can describe the consequences of actions but does not necessarily prescribe the decisions that society takes.</p>
<b>Guided Questions</b>		
* How can solutions be designed for maintaining biodiversity and ecosystem services?		
<b>Catholic Identity Connections</b>		
* We are called to use and reuse resources responsibly. * Christian values and decision-making skills are applied to judgment questions.		

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.8** *Distinguish between facts, reasoned judgment based on research findings, and speculation in a text.*

**RI.8.8** *Delineate and evaluate the argument and specify claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.*

**Mathematics**

**MP.4** *Model with mathematics.*

**NO6** *Use rate and ratio reasoning to solve real-world and mathematical problems.*

**Connections to Other DCIs in Seventh Grade**

**MS.ESS3.C**

**Articulation to DCIs across Grade-Bands**

**NA**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS3-1 Heredity: Inheritance and Variation of Traits**

Students who demonstrate understanding can:

**7-LS3-1 Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.**

*Clarification Statement: Emphasis is on conceptual understanding that changes in genetic material may result in making different proteins.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>LS3.A Inheritance of Traits</b> * Genes are located in the chromosomes of cells, with each chromosome pair containing two variants of each of many distinct genes. Each distinct gene chiefly controls the production of specific proteins, which in turn affects the traits of the individual. Changes (mutations) to genes can result in changes to proteins, which can affect the structures and functions of the organism and thereby change traits.</p> <p><b>LS3.B Variation of Traits</b> * In addition to variations that arise from sexual reproduction, genetic information can be altered because of mutations. Though rare, mutations may result in changes to the structure and function of proteins. Some changes are beneficial, others harmful, and some neutral to the organism.</p>	<p><b>Energy and Matter</b> * Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the shapes, composition, and relationships among its parts; therefore complex natural structures/systems can be analyzed to determine how they function.</p>

**Guided Questions**

\* How do structural changes in the genetic code affect an organism?

**Catholic Identity Connections**

- \* Differences in all living things are recognized as gifts and reflect the sacredness of each.
- \* We delight in the world around us.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
  - RST.6-8.4** *Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.*
  - RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*
  - SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points..*

**Connections to Other DCIs in Seventh Grade**

**MS.LS1.A; MS.LS4.A**

**Articulation to DCIs across Grade-Bands**

**3.LS3.A; 3.LS3.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS3-2 Heredity: Inheritance and Variation of Traits**

Students who demonstrate understanding can:

**7-LS3-2 Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.**

*Clarification Statement: Emphasis is on using models such as Punnett squares, diagrams, and simulations to describe the cause and effect relationship of gene transmission from parent(s) to offspring and resulting genetic variation.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>LS3.A Inheritance of Traits</b> * Variations of inherited traits between parent and offspring arise from genetic differences that result from the subset of chromosomes (and therefore genes) inherited.</p> <p><b>LS1.B Growth and Development of Organisms</b> * Organisms reproduce, either sexually or asexually, and transfer their genetic information to their offspring. <i>(secondary emphasis)</i></p> <p><b>LS3.B Variation of Traits</b> * In sexually reproducing organisms, each parent contributes half of the genes acquired (at random) by the offspring. Individuals have two of each chromosome and hence two alleles of each gene, one acquired from each parent. These versions may be identical or may differ from each other.</p>	<p><b>Energy and Matter</b> * Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the shapes, composition, and relationships among its parts; therefore complex natural structures/systems can be analyzed to determine how they function.</p>

**Guided Questions**

- \* How does asexual reproduction result in offspring with genetic information identical to the parent?
- \* How does sexual reproduction result in an offspring with genetic variation?

**Catholic Identity Connections**

- \* Differences in all living things are recognized as gifts and deserve respect.
- \* Our call from God is to love and respect all creation.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
  - RST.6-8.4** *Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.*
  - RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*
  - SL.8.5** *Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points..*
- Mathematics**
- MP.4** *Model with mathematics.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

**3.LS3.A; 3.LS3.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS4-1 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-1 Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.**

*Clarification Statement: Emphasis is on finding patterns of changes in the level of complexity of anatomical structures in organisms and the chronological order of fossil appearance in the rock layers.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>LS4.A Evidence of Common Ancestry and Diversity</b> * The collection of fossils and their placement in chronological order (e.g., through the location of the sedimentary layers in which they are found or through radioactive dating) is known as the fossil record. It documents the existence, diversity, extinction, and change of many life forms throughout the history of life on Earth.</p>	<p><b>Patterns</b> * Graphs, charts, and images can be used to identify patterns in data.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation.</p>

**Guided Questions**

\* How can the fossil record be used to document the existence, diversity, extinction, and change of life forms throughout history?

**Catholic Identity Connections**

- \* The innate value of all creation comes from having God as the creator.
- \* God is always present in creation.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
  - RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Connections to Other DCIs in Seventh Grade**

**MS.ESS1.C**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS4-2 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-2 Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.**

*Clarification Statement: Emphasis is on explanations of the evolutionary relationships among organisms in terms of similarity or differences of the appearance of anatomical structures.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Apply scientific ideas to construct an explanation for real-world phenomena, examples, or events.</p>	<p><b>LS4.A Evidence of Common Ancestry and Diversity</b> * Anatomical similarities and differences between various organisms living today and between them and organisms in the fossil record enable the reconstruction of evolutionary history and the influence of evolutionary descent.</p>	<p><b>Patterns</b> * Patterns can be used to identify cause and effect relationships.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Assumes an Order and Consistency in Natural Systems</b> * Science assumes that objects and events in natural systems occur in consistent patterns that are understandable through measurement and observation.</p>
<b>Guided Questions</b>		
<p>* How can anatomical similarities and differences be used to infer evolutionary relationships?</p>		
<b>Catholic Identity Connections</b>		
<p>* God created the universe and all the natural laws that govern creation. * The universe was created by God in stages that built upon one another over a period of time.</p>		

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*
- WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*
- WHST.6-8.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*
- SL.8.1** *Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.*
- SL.8.4** *Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS3.A; MS.LS3.B; MS.ESS1.C**

**Articulation to DCIs across Grade-Bands**

**3.LS4.A**

**Archdiocese of Louisville  
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Science**

**7-LS4-3 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-3 Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species (not including humans) to identify relationships not evident in the fully formed anatomy.**

*Clarification Statement: Emphasis is on inferring general patterns of relatedness among embryos of different organisms by comparing the macroscopic appearance of diagrams or pictures.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze displays of data to identify linear and nonlinear relationships.</p>	<p><b>LS4.A Evidence of Common Ancestry and Diversity</b> * Comparison of the embryological development of different species also reveals similarities that show relationships not evident in the fully-formed anatomy.</p>	<p><b>Patterns</b> * Graphs, charts, and images can be used to identify patterns in data.</p>

**Guided Questions**

\* How can embryological evidence be used to identify relationships between organisms?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation.
- \* The Holy Spirit helps guide our decisions.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
- RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*
- RST.6-8.9** *Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

NA

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS4-4 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-4 Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.**

*Clarification Statement: Emphasis is on using simple probability statements and proportional reasoning to construct explanations.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Construct an explanation that includes qualitative or quantitative relationships between variables that describe phenomena.</p>	<p><b>LS4.BA Natural Selection</b> * Natural selection leads to the predominance of certain traits in a population, and the suppression of others.</p>	<p><b>Cause and Effect</b> * Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.</p>

**Guided Questions**

\* How do genetic variations increase an organism's probability of survival and reproduction?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation.
- \* We have a responsibility to respect all of God's creation.

**Archdiocese of Louisville  
Curriculum Framework  
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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*
  - RST.6-8.9** *Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.*
  - WHST.6-8.2** *Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.*
  - WHST.6-8.9** *Draw evidence from literary or informational texts to support analysis, reflection, and research.*
  - SL.8.1** *Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.*
  - SL.8.4** *Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.*

**Mathematics**

- NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*
- NO.7** *Recognize and represent proportional relationships between quantities.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS2.A; MS.LS3.A; MS.LS3.B**

**Articulation to DCIs across Grade-Bands**

**3.LS3.B; 3.LS4.B**

**Archdiocese of Louisville  
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Science**

**7-LS4-5 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-5 Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.**

*Clarification Statement: Emphasis is on synthesizing information from reliable sources about the influence of humans on genetic outcomes in artificial selection (such as genetic modification, animal husbandry, gene therapy); and, on the impacts these technologies have on society as well as the technologies leading to these scientific discoveries.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 6-8 builds on K-5 experiences and progresses to evaluating the merit and validity of ideas and methods.</p> <p>* Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and method used, and describe how they are supported or not supported by evidence.</p>	<p><b>LS4.B Natural Selection</b> * In <i>artificial</i> selection, humans have the capacity to influence certain characteristics of organisms by selective breeding. One can choose desired parental traits, determined by genes, which are then passed on to offspring.</p>	<p><b>Cause and Effect</b> * Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Addresses Questions About the Natural and Material World</b> * Scientific knowledge can describe the consequences of actions but does not necessarily prescribe the decisions that society makes.</p>

**Guided Questions**

\* How have humans influenced the inheritance of desired traits in organisms?

**Catholic Identity Connections**

- \* We should take into consideration all moral and environmental implications in the design process.
- \* Right and wrong are distinct.

**Archdiocese of Louisville  
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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*  
**WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Connections to Other DCIs in Seventh Grade**

NA

**Articulation to DCIs across Grade-Bands**

4.LS1.D

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**7-LS4-6 Biological Evolution: Unity and Diversity**

Students who demonstrate understanding can:

**7-LS4-6 Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.**

*Clarification Statement: Emphasis is on using mathematical models, probability statements, and proportional reasoning to support explanations of trends in changes to populations over time.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Using Mathematics and Computational Thinking</b> Mathematical and computational thinking in 6-8 builds on K-5 experiences and progresses to identifying patterns in large data sets and using mathematical concepts to support explanations and arguments.</p> <p>* Use mathematical representations to support scientific conclusions and design solutions.</p>	<p><b>LS4.C Adaptation</b> * Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions. Traits that support successful survival and reproduction in the new environment become more common; those that do not become less common. Thus, the distribution of traits in a population changes.</p>	<p><b>Cause and Effect</b> * Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.</p>

**Guided Questions**

\* How have humans influenced the inheritance of desired traits in organisms?

**Catholic Identity Connections**

- \* We should take into consideration all moral and environmental implications in the design process.
- \* Choices must be made for the good of all of God's creation.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**Mathematics**

- MP.4** *Model with mathematics.*
- NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*
- NO.7** *Recognize and represent proportional relationships between quantities.*

**Connections to Other DCIs in Seventh Grade**

**MS.LS2.A; MS.LS2.C; MS.LS3.B**

**Articulation to DCIs across Grade-Bands**

**3.LS4.C**

**Archdiocese of Louisville  
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Science**

**Seventh Grade Standards**

**7-LS1 From Molecules to Organisms: Structures and Processes**

- 7-LS1-1** Construct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.
- 7-LS1-2** Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.
- 7-LS1-3** Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
- 7-LS1-4** Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.
- 7-LS1-5** Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- 7-LS1-6** Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
- 7-LS1-7** Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
- 7-LS1-8** Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

**7-LS2 Ecosystems: Interactions, Energy, and Dynamics**

- 7-LS2-1** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- 7-LS2-2** Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- 7-LS2-3** Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
- 7-LS2-4** Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
- 7-LS2-5** Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

**7-LS3 Heredity: Inheritance and Variation of Traits**

- 7-LS3-1** Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
- 7-LS3-2** Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variations.

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**7-LS4 Biological Evolution: Unity and Diversity**

- 7-LS4-1** Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.
- 7-LS4-2** Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.
- 7-LS4-3** Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.
- 7-LS4-4** Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
- 7-LS4-5** Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.
- 7-LS4-6** Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.

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Science**

**MS-ETS Engineering Design**

Students who demonstrate understanding can:

**MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.**

**MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.**

**MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.**

**MS-ETS1-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 6-8 builds on K-5 experiences and progresses to specifying relationships between variables, and clarifying arguments and models.</p> <p>* Define a design problem that can be solved through the development of an object, tool, process, or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions.</p> <p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to generate data to test ideas about designed systems, including those representing inputs and outputs.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that are likely to limit possible solutions.</p> <p><b>ETS1.B Developing Possible Solutions</b> * A solution needs to be tested, and then modified on the basis of the test results, in order to improve it. * There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. * Sometimes parts of different solutions can be combined to create a solution that is better than any of its predecessors. * Models of all kinds are important for testing solutions.</p>	<p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment. * The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>

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Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p> <p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Evaluate competing design solutions based on jointly developed and agreed upon design criteria.</p>	<p><b>ETS1.C Optimizing the Design Solution</b></p> <p>* Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process - that is, some of those characteristics may be incorporated into the new design.</p> <p>* The iterative process of testing the most promising solutions and modifying what is proposed on the basis of the test results leads to greater refinement and ultimately to an optimal solution.</p>	<p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b></p> <p>* All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment.</p> <p>* The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>
<b>Guided Questions</b>		
<p>* What factors affect the design process? <i>(ETS1-1)</i></p> <p>* How are potential design processes evaluated? <i>(ETS1-2)</i></p> <p>* How are differing possible solutions evaluated to determine the best possible outcome? <i>(ETS1-2)</i></p> <p>* How can data from a test be organized, analyzed, and interpreted? <i>(ETS1-3)</i></p> <p>* How can multiple data sets be used to redesign a better solution? <i>(ETS1-3)</i></p> <p>* How can models be used to demonstrate solutions and gather data? <i>(ETS1-4)</i></p>		
<b>Catholic Identity Connections</b>		
<p>* Catholics should take into consideration all moral and environmental implications in the design process. <i>(ETS1-1, ETS1-2, ETS1-3, ETS1-4)</i></p>		

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Curriculum Framework  
Science**

**8-PS1-1 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures (i.e., elements and organization of the Periodic Table).**

*Clarification Statement: Emphasis is on developing models of molecules that vary in complexity. Examples of simple molecules could include ammonia and methanol. Examples of extended structures could include sodium chloride or diamonds. Examples of molecular-level models could include drawings, 3-D ball and stick structures, or computer representations showing different molecules with different types of atoms.*

*Assessment Boundary: Assessment does not include bonding energy, discussing the ionic nature of subunits of complex structures, or a complete description of all individual atoms in a complex molecule or extended structure is not required.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to predict and/or describe phenomena.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * Substances are made from different types of atoms, which combine with one another in various ways. Atoms form molecules that range in size from two to thousands of atoms. * Solids may be formed from molecules, or they may be extended structures with repeating subunits (e.g., crystals).</p>	<p><b>Scale, Proportion, and Quantity</b> * Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small.</p>

**Guided Questions**

\* How can models be used to represent various molecular structures?

**Catholic Identity Connections**

- \* God is the creator of the universe and all molecules and structures.
- \* All creation is a system of interrelated parts.

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**  
**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Mathematics**  
**MP.2** *Reason abstractly and quantitatively.*  
**MP.4** *Model with mathematics.*  
**NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*

**Connections to Other DCIs in Eighth Grade**

**MS.ESS2.C**

**Articulation to DCIs across Grade-Bands**

**5.PS1.A**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS1-2 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.**

*Clarification Statement: Examples of reactions could include burning sugar or steel wool, fat reacting with sodium hydroxide, and mixing zinc with hydrogen chloride.*

*Assessment Boundary: Assessment is limited to analysis of the following properties: density, melting point, boiling point, solubility, flammability, and odor.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS1.A: Structure and Properties of Matter</b> * Each pure substance has characteristic physical and chemical properties (for any bulk quantity under given conditions) that can be used to identify it.</p> <p><b>PS1.B: Chemical Reactions</b> * Substances react chemically in characteristic ways. In a chemical process, the atoms that make up the original substances are regrouped into different molecules, and these new substances have different properties from those of the reactants.</p>	<p><b>Patterns</b> * Macroscopic patterns are related to the nature of microscopic and atomic-level structure.</p>
<b>Guided Questions</b>		
<p>* How can chemical and physical properties of substances be used to identify the substance?</p>		
<b>Catholic Identity Connections</b>		
<p>* God is the creator of the universe and the laws that govern it. * The universe is ordered and good.</p>		

**Archdiocese of Louisville  
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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.*

**DA&P6** *Summarize, describe, and answer questions with regard to data in histograms, bar, line, circle, stem and leaf, dot plots, and box and whisker graphs.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS3.D; MS.ESS2.A**

**Articulation to DCIs across Grade-Bands**

**NA**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS1-3 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-3 Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.**

*Clarification Statement: Emphasis is on natural resources that undergo a chemical process to form the synthetic material. Examples of new materials could include new medicine, foods, and alternative fuels.*

*Assessment Boundary: Assessment is limited to qualitative information.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 6-8 builds on K-5 and progresses to evaluating the merit and validity of ideas and methods.</p> <p>* Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or now supported by evidence.</p>	<p><b>PS1.A Structure and Properties of Matter</b> * Each pure substance has characteristic physical and chemical properties (for any bulk quantify under given conditions) that can be used to identify it.</p> <p><b>PS1.B Chemical Reactions</b> * Substances react chemically in characteristic ways. In a chemical process, the atoms that make up the original substances are regrouped into different molecules, and these new substances have different properties from those of the reactants.</p>	<p><b>Structure and Function</b> * Structures can be designed to serve particular functions by taking into account properties of different materials, and how materials can be shaped and used.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Interdependence of Science, Engineering, and Technology</b> * Engineering advances have led to important discoveries in virtually every field of science, and scientific discoveries have led to the development of entire industries and engineered systems.</p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * The uses of technologies and any limitation on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus, technology use varies from region to region and over time.</p>

**Guided Questions**

\* How have engineering advances and scientific discoveries impacted society?

**Catholic Identity Connections**

\* We should take into consideration all moral and environmental implications in the engineering process.

\* The Holy Spirit has a role in moral decision making.

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**WHST.6-8.8** *Gather relevant information from multiple print and digital sources, using research terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.*

**Connections to Other DCIs in Eighth Grade**

**MS.LS2.A; MS.LS4.D; MS.ESS3.A; MS.ESS3.C**

**Articulation to DCIs across Grade-Bands**

**NA**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS1-4 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-4. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.**

*Clarification Statement: Emphasis is on qualitative molecular-level models of solids, liquids, and gases to show that adding or removing thermal energy increases or decreases kinetic energy of the particles until a change of state occurs. Examples of models could include drawings and diagrams. Examples of particles could include molecules or inert atoms.*

*Examples of models could include drawings and diagrams. Examples of particles could include molecules or inert atoms. Examples of pure substances could include water, carbon dioxide, and helium.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to predict and/or describe phenomena.</p>	<p><b>PS1.4 Structure and Properties of Matter</b></p> <ul style="list-style-type: none"> <li>* Gases and liquids are made of molecules or inert atoms that are moving about relative to each other.</li> <li>* In a liquid, the molecules are constantly in contact with others; in a gas, they are widely spaced except when they happen to collide. In a solid, atoms are closely spaced and may vibrate in position, but do not change relative locations.</li> <li>* The changes of state that occur with variations in temperature or pressure can be described and predicted using these models of matter.</li> </ul> <p><b>PS3.A Definitions of Energy</b></p> <ul style="list-style-type: none"> <li>* The term "heat" as used in everyday language refers both to thermal energy (the motion of atoms or molecules within a substance) and the transfer of that thermal energy from one object to another. In science, heat is used only for this second meaning; it refers to the energy transferred due to the temperature difference between two objects (<i>secondary emphasis</i>)</li> <li>* The temperature of a system is proportional to the average internal kinetic energy and potential energy per atom or molecule (whichever is the appropriate building block for the system's material). The details of that relationship depend on the type of atom or molecule and the interactions among the atoms in the material. Temperature is not a direct measure of a system's total thermal energy. The total thermal energy (sometimes called the total internal energy) of a system depends jointly on the temperature, the total number of atoms in the system, and the state of the material (<i>secondary emphasis</i>).</li> </ul>	<p><b>Cause and Effect</b></p> <ul style="list-style-type: none"> <li>* Cause and effect relationships may be used to predict phenomena in natural or designed systems.</li> </ul>

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Science**

**Guided Questions**

- \* How can the relationship between thermal energy, particle motion, temperature, and pressure be determined?
- \* How can this relationship be demonstrated in a model?
- \* How do pressure changes affect thermal energy?

**Catholic Identity Connections**

- \* We should take into consideration all moral and environmental implications in scientific research and discovery.
- \* God created the overall laws and principles under which the universe as we know and study it came to be. We are all functioning within those principles, just as we function under moral and theological obligations towards a greater good.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*
- Mathematics**
- NO.6** *Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.*
- NO.6** *Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.*

**Connections to Other DCIs in Eighth Grade**

**MS.ESS2.C**

**Articulation to DCIs across Grade-Bands**

**NA**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS1-5 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-5 Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.**

*Clarification Statement: Emphasis is on law of conservation of matter and on physical models or drawings, including digital forms, that represent atoms.*

*Assessment Boundary: Assessment does not include the use of atomic masses or intermolecular forces.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to describe unobservable mechanisms.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena</b> * Laws are regularities or mathematical descriptions of natural phenomena.</p>	<p><b>PS1.B Chemical Reactions</b> * Substances react chemically in characteristic ways. In a chemical process, the atoms that make up the original substances are regrouped into different molecules, and these new substances have different properties from those of the reactants. * The total number of each type of atom is conserved, and thus the mass does not change.</p>	<p><b>Energy and Matter</b> * Matter is conserved because atoms are conserved in physical and chemical processes.</p>

**Guided Questions**

\* How can the law of conservation of matter be evidenced in the real world (e.g., balanced symbolic equations)?

**Catholic Identity Connections**

\* God gives us the intelligence and resources to explore and broaden our understanding of matter in the universe.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

<b>ELA Literacy</b>	
<b>RST.6-8.7</b>	<i>Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</i>
<b>Mathematics</b>	
<b>MP.2</b>	<i>Reason abstractly and quantitatively.</i>
<b>MP.4</b>	<i>Model with mathematics.</i>
<b>NO.6</b>	<i>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</i>

**Connections to Other DCIs in Eighth Grade**

**MS.LS1.C; MS.LS2.B; MS.ESS2.A**

**Articulation to DCIs across Grade-Bands**

**5.PS1.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS1-6 Matter and Its Interactions**

Students who demonstrate understanding can:

**8-PS1-6 Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.**

*Clarification Statement: Emphasis is on the design, controlling the transfer of energy to the environment, and modification of a device using factors such as type and concentration of a substance. Examples of designs could involve chemical reactions such as dissolving ammonium chloride or calcium chloride.*

*Assessment Boundary: Assessment is limited to the criteria of amount, time, and temperature of substance in testing the device.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific knowledge, principles, and theories.</p> <p>* Undertake a design project, engaging in the design cycle, to construct and/or implement a solution that meets specific design criteria and constraints.</p>	<p><b>PS1.B Chemical Reactions</b> * Some chemical reactions release energy, others store energy.</p> <p><b>ETS1.B Developing Possible Solutions</b> * A solution needs to be tested, and then modified on the basis of the test results, in order to improve it. <i>(secondary emphasis)</i></p> <p><b>ETS1.C Optimizing the Design Solution</b> * Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process - that is, some of the characteristics may be incorporated into the new design. <i>(secondary emphasis)</i> * The iterative process of testing the most promising solutions and modifying what is proposed on the basis of the test results leads to greater refinement and ultimately to an optimal solution. <i>(secondary emphasis)</i></p>	<p><b>Energy and Matter</b> * The transfer of energy can be tracked as energy flows through a designed or natural system.</p>

**Guided Questions**

- \* How can data results be evaluated to determine whether energy is released or absorbed?
- \* How can the results be used to modify the rate of energy transfer?

**Catholic Identity Connections**

- \* We should take into consideration all moral and environmental implications in scientific research and discovery.

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS3.D**

**Articulation to DCIs across Grade-Bands**

**NA**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS2-1 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**8-PS2-1 Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.**

*Clarification Statement: Examples of practical problems could include the impact of collisions between two cars, between a car and stationary objects, and between a meteor and a space vehicle.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Apply scientific ideas or principles to design an object, tool, process, or system.</p>	<p><b>PS2.A Forces and Motion</b> * For any pair of interacting objects, the force exerted by the first object on the second object is equal in strength to the force that the second object exerts on the first, but in the opposite direction (Newton's Third Law).</p>	<p><b>Systems and System Models</b> * Models can be used to represent systems and their interactions - such as inputs, processes and outputs - and energy and matter flows within systems.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>

**Guided Questions**

- \* How does the mass of two objects affect the distance each traveled in an impact collision?
- \* What are real-world examples of the third law of motion?

**Catholic Identity Connections**

- \* God created us with the ability to use reasoning skills to solve problems and explain solutions.

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.*

**NO.6** *Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS3.C**

**Articulation to DCIs across Grade-Bands**

**3.PS2.A**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS2-2 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**8-PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.**

*Clarification Statement: Emphasis is on balanced (Newton's First Law) and unbalanced forces in a system, qualitative comparisons of forces, mass and changes in motion (Newton's Second Law), frame of reference, and specification of units.*

*Assessment Boundary: Assessment is limited to forces and changes in motion in one dimension in an inertial reference frame and to change in one variable at a time. Assessment does not include the use of trigonometry.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or design solutions.</p> <p>* Plan an investigation individually and collaboratively, and in the design identify independent and dependent variables and controls, what tools are needed to do the gathering, how measurements will be recorded, and how many data are needed to support a claim.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS2.A Forces and Motion</b> * The motion of an object is determined by the sum of the forces acting on it; if the total force on the object is not zero, its motion will change. The greater the mass of the object, the greater the force needed to achieve the same change in motion. For any given object, a large force causes a larger change in motion. * All positions of objects and the directions of forces and motions must be described in an arbitrarily chosen reference frame and arbitrarily chosen units of size. In order to share information with other people, these choices must also be shared.</p>	<p><b>Stability and Change</b> * Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and forces at different scales.</p>

**Guided Questions**

- \* What factors affect a change in inertia?
- \* How do speed or mass affect the velocity of an object?

**Catholic Identity Connections**

- \* God has given each of us reason, which allows us to plan investigations that help determine what is happening in various situations.
- \* Our God-given intellect is something to be used to understand the universe around us. This universe that is created is good and God wants us to get to know it.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS3.A; MS.PS3.B; MS.ESS2.C**

**Articulation to DCIs across Grade-Bands**

**3.PS2.A**

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Science**

**8-PS2-3 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**8-PS2-3 Ask questions about the data to determine the factors that affect the strength of electric and magnetic forces.**

*Clarification Statement: Examples of devices that use electric and magnetic forces could include electromagnets, electric motors, or generators. Examples of data could include the effect of the number of turns of wire on the strength of any electromagnet, or the effect of increasing the number or strength of magnets on the speed of an electric motor.*

*Assessment Boundary: Assessment about questions that require quantitative answers is limited to proportional reasoning and algebraic thinking.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 6-8 builds on K-5 experiences and progresses to specifying relationships between variables, and clarifying arguments and models.</p> <p>* Ask questions that can be investigated within the scope of the classroom, outdoor environment, and museums and other public facilities with available resources and, when appropriate, frame a hypothesis based on observations and scientific principles.</p>	<p><b>PS2.B Types of Interactions</b> * Electric and magnetic (electromagnetic) forces can be attractive or repulsive, and their sizes depend on the magnitudes of the charges, currents, or magnetic strengths involved and on the distances between the interacting objects.</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p>

**Guided Questions**

- \* How can the strength of magnetic forces be determined?
- \* How are electromagnetic forces used in motors?

**Catholic Identity Connections**

- \* God has given us the ability to consider information and formulate questions.
- \* The universe is good and worth exploring.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**Connections to Other DCIs in Eighth Grade**

NA

**Articulation to DCIs across Grade-Bands**

**3.PS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS2-4 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**8-PS2-4 Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the mass of interacting objects.**

*Clarification Statement: Examples of evidence for arguments could include data generated from simulations or digital tools, and charts displaying mass, strength of interaction, distance from the sun, and orbital periods of objects within the solar system.*

*Assessment Boundary: Assessment does not include Newton's Law of Gravitation or Kepler's Laws.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed worlds.</p> <p>* Construct and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS2.B Types of Interactions</b> * Gravitational forces are always attractive. There is a gravitational force between any two masses, but it is very small except when one or both of the objects have large mass (e.g., Earth and the sun).</p>	<p><b>Systems and System Models</b> * Models can be used to represent systems and their interactions - such as inputs, processes, and outputs - and energy and matter flows within systems.</p>

**Guided Questions**

\* Why are gravitational interactions dependent on an object's mass?

**Catholic Identity Connections**

\* God expects that our interactions, including arguments to support a point, with others are respectful.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**WHST.6-8.1**      *Write arguments focused on discipline-specific content.*

**Connections to Other DCIs in Eighth Grade**

**MS.ESS1.A; MS.ESS1.B; MS.ESS2.C**

**Articulation to DCIs across Grade-Bands**

**5.PS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS2-5 Motion and Stability: Forces and Interactions**

Students who demonstrate understanding can:

**8-PS2-5 Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.**

*Clarification Statement: Examples of this phenomenon could include the interactions of magnets, electrically-charged strips of tape, and electrically-charged pith balls. Examples of investigations could include first-hand experiences or simulations.*

*Assessment Boundary: Assessment is limited to electric and magnetic fields, and limited to qualitative evidence for the existence of fields.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or design solutions.</p> <p>* Conduct an investigation and evaluate the experimental design to produce data to serve as the basis for evidence that can meet the goals of the investigation.</p>	<p><b>PS2.B Types of Interactions</b> * Forces that act at a distance (electric, magnetic, and gravitational) can be explained by fields that extend through space and can be mapped by their effect on a test object (a charged object, or a ball, respectively).</p>	<p><b>Cause and Effect</b> * Cause and effect relationships may be used to predict phenomena in natural or designed systems.</p>

**Guided Questions**

- \* How do gravitational interactions affect the motion of satellites?
- \* What factors influence the attractiveness or repulsivity of magnetic or electric forces?

**Catholic Identity Connections**

- \* God is the creator of the universe and the laws that govern it.
- \* We live in a world of balance and harmony.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

- ELA Literacy**
- RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*
- WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Connections to Other DCIs in Eighth Grade**

NA

**Articulation to DCIs across Grade-Bands**

**3.PS2.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS3-1 Energy**

Students who demonstrate understanding can:

**8-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.**

*Clarification Statement: Emphasis is on descriptive relationships between kinetic energy and mass separately from kinetic energy and speed. Examples could include riding a bicycle at different speeds, rolling different sizes of rocks downhill, and getting hit by a wiffle ball versus a tennis ball.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Construct and interpret graphical displays of data to identify linear and nonlinear relationships.</p>	<p><b>PS3.A Definitions of Energy</b> * Motion energy is properly called kinetic energy; it is proportional to the mass of the moving object and grows with the square of its speed.</p>	<p><b>Scale, Proportion, and Quantity</b> * Proportional relationships (e.g., speed as the ratio of distance traveled to time taken) among different types of quantities provide information about the magnitude of properties and processes.</p>
<b>Guided Questions</b>		
<p>* How can real-world examples be used to describe the relationship between kinetic energy, mass, and speed?</p> <p>* How can various graphical displays (e.g., bar graphs, line graphs, pie graphs) be used to record and interpret data about kinetic energy?</p>		
<b>Catholic Identity Connections</b>		
<p>* God gives humans the intelligence needed to interpret data.</p>		

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**RST.6-8.7** *Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities.*

**NO.6** *Understand the concept of a unit ratio with a ratio  $a$  to  $b$  with  $b$  not equal to 0, and use ratio language in the context of a ratio relationship.*

**NO.7** *Recognize and represent proportional relationships between quantities.*

**A.8** *Solve, graph, and check the solution to any one-variable linear equation or inequality.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS2.A**

**Articulation to DCIs across Grade-Bands**

**4.PS3.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS3-2 Energy**

Students who demonstrate understanding can:

**8-PS3-2 Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.**

*Clarification Statement: Emphasis is on relative amounts of potential energy, not on calculations of potential energy. Examples of objects within systems interacting at varying distances could include the Earth and either a roller coaster cart at varying positions on a hill or objects at varying heights on shelves, changing the direction/orientation of a magnet, and a balloon with static electrical charge being brought closer to a classmate's hair. Examples of models could include representations, diagrams, pictures, and written descriptions of systems.*

*Assessment Boundary: Assessment is limited to two objects and the electric, magnetic, and gravitational interactions.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to describe unobservable mechanisms.</p>	<p><b>PS1.A Definitions of Energy</b> * A system of objects may also contain stored (potential) energy, depending on their relative positions.</p> <p><b>PS3.C Relationship Between Energy and Forces</b> * When two objects interact, each one exerts a force on the other that can cause energy to be transferred to or from the object.</p>	<p><b>Systems and System Models</b> * Models can be used to represent systems and their interactions - such as inputs, processes, and outputs - and energy and matter flows within systems.</p>

**Guided Questions**

- \* How can a model be used to determine what factors can affect the potential energy of an object?
- \* How can the kinetic energy of one object be used to change the potential energy of a second object?

**Catholic Identity Connections**

- \* God created the world and the laws that govern it.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.8.5** *Include multimedia components and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.*

**Connections to Other DCIs in Eighth Grade**

NA

**Articulation to DCIs across Grade-Bands**

NA

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS3-3 Energy**

Students who demonstrate understanding can:

**8-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.**

*Clarification Statement: Examples of devices could include an insulated box, a solar cooker, and a Styrofoam cup.*

*Assessment Boundary: Assessment does not include calculating the total amount of thermal energy transferred.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Constructing Explanations and Designing Solutions</b> Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.</p> <p>* Apply scientific ideas or principles to design, construct, and test a design of an object, tool, process, or system.</p>	<p><b>PS3.A Definitions of Energy</b> * Temperature is a measure of the average kinetic energy of particles of matter. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present.</p> <p><b>PS3.B Conservation of Energy and Energy Transfer</b> * Energy is spontaneously transferred out of hotter regions or objects and into colder ones.</p> <p><b>ETS1.A Defining and Delimiting an Engineering Problem</b> * The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that is likely to limit possible solutions. <i>(secondary emphasis)</i></p> <p><b>ETS1.B Developing Possible Solutions</b> * A solution needs to be tested and then modified on the basis of the test results in order to improve it. There are systematic processes for evaluating solutions with respect to how well they meet criteria and constraints of a problem. <i>(secondary emphasis)</i></p>	<p><b>Energy and Matter</b> * The transfer of energy can be tracked as energy flows through a designed or natural system.</p>

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Curriculum Framework  
Science**

**Guided Questions**

- \* What materials are best for minimizing or maximizing thermal energy transfer?
- \* Using data from a trial, what changes can be made to the device to improve efficiency?

**Catholic Identity Connections**

- \* God created the natural processes that govern all creation.
- \* In giving us dominion over the Earth, God gave us the responsibility to care for it.

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS1.B; MS.ESS2.A; MS.ESS2.C; MS.ESS2.D**

**Articulation to DCIs across Grade-Bands**

**4.PS3.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8.PS3-4 Energy**

Students who demonstrate understanding can:

**8-PS3-4 Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.**

*Clarification Statement: Examples of experiments could include comparing final water temperatures after different masses of ice melted in the same volume of water with the same initial temperature, the temperature change of samples of different materials with the same mass as they cool or heat in the environment, or the same material with different masses when a specific amount of energy is added.*

*Assessment Boundary: Assessment does not include calculating the total amount of thermal energy transferred.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in 6-8 builds on K-5 experiences and progresses to include investigations that use multiple variables and provide evidence to support explanations or design solutions.</p> <p>* Plan an investigation individually and collaboratively, and in the design, identify independent and dependent variables and controls, what tools are needed to do the gathering, how measurements will be recorded, and how many data are needed to support a claim.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS3.A Definitions of Energy</b> * Temperature is a measure of the average kinetic energy of particles of matter. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present.</p> <p><b>PS3.B Conservation of Energy and Energy Transfer</b> * The amount of energy transfer needed to change the temperature of a matter sample by a given amount depends on the nature of the matter, the size of the sample, and the environment.</p>	<p><b>Scale, Proportion, and Quantity</b> * Proportional relationships (e.g., speed as the ratio of distance traveled to time taken) among different types of quantities provide information about the magnitude of properties and processes.</p>

**Guided Questions**

- \* How can the thermal energy of one substance be transferred to another substance?
- \* How can real-world scenarios explain the relationship between energy, matter, and mass?

**Catholic Identity Connections**

- \* God has given us the ability to design and carry out investigations to answer a given or self-generated question.
- \* We explore, experiment, and attempt to understand God's overall universe, of which we are a part.

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Curriculum Framework  
Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.3** *Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.*

**WHST.6-8.7** *Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS2.A**

**Articulation to DCIs across Grade-Bands**

**4.PS3.C**

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Curriculum Framework  
Science**

**8-PS3-5 Energy**

Students who demonstrate understanding can:

**8-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.**

*Clarification Statement: Examples of empirical evidence used in arguments could include an inventory or other representation of the energy before and after the transfer in the form of temperature changes or motion of object.*

*Assessment Boundary: Assessment does not include calculations of energy.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed worlds.</p> <p>* Construct, use, and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS3.B Conservation of Energy and Energy Transfer</b> * When the motion energy of an object changes, there is inevitably some other change in energy at the same time.</p>	<p><b>Energy and Matter</b> * Energy may take different forms (e.g., energy in fields, thermal energy, energy of motion).</p>

**Guided Questions**

\* What evidence is needed to support the claim that energy is transferred between two substances or objects?

**Catholic Identity Connections**

- \* God is the creator of the universe and the laws that govern it.
- \* Our world is safely held in the loving hands of God.

**Archdiocese of Louisville  
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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**RST.6-8.1** *Cite specific textual evidence to support analysis of science and technical texts.*

**WHST.6-8.1** *Write arguments focused on discipline-specific content.*

**Mathematics**

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**NO.6** *Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities.*

**NO.7** *Recognize and represent proportional relationships between quantities.*

**A.8** *Solve, graph, and check the solution to any one-variable linear equation or inequality.*

**Connections to Other DCIs in Eighth Grade**

**MS.PS2.A**

**Articulation to DCIs across Grade-Bands**

**4.PS3.C**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS4-1 Waves and Their Applications in Technologies for Information Transfer**

Students who demonstrate understanding can:

**8-PS4-1 Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.**

*Clarification Statement: Emphasis is on describing waves with both qualitative and quantitative thinking.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Using Mathematics and Computational Thinking</b> Mathematical and computational thinking at the 6-8 level builds on K-5 and progresses to identifying patterns in large data sets and using mathematical concepts to support explanations and arguments.</p> <p>* Use mathematical representations to describe and/or support scientific conclusions and design solutions.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Scientific Knowledge Is Based on Empirical Evidence</b> * Science knowledge is based upon logical and conceptual connections between evidence and explanations.</p>	<p><b>PS4.A Wave Properties</b> * A simple wave has a repeating pattern with a specific wavelength, frequency, and amplitude.</p>	<p><b>Patterns</b> * Graphs and charts can be used to identify patterns in data.</p>

**Guided Questions**

\* How can the relationship between frequency and wavelength be represented in a graph?

**Catholic Identity Connections**

\* God is the creator of the universe and the laws that govern it.

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.8.5** *Include multimedia components and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.*

**Mathematics**

**MP.2** *Reason abstractly and quantitatively.*

**MP.4** *Model with mathematics.*

**NO.6** *Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities.*

**NO.6** *Understand the concept of a unit ratio with a ratio  $a$  to  $b$  with  $b$  not equal to 0, and use ratio language in the context of a ratio relationship.*

**NO.7** *Recognize and represent proportional relationships between quantities.*

**A.8** *Solve, graph, and check the solution to any one-variable linear equation or inequality.*

**Connections to Other DCIs in Eighth Grade**

**NA**

**Articulation to DCIs across Grade-Bands**

**4.PS3.A; 4.PS3.B; 4.PS4.A**

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Science**

**8-PS4-2 Waves and Their Applications in Technologies for Information Transfer**

Students who demonstrate understanding can:

**8-PS4-2 Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.**

*Clarification Statement: Emphasis is on both light and mechanical waves. Examples of models could include drawings, simulations, and written descriptions.*

*Assessment Boundary: Assessment is limited to qualitative applications pertaining to light and mechanical waves.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop and use a model to describe phenomena.</p>	<p><b>PS4.A Wave Properties</b> * A sound wave needs a medium through which it is transmitted.</p> <p><b>PS4.B Electromagnetic Radiation</b> * When light shines on an object, it is reflected, absorbed, or transmitted through the object, depending on the object's material and the frequency (color) of the light. * The path that light travels can be traced as straight lines, except at surfaces between different transparent materials (e.g., air and water, air and glass) where the light path bends. * A wave model of light is useful for explaining brightness, color, and the frequency-dependent bending of light at a surface between media. * However, because light can travel through space, it cannot be a matter wave, like sound or water waves.</p>	<p><b>Structure and Function</b> * Structures can be designed to serve particular functions by taking into account properties of different materials, and how materials can be shaped and used.</p>

**Guided Questions**

- \* How can waves be transmitted, absorbed, or reflected through various materials?
- \* How can these waves be represented in real-world examples?

**Catholic Identity Connections**

- \* Just as waves are reflected, absorbed, or transmitted, our Catholic faith is reflected, absorbed, and transmitted to those around us.

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**Archdiocese of Louisville ELA and Mathematics Standards Connections**

**ELA Literacy**

**SL.8.5** *Include multimedia components and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.*

**Connections to Other DCIs in Eighth Grade**

**MS.LS1.D**

**Articulation to DCIs across Grade-Bands**

**4.PS4.B**

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**8-PS4-3 Waves and Their Applications in Technologies for Information Transfer**

Students who demonstrate understanding can:

**8-PS4-3 Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.**

*Clarification Statement: Emphasis is on a basic understanding that waves can be used for communication purposes. Examples could include using fiber optic cable to transmit light pulses, radio wave pulses in wifi devices, and conversion of stored binary patterns to make sound or text on a computer screen.*

*Assessment Boundary: Assessment does not include binary counting. Assessment does not include the specific mechanism of any given device.*

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Obtaining, Evaluating, and Communicating Information</b> Obtaining, evaluating, and communicating information in 6-8 builds on K-5 and progresses to evaluating the merit and validity of ideas and methods.</p> <p>* Integrate qualitative scientific and technical information in written text with that contained in media and visual displays to clarify claims and findings.</p>	<p><b>PS4.C Information Technologies and Instrumentation</b> * Digitized signals (sent as wave pulses) are a more reliable way to encode and transmit information.</p>	<p><b>Structure and Function</b> * Structures can be designed to serve particular functions.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Engineering, Technology, and Applications of Science</b></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * Technologies extend the measurement, exploration, modeling, and computational capacity of scientific investigations.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><b>Connections to Nature of Science</b></p> <p><b>Science Is a Human Endeavor</b> * Advances in technology influence the progress of science and science has influenced advances in technology.</p>
<b>Guided Questions</b>		
* How have advances in technology influenced the progress of science and how have advances in science influenced the progress of technology?		
<b>Catholic Identity Connections</b>		
* We have a moral obligation to use technology in a responsible way.		

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Science**

**Archdiocese of Louisville ELA and Mathematics Standards Connections**

<b>ELA Literacy</b>	
<b>RST.6-8.1</b>	<i>Cite specific textual evidence to support analysis of science and technical texts.</i>
<b>RST.6-8.2</b>	<i>Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.</i>
<b>RST.6-8.9</b>	<i>Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</i>
<b>WHST.6-8.9</b>	<i>Draw evidence from informational texts to support analysis, reflection, and research.</i>

**Connections to Other DCIs in Eighth Grade**

NA

**Articulation to DCIs across Grade-Bands**

4.PS4.C

**Archdiocese of Louisville  
Curriculum Framework  
Science**

**Eighth Grade Standards**

**8-PS1 Matter and Its Interactions**

- 8-PS1-1** Develop models to describe the atomic composition of simple molecules and extended structures.
- 8-PS1-2** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
- 8-PS1-3** Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- 8-PS1-4** Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
- 8-PS1-5** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
- 8-PS1-6** Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

**8-PS2 Motion and Stability: Forces and Interactions**

- 8-PS2-1** Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
- 8-PS2-2** Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.
- 8-PS2-3** Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- 8-PS2-4** Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.
- 8-PS2-5** Construct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

**8-PS3 Energy**

- 8-PS3-1** Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.
- 8-PS3-2** Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.
- 8-PS3-3** Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
- 8-PS3-4** Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
- 8-PS3-5** Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.

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**8-PS4 Waves and Their Applications in Technologies for Information Transfer**

- 8-PS4-1** Use mathematical representations to describe a simple model for waves that include how the amplitude of a wave is related to the energy in a wave.
- 8-PS4-2** Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.
- 8-PS4-3** Integrate quantitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.

**Archdiocese of Louisville  
Curriculum Framework  
Science**

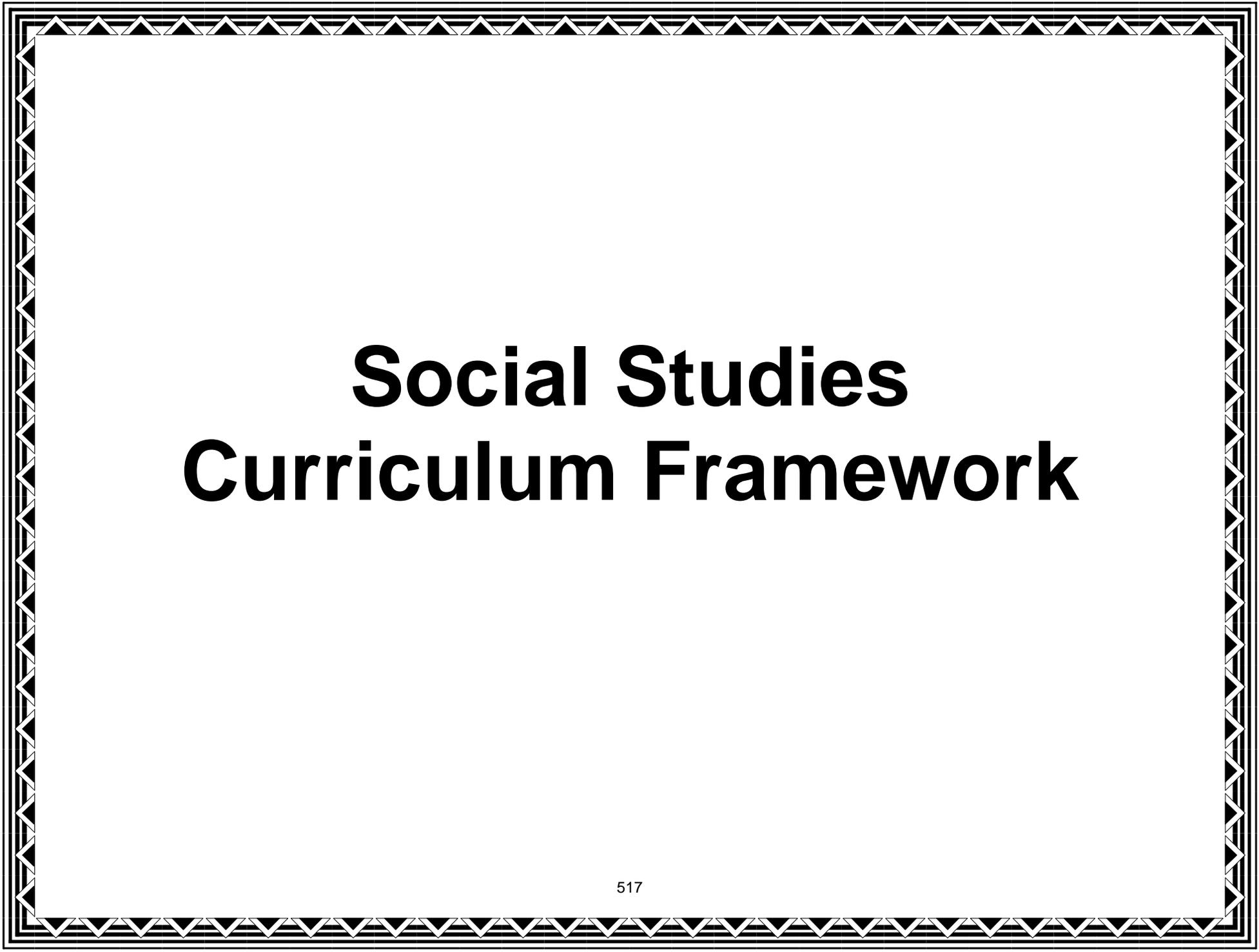
<b>MS-ETS Engineering Design</b>		
Students who demonstrate understanding can:		
<b>MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</b>		
<b>MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.</b>		
<b>MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</b>		
<b>MS-ETS1-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.</b>		
Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in 6-8 builds on K-5 experiences and progresses to specifying relationships between variables, and clarifying arguments and models.</p> <p>* Define a design problem that can be solved through the development of an object, tool, process, or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions.</p> <p><b>Developing and Using Models</b> Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.</p> <p>* Develop a model to generate data to test ideas about designed systems, including those representing inputs and outputs.</p>	<p><b>ETS1.A Defining and Delimiting Engineering Problems</b> * The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that are likely to limit possible solutions.</p> <p><b>ETS1.B Developing Possible Solutions</b> * A solution needs to be tested, and then modified on the basis of the test results, in order to improve it. * There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. * Sometimes parts of different solutions can be combined to create a solution that is better than any of its predecessors. * Models of all kinds are important for testing solutions.</p>	<p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> * All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment. * The uses of technologies and limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions.</p>

**Archdiocese of Louisville  
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Science**

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
<p><b>Analyzing and Interpreting Data</b> Analyzing data in 6-8 builds on K-5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.</p> <p>* Analyze and interpret data to determine similarities and differences in findings.</p> <p><b>Engaging in Argument from Evidence</b> Engaging in argument from evidence in 6-8 builds on K-5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.</p> <p>* Evaluate competing design solutions based on jointly developed and agreed upon design criteria.</p>	<p><b>ETS1.C Optimizing the Design Solution</b></p> <p>* Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process - that is, some of those characteristics may be incorporated into the new design.</p> <p>* The iterative process of testing the most promising solutions and modifying what is proposed on the basis of the test results leads to greater refinement and ultimately to an optimal solution.</p>	
<b>Guided Questions</b>		
<p>* What factors affect the design process? (ETS1-1)</p> <p>* How are potential design processes evaluated? (ETS1-2)</p> <p>* How are differing possible solutions evaluated to determine the best possible outcome? (ETS1-2)</p> <p>* How can data from a test be organized, analyzed, and interpreted? (ETS1-3)</p> <p>* How can multiple data sets be used to redesign a better solution? (ETS1-3)</p> <p>* How can models be used to demonstrate solutions and gather data? (ETS1-4)</p>		
<b>Catholic Identity Connections</b>		
<p>* Catholics should take into consideration all moral and environmental implications in the design process. (ETS1-1, ETS1-2, ETS1-3, ETS1-4)</p>		

**Archdiocese of Louisville  
Curriculum Framework  
Science**

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# **Social Studies Curriculum Framework**

# Social Studies Curriculum Framework

## Archdiocese of Louisville

*College, Career, and Civic Life: C3 Framework for Social Studies Standards* provides a vision for Social Studies education. It is designed to guide states, districts, and dioceses in the creation of Social Studies standards.

### Inquiry Arc

In today's world, the Archdiocese of Louisville recognizes that inquiry is at the center of all learning. The Inquiry Arc represents a frame for teaching and learning Social Studies. There are four dimensions to the Inquiry Arc which should be integrated into daily instruction.

Dimension 1: Developing Questions and Planning Inquiries

Dimension 2: Applying Disciplinary Tools and Concepts (Civics, Economics, Geography, and History)

Dimension 3: Evaluating Sources and Using Evidence

Dimension 4: Communicating Conclusions and Taking Informed Action

The Archdiocese of Louisville Social Studies Curriculum Framework was adapted from the **New York State K-8 Social Studies Framework**. That document was created by the New York State Education Department and the University of New York.

## Archdiocese of Louisville Social Studies Curriculum Framework

### **Social Studies Practices**

The Social Studies Practices span all areas of Social Studies and represent a progression from Kindergarten through Grade 12. These practices develop the social science and historical thinking skills students will need to be civic minded and stewardly citizens of our world. The Social Studies Practices include:

- Gathering, Interpreting, and Using Evidence
- Chronological Reasoning and Causation
- Comparison and Contextualization
- Geographic Reasoning
- Economics and Economic Systems
- Civic Participation

## Archdiocese of Louisville Social Studies Curriculum Framework

### Focus for Each Grade Level

In the Archdiocese of Louisville Social Studies Curriculum Framework, each grade level has a particular focus. These include:

**Kindergarten** – Self and Others

**Grade One** – My Family and Others, Now and Long Ago

**Grade Two** – My Community and Other Communities

**Grade Three** – Communities around the World

**Grade Four** – Kentucky History and Geography and Regions of the United States

**Grade Five** – Western Hemisphere

**Grade Six** – Eastern Hemisphere

**Grade Seven** – United States History from the Early Days until the End of the Civil War

**Grade Eight** – Reconstruction until Modern Times



# Archdiocese of Louisville Social Studies Curriculum Framework

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**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

## **Kindergarten**

In Kindergarten, students study “Self and Others” in the context of their immediate surroundings. They learn about similarities and differences between children, families, and communities, and about holidays, symbols, and traditions that unite us as Americans. Students learn about respect for others and rights and responsibilities of individuals.

The goal for Kindergarten students is to wonder and reason, building a rich foundation of inquiry. Students will explore, question, and investigate important social elements in their environment.

Through the Practices in the Inquiry Arc, students will:

- come to the understanding of civic-mindedness
- use their personal experiences to explore possible reasons for events, leading to the idea that historical events are driven by cause and effect
- question and evaluate the motivations behind economic decision-making
- investigate relationships between the environment and their communities

Students will begin to develop the essential practices of determining compelling questions to guide their exploration and evaluating information to plan and implement appropriate actions to address authentic problems.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

<b>Social Studies Practices - Kindergarten</b>		
<p><b>K.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>K.A.1 Ask questions. K.A.2 Recognize forms of evidence used to make meaning in social studies. K.A.3 Identify the differences and similarities between a globe and a map. K.A.4 Identify opinions expressed by others.</p>	<p><b>K.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>K.B.1 Retell an important life event in sequential order. K.B.2 Understand the concept of time measurements, including days, weeks, and months. K.B.3 Identify causes and effects, using an example from his/her family life. K.B.4 Identify change over time in his/her life. K.B.5 Identify events of the past, present, and future in his/her life. K.B.6 Identify routines and patterns in his/her life.</p>	<p><b>K.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>K.C.1 Identify similarities and differences between home and school. K.C.2 Identify similarities and differences between him/her and others.</p>
<p><b>K.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>K.D.1 Ask geographic questions about where places are located and why they are located there, using location terms and geographic representations such as maps, photographs, satellite images, and models. K.D.2 Identify natural events or physical features such as land, water, air, and wind. K.D.3 Describe how the environment affects his/her activities. K.D.4 Identify a pattern. K.D.5 Identify examples of human activities that change a place. K.D.6 Identify personal information (e.g., address and phone number). K.D.7 Recognize iconic United States symbols (e.g., United States flag, bald eagle, Liberty Bell).</p>	<p><b>K.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>K.E.1 Identify examples of scarcity and choices made due to scarcity. K.E.2 Identify examples of goods and services. K.E.3 Identify what money is and how it is used in society. K.D.4 Identify the difference between needs and wants.</p>	<p><b>K.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>K.F.1 Demonstrate respect for the rights of others. K.F.2 Participate in activities focusing on issues in the classroom or school. K.F.3 Identify the role of the individual in classroom participation. K.F.4 Show respect in issues involving differences and conflict. K.F.5 Identify acceptable social actions required for particular situations. K.F.6 Identify the principal and priest and their role within the school. K.F.7 Identify and follow rules in the classroom and school. K.F.8 Identify personal information (e.g., address, phone number, birth date, first and last name). K.F.9 Participate in the Pledge of Allegiance.</p>

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Individual Development and Cultural Identity**

**K.ID.1 Children's sense of self is shaped by experiences that are unique to them and their families, and by common experiences shared by a community or nation.**

*K.ID.1a A sense of self is developed through physical and cultural characteristics and through the development of personal likes, dislikes, talents, and skills.*

*\* Students will use a variety of information to develop their sense of self.*

*K.ID.1b Personal experiences shape our sense of self and help us understand our likes, dislikes, talents, and skills, as well as our connections to others.*

*\* Students will create A BOOK ABOUT ME that includes information about their gender, race/ethnicity, family members, likes and dislikes, talents, and skills.*

**K.ID.2 Children, families, and communities exhibit cultural similarities and differences.**

*K.ID.2a Each person is unique but also shares common characteristics with other family, school, and community members.*

*\* Students will identify characteristics of themselves that are similar to their classmates and characteristics that are different, using specific terms and descriptors such as gender, race or ethnicity, and native language.*

*K.ID.2b Unique family activities and traditions are important parts of an individual's culture and sense of self.*

*\* Students will explain how their families celebrate birthdays or other special days.*

*K.ID.2c Children and families from different cultures all share some common characteristics, but also have specific differences that make them unique.*

*\* Students will learn about and respect individual differences.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**K.ID.3 Symbols and traditions help develop a shared culture and identity within the United States.**

*K.ID.3a Diverse cultural groups within the community and nation embrace unique traditions and beliefs, and celebrate distinct holidays.*

- \* *Students will compare ways diverse cultural groups within the community and nation celebrate distinct holidays.*

*K.ID.3b The study of American symbols, holidays, and celebrations helps to develop a shared sense of history, community, and culture.*

- \* *Students will explain when and why national holidays such as Labor Day, Constitution Day, Columbus Day, Thanksgiving, Martin Luther King Jr. Day, Presidents' Day, and Independence Day are celebrated.*
- \* *Students will identify American symbols, such as the Liberty Bell and the bald eagle.*
- \* *Students will learn the Pledge of Allegiance.*
- \* *Students will learn the parts of the American flag (stars and stripes) and how to show respect toward the flag.*
- \* *Students will learn patriotic songs, including the national anthem, "America the Beautiful," and "America".*

**Guided Questions**

- \* What are the similarities and differences between you and your classmates?
- \* What activities do you and your family do together?
- \* What do American symbols represent?

**Catholic Identity Connections**

- \* Students understand that they are a gift from God.
- \* Students respect and care for all of God's creations.
- \* Students appreciate relationships in family, school, and church.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Civic Ideals and Practices**

**K.CI.1 Children and adults have rights and responsibilities at home, at school, in the classroom, and in the community.**

*K.CI.1a Children have basic universal rights or protections as members of a family, school, community, nation, and the world.*

- \* *Students will identify basic rights they have (e.g., provision of food, clothing, shelter, and education, and protection from abuse, bullying, neglect, and discrimination).*

*K.CI.1b Children can be responsible members of a family or classroom and can perform important duties to promote the safety and general welfare of the group.*

- \* *Students will be given the opportunity to perform duties in the classroom (e.g., cleaning up a center, serving as line leader, straightening up the library, serving as a messenger).*

**K.CI.2 Rules affect children and adults, and people make and change rules for many reasons.**

*K.CI.1c Children and adults must follow rules within the home, school, and community to provide for a safe and orderly environment.*

- \* *Students will discuss rules for fire, water, traffic, school, and home safety, and what would happen if rules were not followed.*

*K.CI.1d People in authority make rules and laws that provide for the health and safety of all.*

- \* *Students will discuss classroom routines and rules (e.g., raise hand to ask or answer a question during circle time, walk quietly in the halls when going to another area).*

*K.CI.1e Children and adults have opportunities to contribute to the development of rules and/or laws.*

- \* *Students will be given an opportunity to create new rules as needed for class activities.*

**Guided Questions**

- \* What are the different expectations at home and at school?
- \* Why are rules important?
- \* What are the basic needs of a family?

**Catholic Identity Connections**

- \* Students strengthen their personal relationship with God.
- \* Students are able to turn to God for guidance.
- \* Students show respect and participate during daily prayer.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Geography, Humans, and the Environment**

**K.G.1 Maps and globes are representations of the Earth's surface that are used to locate and better understand places and regions.**

*K.G.1a A globe represents Earth, and maps can be used to represent the world as well as local places or specific regions.*

\* *Students will identify the differences and similarities between a globe and a map.*

*K.G.1b Places and regions can be located on a map or globe, using geographic vocabulary.*

\* *Students will locate on a map familiar places or buildings in the community (e.g., school, grocery store, train station, hospital).*

*K.G.1c Places, physical features, and man-made structures can be located on a map or globe and described using specific geographic vocabulary.*

\* *Students will correctly use words and phrases to indicate location and direction (e.g., up, down, near, far, left, right, straight, back, behind, in front of, next to, between).*

**K.G.2 People and communities are affected by and adapt to their physical environment.**

*K.G.2a Climate, seasonal weather changes, and the physical features associated with the community and region all affect how people live.*

\* *Students will describe and give examples of seasonal weather changes and illustrate how weather affects people and communities.*

**Guided Questions**

- \* What do maps and globes tell us?
- \* How do weather, seasons, and climate affect our daily activities?
- \* How do we communicate directions?

**Catholic Identity Connections**

- \* Students identify God throughout nature.
- \* Students understand that God created the world.
- \* Students practice respect and care for all creation.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Time, Continuity, and Change**

**K.TC.1 The past, present, and future describe points in time and help us examine and understand events.**

*K.TC.1a Specific words and phrases related to chronology and time should be used when recounting events and experiences.*

- \* *Students will correctly use words related to chronology and time when recounting events and experiences (e.g., first, next, last; now, long ago; before, after; morning, afternoon, night; yesterday, today, tomorrow; last or next week, month, year; and present, past, and future tenses of verbs).*

*K.TC.1b People use folktales, legends, oral histories, and music to teach values, ideas, traditions, and important events from the past.*

- \* *Students will retell a story and explain the value, idea, tradition, or important event that is expressed.*

**Guided Questions**

- \* How do we express the sequence of events in a particular situation?
- \* How do stories change over time and with different people telling the story?
- \* What are important events and stages in our lives?

**Catholic Identity Connections**

- \* Students illustrate a basic understanding of certain traditions in the Church.
- \* Students are introduced to the six days of Creation.
- \* Students show understanding of the value of prayer.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Economic Systems**

**K.ES.1 People have economic needs and wants. Goods and services can satisfy people's wants. Scarcity is the condition of not being able to have all of the goods and services that a person wants or needs.**

*K.ES.1a A need is something that a person must have for health and survival, while a want is something that a person would like to have.*

- \* Students will identify basic needs (food, clothing, and shelter).
- \* Students will distinguish between a need and a want.

*K.ES.1b Goods are objects that can satisfy people's needs and wants; services are activities that can satisfy people's needs and wants.*

- \* Students will identify examples of goods and services.

*K.ES.1c Scarcity is the condition of not being able to have all of the goods and services that a person wants or needs.*

- \* Students will identify examples of scarcity.

**Guided Questions**

- \* What is the difference between a need and a want?
- \* What are examples of goods and services?
- \* What is the importance of money?

**Catholic Identity Connections**

- \* Students are introduced to spiritual needs and wants.
- \* Students engage in service to the community in response to the Gospel call.
- \* Students exercise responsible stewardship toward all creation.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Kindergarten**

**Connections to English Language Arts and Literacy - Kindergarten**

**K.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- K.A.1 With prompting and support, ask and answer questions about key details in a text.
- K.A.2 With prompting and support, identify the main topic and retell key details of a text.
- K.A.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

**Craft and Structure**

- K.A.4 With prompting and support, ask and answer questions about unknown words in a text.
- K.A.5 Identify the front cover, back cover, and title page of a book.
- K.A.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

**Integration of Knowledge and Ideas**

- K.A.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in a text an illustration depicts).
- K.A.8 With prompting and support, identify the reasons an author gives to support points in a text.
- K.A.9 With prompting and support, identify basic similarities and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

**Range of Reading and Level of Text Complexity**

- K.A.10 Actively engage in group reading activities with purpose and understanding.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

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**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**First Grade**

In First Grade, students learn about “My Family and Other Families, Now and Long Ago.” Students examine families and develop an awareness of cultural diversity within the American culture. Responsible citizenship is introduced. The students will increase their geography skills through the use of maps and directions.

The goal for first graders is to deepen their understanding of all Practices in the Inquiry Arc.

Students will:

- make sense of relationships and interactions through cause and effect thinking
- question how roles and responsibilities in their communities relate to rules and decision-making
- develop historical-thinking skills by questioning and evaluating sources
- foster economic decision-making by asking questions and evaluating their roles as consumers
- develop geographic-reasoning skills that will challenge students to see relationships between cultures and the environment
- develop an understanding of how family, traditions, and culture are important to communities

Students will develop an understanding of how these concepts affect their world and see themselves as contributors to the solutions. By the end of first grade, these young learners will be equipped to ask relevant questions and make connections to the world they know.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

<b>Social Studies Practices - Grade 1</b>		
<p><b>1.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>1.A.1 Develop questions about his/her family. 1.A.2 Recognize different forms of evidence used to make meaning in social studies (including sources such as artm photographs, artifacts, oral histories, maps, and graphs). 1.A.3 Identify the creator and/or author of different forms of evidence. 1.A.4 Create an understanding of the past by using primary and secondary sources. 1.A.5 Identify opinions of others.</p>	<p><b>1.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>1.B.1 Understand the concept of time measurements, including days, weeks, months, and years. 1.B.2 Retell a real-life family event in sequential order. 1.B.3 Identify causes and effects, using examples from his/her family life. 1.B.4 Identify events of the past, present, and future in his/her family life. 1.B.5 Recognize and identify patterns of continuity in his/her family.</p>	<p><b>1.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>1.C.1 Identify similarities and differences between communities. 1.C.2 Identify similarities and/or differences between him/her and others, with detail. 1.C.3 Understand the concepts of geography, economics, and history that apply to his/her family.</p>
<p><b>1.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>1.D.1 Ask geographic questions about where places are located and why they are located there, using geographic representations such as maps and models. 1.D.2 Describe where places are in relation to each other. 1.D.3 Identify human-made features; identify natural events or physical features. 1.D.4 Describe how environment affects his/her and other people's activities. 1.D.5 Identify a pattern and a process. 1.D.6 Describe how human activities alter places.</p>	<p><b>1.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>1.E.1 Explain how needs and wants affect choices made by family and community groups, and identify costs and benefits associated with these choices. 1.E.2 Distinguish between a consumer and a producer and their relationship to goods and services. 1.E.3 Explain how people earn money and other ways that people receive money.</p>	<p><b>1.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>1.F.1 Demonstrate respect for the rights of others in discussions involving differences and conflicts. 1.F.2 Participate in activities that focus on a classroom or school issue or problem. 1.F.3 Identify rights and responsibilities within the classroom, school, and community. 1.F.4 Identify the role of the individual in classroom and school participation. 1.F.5 Show respect in issues involving differences and conflict; participate in the resolution of differences and conflict. 1.F.6 Identify social actions that are acceptable for particular situations. 1.F.7 Identify the president of the United States and the school principal and their leadership responsibilities. 1.F.8 Identify different political systems.</p>

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Individual Development and Cultural Identity**

**1.ID.1 Language, beliefs, customs, and traditions help shape the identity and culture of a family and a community.**

*1.ID.1a Families are a basic unit of all societies, and different people define family differently.*

*\* Students will listen to stories about different families and will identify characteristics that are the same and different.*

*1.ID.1b People and families of diverse racial, religious, national, and ethnic groups share their beliefs, customs, and traditions, which creates a multicultural community.*

*\* Students will identify traditions that are associated with their families, and tell why the tradition is important.*

*1.ID.1c Awareness of America's rich diversity fosters intercultural understanding.*

*\* Students will compare the cultural similarities and differences between various ethnic and cultural groups.*

**1.ID.2 There are significant individuals, historical events, and symbols that are important to American cultural identity.**

*1.ID.2a The study of historical events, historical figures, and folklore enables Americans with diverse cultural backgrounds to feel connected to a common national heritage.*

*\* Students will listen to stories about historical events, folklore, and popular historical figures and identify the significance of the event or person.*

*\* Students will explain when and why national holidays such as Labor Day, Columbus Day, Thanksgiving, Martin Luther King Jr. Day, Presidents' Day, and Independence Day are celebrated.*

*1.ID.2b The Pledge of Allegiance and patriotic songs play an important role in understanding and examining the nation's history, values, and beliefs.*

*\* Students will be able to recite the Pledge of Allegiance, to begin to understand its purpose and its general meaning, and to sing patriotic songs such as "America the Beautiful", "America" ("My Country 'Tis of Thee"), and "The Star Spangled Banner" and begin to understand the general meaning of the lyrics.*

**Guided Questions**

- \* How do family customs and traditions help shape the identity and culture of a family?
- \* How do the beliefs, customs, and traditions of diverse groups help shape communities?
- \* How does the study of significant historical figures, events, and symbols impact and enrich our American cultural identity?

**Catholic Identity Connections**

- \* We are called to honor the family as part of our Church community.
- \* Jesus asks us to treat everyone with love and respect despite different cultures, customs, and beliefs.
- \* It is important that we honor and respect our country and recognize the cultural similarities and differences within.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Civic Ideals and Practices**

**1.CP.1 A citizen is a member of a community or group. Students are citizens of their local and global communities.**

*1.CP.1a An engaged and active citizen participates in the activities of the group or community and makes positive contributions.*

*\* Students will participate in group activities and contribute to the work of the group.*

*1.CP.1b Traits of a responsible citizen include respecting others, behaving honestly, helping others, obeying rules and laws, being informed, and sharing needed resources.*

*\* Students will explain the traits of a responsible citizen and model actions of responsible citizens.*

*1.CP.1c As global citizens, we are connected to people and cultures beyond our own community and nation, and we have a shared responsibility to protect and respect our world.*

*\* Students will discuss ways that they can protect and respect our world and its people.*

**1.CP.2 People create governments in order to ensure peace and establish order. Laws are created to protect the rights and define the responsibilities of individuals and groups.**

*1.CP.2a Rules and laws are developed to protect people's rights and for the safety and welfare of the community.*

*\* Students will discuss the differences between rules and laws, and determine why school rules were developed and what the consequences are of not following the rules.*

*1.CP.2b Governments exist at the local, state, and national levels to represent the needs of the people, create and enforce laws, and help resolve conflicts.*

*\* Students will begin to understand that there are local, state, and national levels of government and will identify some actions that the government takes.*

*\* Students will begin to understand the role of leadership in our community and our country.*

*1.CP.2c Children can participate in problem solving, decision making, and conflict resolution within their home, school, and community.*

*\* Students will be given opportunities to solve problems, make decisions, and resolve conflicts.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Guided Questions**

- \* What are the rights and responsibilities of individuals within a community?
- \* How do we protect and respect our world and its people?
- \* How do rules and laws help to protect citizens?

**Catholic Identity Connections**

- \* We are called to be stewards of God's creation.
- \* We have a responsibility to follow God's rules and laws.
- \* Jesus asks us to honor and respect the authority figures in our lives.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Geography, Humans, and the Environment**

**1.GH.1 The location and place of physical features and man-made structures can be described and interpreted by using symbols and geographic vocabulary.**

*1.GH.1a Maps and map tools, such as map keys and cardinal directions, can help us navigate from one place to the next, provide directions, or trace important routes.*

*\* Students will use cardinal directions within the classroom to describe the locations of objects (e.g., desks, bookcases) and create a map of the classroom by using symbols to represent objects.*

*1.GH.1b Maps are used to locate important places in the community, state, and nation, such as capitals, monuments, hospitals, museums, schools, and cultural centers.*

*\* Students will use a map and provide directions to another student on how to get from one place to another place identified on the map.*

*1.GH.1c Symbols are used to represent physical features and man-made structures on maps and globes.*

*\* Students will closely read maps, making use of the map keys to understand symbols and what they represent.*

**1.GH.2 People and communities depend on and modify their physical environment in order to meet basic needs.**

*1.GH.2a People and communities depend on the physical environment for natural resources.*

*\* Students will identify natural resources required to meet basic needs.*

*1.GH.2b Roads, dams, bridges, farms, parks, and dwellings are all examples of how people modify the physical environment to meet needs and wants.*

*\* Students will identify how the physical environment of a community has been modified to meet needs and wants.*

*1.GH.2c People interact with their physical environment in ways that may have a positive or a negative effect.*

*\* Students will identify positive and negative effects that human interaction can have on the physical environment.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Guided Questions**

- \* How do we use maps and map tools to help us identify and navigate geographical locations?
- \* How do people and communities use their natural resources to meet their needs?
- \* How do people interact with and influence their physical environment?

**Catholic Identity Connections**

- \* God calls us to care for our environment.
- \* We are called to use the Earth's natural resources wisely.
- \* We have a responsibility to interact with God's creation in a positive way.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Time, Continuity, and Change**

**1.TC.1 Families have a past and change over time. There are different types of documents that relate family histories.**

*1.TC.1a Personal and family history is a source of information for individuals about the people and places around them.*

- \* *Students will create personal time lines of their life, school year, and family events with the help of family members.*
- \* *Students will demonstrate an understanding of sequence and chronology and share their timelines with each other.*

*1.TC.1b Families change over time, and family growth and change can be documented and recorded.*

- \* *Students will examine the changes in their family over time and explore ways to document and record these changes.*

*1.TC.1c Families of long ago have similarities and differences with families today.*

- \* *Students will examine families of the past and compare them with their family.*
- \* *Students will identify characteristics that have been passed on through the generations.*

*1.TC.1d Sequence and chronology can be identified in terms of days, weeks, months, years, and seasons when describing family events and histories.*

- \* *Students will use sequence and chronological terms when describing family events.*

*NOTE: Teachers will use their professional judgment and demonstrate sensitivity regarding the varied family structures of their students and availability of information.*

**1.TC.2 Historical sources reveal information about how life in the past differs from the present.**

*1.TC.2a Various historical sources exist to inform people about life in the past, including artifacts, letters, maps, photographs, and newspapers.*

- \* *Students will examine various historical sources, including artifacts, letters, maps, photographs, and newspapers in order to learn about life in the past.*

*1.TC.2b Oral histories, biographies, and family time lines relate family histories.*

- \* *Students will interview family members to learn about their family histories.*
- \* *Students will develop a family timeline as an extension of their personal timeline.*
- \* *Students will describe the main characters and qualities after listening to biographies and legends.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Guided Questions**

- \* How do families change over time?
- \* How are families of long ago similar to and different than families of today?
- \* How do historical sources give us information about life in the past?

**Catholic Identity Connections**

- \* God calls us to respect all families and their traditions.
- \* We recognize the Bible as a historical source that informs us about people and life in the past.
- \* It is important that we recognize that families are a gift from God.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Economic Systems**

**1.ES.1 People have many economic needs and wants, but limited resources with which to obtain them.**

*1.ES.1a Scarcity means that people's wants exceed their limited resources.*

*\* Students will provide examples of scarcity by identifying wants that exceed resources.*

*1.ES.1b Families and communities must make choices due to needs and wants and scarce resources; these choices involve costs.*

*\* Students will examine choices that families make due to needs and wants and identify costs associated with these choices.*

*1.ES.1c People use tools, technologies, and other resources to meet their needs and wants.*

*\* Students will examine how tools, technology, and other resources can be used to meet needs and wants.*

**1.ES.2 People make economic choices as producers and consumers of goods and services.**

*1.ES.2a Goods are consumable, tangible products; services are actions performed by a person or group of people with a certain skill.*

*\* Students will identify examples of goods and services.*

*1.ES.2b A producer makes goods or provides a service, while a consumer uses or benefits from the goods or services.*

*\* Students will identify examples of a producer and a consumer.*

*1.ES.2c People and families work to earn money to purchase goods and services that they need or want.*

*\* Students will examine how earning money through work is related to the purchase of goods and services.*

*1.ES.2d People make decisions about how to spend and save the money that they earn.*

*\* Students will examine decisions that people make about spending and saving money.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Guided Questions**

- \* What is the difference between needs and wants?
- \* How are goods and services related to needs and wants?
- \* What is the role of producers and consumers in a community?

**Catholic Identity Connections**

- \* God calls us to make good choices with the resources we have been given.
- \* It is important for us to use our time, talent, and treasure to help others.
- \* Jesus invites us to use what we have to meet the needs of the less fortunate.

**Archdiocese of Louisville Social Studies Curriculum Framework  
First Grade**

**Connections to English Language Arts and Literacy - Grade 1**

**1.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 1.A.1 Ask and answer questions about key details in a text.
- 1.A.2 Identify the main topic and retell key details of a text.
- 1.A.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.

**Craft and Structure**

- 1.A.4 Ask and answer questions to help determine or clarify the meanings of words and phrases in a text.
- 1.A.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
- 1.A.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

**Integration of Knowledge and Ideas**

- 1.A.7 Use the illustrations and details in a text to describe its key ideas.
- 1.A.8 Identify the reasons an author gives to support points in a text.
- 1.A.9 Identify basic similarities and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
- 1.A.10 Develop and use related vocabulary.

**Range of Reading and Level of Text Complexity**

- 1.A.11 With prompting and support, read informational texts that are appropriately complex for grade 1.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Second Grade**

In Grade Two, students learn about “My Community and Other Communities”. Students study their local community and learn about characteristics that define urban, suburban, and rural communities. Democratic principles and participation in government are introduced. Students will examine the availability of resources and the interdependence within and across communities.

The goal in second grade is to connect foundational concepts to explain and describe aspects of the world around them.

By creating experiences and opportunities enriched by the Practices in the Inquiry Arc, students will:

- explain, describe, and question why and how people and governments make decisions that benefit their communities
- explain how availability of goods and services are key in their economic decision making, including the process of production, distribution, and consumption
- describe how human-environmental interactions affect their understanding of the world and how the world changes as a result of physical characteristics and human activities
- recognize cause and effect relationships

Questioning, comparing different historical perspectives, and creating timelines will be key in their social studies development. By the end of second grade, these learners will be better able to demonstrate understanding of the world around them.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

<b>Social Studies Practices - Grade 2</b>		
<p><b>2.A. Gathering, Interpreting, and Using Evidence</b>  <i>Students will independently and collaboratively:</i>                      2.A.1 Develop questions about the community.                      2.A.2 Recognize different forms of evidence used to make meaning in social studies (including sources such as art, photographs, artifacts, oral histories, maps, and graphs).                      2.A.3 Recognize arguments and identify evidence.                      2.A.4 Create an understanding of the past by using primary and secondary sources.</p>	<p><b>2.B. Chronological Reasoning and Causation</b>  <i>Students will independently and collaboratively:</i>                      2.B.1 Retell a community event in sequential order.                      2.B.2 Identify causes and effects, using examples from his/her family life or from the community.                      2.B.3 Identify change over time in his/her community.                      2.B.4 Identify events of the past, present, and future in his/her community.                      2.B.5 Recognize and identify patterns of continuity and change in his/her community.</p>	<p><b>2.C. Comparison and Contextualization</b>  <i>Students will independently and collaboratively:</i>                      2.C.1 Identify similarities and differences between communities.                      2.C.2 Identify similarities and differences between his/her community and other communities.                      2.C.3 Describe an event in his/her community.                      2.C.4 Recognize the relationship between geography, economics, and history in his/her community.                      2.C.5 Describe a historical development in his/her community with specific details, including time and place.</p>

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Individual Development and Cultural Identity**

**2.ID.1 A community is a population of various individuals in a common location. It can be characterized as urban, suburban, or rural. Population density and use of the land are some characteristics that define and distinguish types of communities.**

*2.ID.1a An urban community, or city, is characterized by dense population and land occupied primarily by buildings and structures that are used for residential and business purposes.*

*\* Students will identify characteristics of an urban community..*

*2.ID.1b Suburban communities are on the outskirts of cities, where human population is less dense, and buildings and homes are spaced farther apart.*

*\* Students will identify the characteristics of a suburban community.*

*2.ID.1c Rural communities are characterized by large expanses of open land and significantly lower populations than urban or suburban areas.*

*\* Students will identify the characteristics of a rural community.*

*\* Students will compare the characteristics of urban, suburban, and rural communities and determine in which type of community they live.*

*\* By discussing different types of housing (apartment, single-family house, etc.) and the proximity of houses to each other, students will understand the term "population density" and how it applies to different communities.*

*2.ID.1d Activities available for people living in urban, suburban, and rural communities are different. The type of community a person grows up in will affect a person's development and identity.*

*\* Students will identify activities that are available in each type of community, and discuss how those activities affect the people living in that community.*

**2.ID.2 People share similarities and differences with others in their own community and with other communities.**

*2.ID.2a People living in urban, suburban, and rural communities embrace traditions and celebrate holidays that reflect both diverse cultures and a common community identity.*

*\* Students will examine the ethnic and/or cultural groups represented in their classroom.*

*\* Students will explore the cultural diversity of their local community by identifying activities that have been introduced by different cultural groups.*

*\* Students will identify community events that help promote a common community identity.*

*2.ID.2b A community is strengthened by the diversity of its members; ideas, talents, perspectives, and cultures can be shared across the community.*

*\* Students will explore how different ideas, talents, perspectives, and culture are shared across their community.*

## Archdiocese of Louisville Social Studies Curriculum Framework Second Grade

### Guided Questions

- \* What characteristics of urban, suburban, and rural communities determine in which type of community you live now and would like to live in the future?
- \* How does where you live influence your development and identity?
- \* How do the traditions and celebration of holidays reflect the diverse cultures present in your community?

### Catholic Identity Connections

- \* The care and respect of community members for each other helps to promote a common community identity.
- \* We are called to care of our community and those within it.
- \* A community is strengthened by the diversity of its members and the gifts and talents they share.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Civic Ideals and Practices**

**2.CP.1 The United States is founded on the principles of democracy, and these principles are reflected in all types of communities.**

*2.CP.1a The United States is founded on the democratic principles of equality, fairness, and respect for authority and rules.*

- \* *Students will explore democratic principles, such as dignity for all, equality, fairness, and respect for authority and rules, and how those principles are applied to their community.*

*2.CP.1b Government is established to maintain order and keep people safe. Citizens demonstrate respect for authority by obeying rules and laws.*

- \* *Students will examine the ways in which the government in their community provides order and keeps people safe, and how citizens can demonstrate respect for authority.*

*2.CP.1c The process of holding elections and voting is an example of democracy in action in schools, communities, Kentucky, and the nation.*

- \* *Students will learn about the process of voting and its importance.*
- \* *Students will participate in voting within the classroom and in school, as appropriate.*

*2.CP.1d Symbols of American democracy serve to unite community members.*

- \* *Students will examine the symbols of the country, including the bald eagle, American flag, the Statue of Liberty, the White House, and Mount Rushmore.*

**2.CP.2 Communities have rules and laws that affect how they function. Citizens contribute to a community's government through leadership and service.**

*2.CP.2a Communities have the responsibility to make and enforce fair laws and rules that provide for the common good.*

- \* *Students will explain the importance of making fair laws and rules, the benefits of following them, and the consequences of violating them.*

*2.CP.2b Citizens provide service to their community in a variety of ways.*

- \* *Students will identify who makes and enforces the rules and laws in their community. They will also explore how leaders make and enforce these rules and laws.*

*2.CP.2c Citizens provide service to their community in a variety of ways.*

- \* *Students will explore opportunities to provide service to their school community and the community at large (e.g., beautifying school grounds, writing thank-you notes to helpers).*
- \* *Students will identify how adults can provide service to the school and the community at large.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Guided Questions**

- \* What does it mean to be a good citizen within your community?
- \* Why is voting important?
- \* How do rules and laws affect the function of your community?
- \* What opportunities can you provide to offer service to your community at large?

**Catholic Identity Connections**

- \* Students will demonstrate Catholic values by showing respect for authority and obeying rules and laws.
- \* Students will learn to treat others the way they want to be treated.
- \* We are called to serve others in our lives.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Geography, Humans, and the Environment**

**2.GE.1 Geography and natural resources shape where and how urban, suburban, and rural communities develop and how they sustain themselves.**

*2.GE.1a Urban, suburban, and rural communities can be located on maps, and the geographic characteristics of these communities can be described by using symbols, map legends, and geographic vocabulary.*

- \* *Students will locate their communities on maps and/or globes.*
- \* *Students will create maps that represent their classroom, school, or community.*
- \* *Students will use geographic characteristics to describe their community.*

*2.GE.1b The location of physical features and natural resources often affects where people settle and may affect how those people sustain themselves.*

- \* *Students will compare how different communities in their state or nation have developed, and explain how physical features of the community affect the people living there.*

*2.GE.1d The location and place of physical features and man-made structures can be described using symbols and specific geography vocabulary.*

- \* *Students will use a compass rose to identify cardinal (North, South, East, West) and intermediate (Northeast, Southeast, Southwest, and Northwest) directions on maps and in their community.*
- \* *Students will locate the equator, continents, the oceans, the northern and southern hemispheres, and poles on a globe.*
- \* *Students will use maps and legends to identify major physical features, such as mountains, rivers, lakes, and oceans.*

**Guided Questions**

- \* What are some human and physical characteristics of places in our community?
- \* What do maps and pictures tell us?
- \* Why do we use maps and globes?

**Catholic Identity Connections**

- \* Students will learn the importance of taking care of our world.
- \* Students will recognize that God provides us with natural resources to fulfill our needs.
- \* We are all children of God.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Time, Continuity, and Change**

**2.TC.1 Identifying continuities and changes over time can help with the understanding of historical developments.**

*2.TC.1a Continuities and changes over time in communities can be described using historical thinking, vocabulary, and tools such as timelines.*

\* *Students will examine the things in a community that stay the same and things that change.*

*2.TC.1b Continuities and changes over time in communities can be examined by interpreting evidence such as maps, population charts, photographs, newspapers, biographies, artifacts, and other historical materials.*

\* *Students will examine continuities and changes over time in their community, using evidence such as maps, population charts, photographs, newspapers, biographies, artifacts, and other historical materials.*

\* *Students will develop a tim line for their community, including important events such as when the school was built.*

**2.TCC.2 Cause-and-effect relationships help us recount events and understand historical development.**

*2.TC.2a Cause-and-effect relationships help us to understand the changes in communities.*

\* *Students will distinguish between cause and effect and will examine changes in their community in terms of cause and effect (e.g., automobiles and the growth of the suburbs, growing population in suburban areas, and reduction of farms).*

**Guided Questions Questions**

- \* How can sharing be a positive factor in our lives?
- \* How do people initiate change?
- \* How do traditions influence communities?

**Catholic Identity Connections**

- \* God has a plan for everyone.
- \* Individuals within families depend on one another.
- \* God gives us the tools to cope with change and stress in our lives.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Economic Systems**

**2.ES.1 Communities face different challenges in meeting their needs and wants.**

*2.ES.1a The availability of resources to meet basic needs varies across urban, suburban, and rural communities.*

- \* *Students will investigate what resources are available in their community and what resources are obtained from neighboring communities.*
- \* *Students will examine how available resources differ in communities (e.g., home-grown food available in rural farm areas vs. shopping in supermarkets).*

*2.ES.1b People make decisions to buy, sell, and use money based on their needs, wants, and the availability of resources.*

- \* *Students will explore economic decision making and the use of money.*

*2.ES.1c Scarcity, the price of goods and services, and choice all influence economic decisions made by individuals and communities.*

- \* *Students will examine how consumers react to changes in the prices of goods.*

*2.ES.1d Taxes are collected to provide communities with goods and services.*

- \* *Students will explore the purpose of taxes and how they are collected in their communities.*

**2.ES.2 A community requires the interdependence of many people performing a variety of jobs and services to provide for basic needs and wants.**

*2.ES.2a Goods are the products made by a person or group of people. Services are actions performed by a person or group of people with a certain skill.*

- \* *Students will distinguish between goods and services and identify goods produced in their community.*

*2.ES.2b Members of a community specialize in different types of jobs that provide goods and/or services to the community. Community workers such as teachers, firefighters, sanitation workers, and police officers provide services.*

- \* *Students will identify different types of jobs performed in their community.*
- \* *Students will explain the services provided by community workers.*

*2.ES.2c At times, neighboring communities share resources and workers to support multiple communities.*

- \* *Students will explore how communities share resources and services with other communities.*

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**Guided Questions**

- \* How do communities meet group and individual needs?
- \* How are goods and services related to needs and wants?
- \* What are the roles of specific community helpers and why are they important?

**Catholic Identity Connections**

- \* Neighboring communities share resources and work together to support one another in times of need.
- \* God gives us what we need, not necessarily what we want.
- \* We are called to be a good steward by giving of our time, talent, and treasure.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Second Grade**

**Connections to English Language Arts and Literacy - Grade 2**

**2.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 2.A.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- 2.A.2 Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.
- 2.A.3 Describe the connection between a series of historical events in a text.

**Craft and Structure**

- 2.A.4 Determine the meanings of words and phrases in a text relevant to a grade 2 topic or subject.
- 2.A.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text effectively.
- 2.A.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

**Integration of Knowledge and Ideas**

- 2.A.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
- 2.A.8 Describe how reasons support specific points the author makes in a text.
- 2.A.9 Compare and contrast the most important points presented by two texts on the same topic.

**Range of Reading and Level of Text Complexity**

- 2.A.10 By the end of year, read and comprehend informational texts, including history/social studies, in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

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## Archdiocese of Louisville Social Studies Curriculum Framework Second Grade

### Third Grade

In Grade Three, students make comparisons across time and space, examining different communities and their cultures, including social organization, customs and traditions, language, arts and literature, religion, forms of government, and economic systems. Students are introduced to the concepts of prejudice, discrimination, and human rights.

The goal for third graders is to continue to refine their questioning and evaluation skills while building a broader understanding of the world around them.

Through the Practices in the Inquiry Arc, students will:

- investigate how collaboration and the establishment of various responsibilities in a community and respect for others are necessary to achieve and maintain a functioning society
- develop an understanding of democratic processes and principles, through the concept of rules and authority
- build a context for the larger concept of democracy by exploring how ideas, events, and people are connected through history, geography, economics, and civics
- examine how events from the past shape the future
- evaluate how their own understandings are shaped by the past
- compare historical sources and establish cause and effect across time while investigating different historical perspectives
- analyze and evaluate how productivity and opportunity costs influence decision-making and the role of money and financial institutions on decisions on both a small and large scale
- examine why people exchange goods and services and how goods and productivity can be improved
- understand that the physical environment plays a pivotal role in determining how society developed over time

Students will take informed action on issues that arise from the home, school, and/or community, and work collaboratively to communicate their ideas to authentic audiences. By the end of third grade, students will have a sense that people, ideas, and events function both independently and together.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Third Grade**

<b>Social Studies Practices - Grade 3</b>		
<p><b>3.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>3.A.1 Develop questions about a world community.</p> <p>3.A.2 Recognize and use different forms of evidence used to make meaning in social studies (including primary and secondary sources such as art and photographs, artifacts, oral histories, maps, and graphs).</p> <p>3.A.3 Identify and explain the creation and/or authorship, purpose, and format of evidence; where appropriate, identify point of view.</p> <p>3.A.4 Support arguments with rationale or evidence.</p> <p>3.A.5 Identify resources.</p> <p>3.A.6 Create an understanding of the past by using primary and secondary sources.</p>	<p><b>3.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>3.B.1 Explain how three or more events are related to one another.</p> <p>3.B.2 Employ mathematical skills to measure time in years and centuries.</p> <p>3.B.3 Identify causes and effects, using examples from his/her life or from history or a current event.</p> <p>3.B.4 Distinguish between long-term and immediate causes and effects of an event from his/her life, history, or current events.</p> <p>3.B.5 Recognize continuity and change over periods of time.</p> <p>3.B.6 Recognize periods of time such as decades and centuries.</p> <p>3.B.7 Recognize and identify patterns of continuity and change in world communities.</p>	<p><b>3.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>3.C.1 Identify a continent and/or world region by describing a characteristic that places within it have in common.</p> <p>3.C.2 Identify multiple perspectives by comparing and contrasting points of view in differing world communities.</p> <p>3.C.3 Describe a historical event in a world community.</p> <p>3.C.4 Recognize the relationship between geography, economics, and history in world communities.</p> <p>3.C.5 Describe a historical development in a world community, using specific detail, including time and place.</p>

**Archdiocese of Louisville Social Studies Curriculum Framework  
Third Grade**

**Geography, Humans, and the Environment**

**3.GH.1 Geographic regions have unifying characteristics and can be studied using a variety of tools.**

*3.GH.1a Earth is comprised of water and large masses that can be divided into distinct regions.*

- \* *Students will identify the continents and oceans by using globes and maps.*
- \* *Students will locate various world communities in relation to oceans and continents.*

*3.GH.1b Globes, maps, photographs, and satellite images contain geographic information. Maps often have a title, legend or key, compass orientation, author, date, grid, and scale.*

- \* *Students will identify the differences between a globe and a map.*
- \* *Students will examine a variety of maps for various world communities, looking for structural features of the map such as title, legend or key, compass orientation, author, date, grid, and scale. These should include political, physical, climate, and economical/resource maps. A variety of scale should be represented (e.g., continent vs. country, country vs. city).*
- \* *Students will compare geographic information found in photographs and satellite images with other representations of the same area and identify differences for at least one of the selected world communities.*

**3.GH.2 The location of world communities can be described using geographic tools and vocabulary.**

*3.GH.2a World communities can be located on globes and maps.*

- \* *Students will examine where various world communities are located.*

*3.GH.2b World communities can be located in relation to each other and to principle parallels, meridians, and hemispheres.*

- \* *Students will examine the location of various world communities relative to the United States and other world communities. Students will locate various world communities in relationship to the equator and Prime Meridian using cardinal and intermediate directions.*

## Archdiocese of Louisville Social Studies Curriculum Framework Third Grade

### 3.GH.3 Geographic factors often influence where people settle and form communities. People adapt to and modify their environment in different ways to meet their needs.

*3.GH.3a Geographic factors influence where people settle and their lifestyle. Some geographic factors make a location more suitable for settlement, while others act as deterrents.*

- \* *Students will examine the geographic factors of various world communities, including physical features and climate, noting how certain factors are likely to support settlement and larger populations.*
- \* *Students will investigate the lifestyle of the people who live in various world communities and how the lifestyle has been influenced by the geographic factors.*

*3.GH.3b People make adaptations and modifications to the environment. Advancements in science, technology, and industry can bring about modifications to the environment and can have unintended consequences on the environment. People have attempted to take actions to protect the environment.*

- \* *Students will examine how various world communities have adapted to and/or modified their environment to meet their needs.*
- \* *Students will investigate how human activities and the use of technology have altered the environment, bringing about unintended consequences for various world communities and their own community.*
- \* *Students will explore actions that are being taken to protect the environment in various world communities and their own community.*

#### Guided Questions

- \* How are geographic tools used to understand regions of the world?
- \* How are regions of the United States and world interrelated?
- \* How does the physical environment impact where and how people live and work?

#### Catholic Identity Connections

- \* According to Catholic social teachings, we are called to be stewards of God's creation.
- \* Students will explore the development of Catholicism and Christianity in various world communities.
- \* Students will acknowledge the diversity of geographic features from God's creation.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Third Grade**

**Time, Continuity, and Change**

**3.TC.1 Each community or culture has a unique history, including heroic figures, traditions, and holidays.**

*3.TC.1a People in world communities use legends, folktales, oral histories, biographies, and historical narratives to transmit cultural histories from one generation to the next.*

- \* *Students will examine legends, folktales, oral histories, biographies, and historical narratives to learn about the important individuals and events of various world communities.*
- \* *Students will examine symbols of various world communities.*

*3.TC.1b Arts, music, dance, and literature develop through a community's history.*

- \* *Students will explore the arts, music, dance, and literature of various world communities.*

**Guided Questions**

- \* How do various cultures express their beliefs and practices?
- \* How do interpretations of events, people and places, or situations affect our understanding of the past and present?
- \* How do art, music, dance, and literature of various world cultures express time, place, and way of life?

**Catholic Identity Connections**

- \* Students exhibit an appreciation and sensitivity to a multicultural and world view.
- \* Students explore religious artifacts from the past to acknowledge historical changes of the Church.
- \* Students acknowledge that prayer can be expressed through arts, music, dance, and literature.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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**Development, Movement, and Interaction of Cultures**

**3.WC.1 Communities share cultural similarities and differences across the world.**

*3.WC.1a Communities around the world can be diverse in terms of their members, languages spoken, customs and traditions, and religious beliefs and practices. People in world communities celebrate various holidays and festivals.*

- \* *Students will examine various world communities in terms of its members, languages spoken, customs and traditions, and religious beliefs and practices.*
- \* *Students will learn about the holidays and festivals celebrated in various world communities and compare them to the holidays and festivals celebrated in their own community.*
- \* *Students will compare and contrast the cultural elements of various world communities to their own.*

**3.WC.2 Communities from around the world interact with other people and communities and exchange cultural ideas and practices.**

*3.WC.2a Cultural diffusion is the process by which cultures exchange and transmit ideas, beliefs, technologies, and goods over time.*

- \* *Students will examine the interactions of various cultures and the effects of the people, goods, and ideas on communities.*

**Guided Questions**

- \* How do cultures around the globe celebrate holidays?
- \* How can differing beliefs impact relationships of differing communities?
- \* Why are traditions and practices important to communities?

**Catholic Identity Connections**

- \* Students will recognize societal structures in light of Catholic social justice issues.
- \* Students will acknowledge and affirm the relationship between faith and culture.
- \* Students will explore Catholic holidays and traditions.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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**Civic Ideals and Practices**

**3.CP.1 Governments in communities and countries around the world have the authority to make and the power to enforce laws. The role of the citizen within these communities or countries varies across different types of governments.**

*3.CP.1a The United States government is based on democratic principles. The fundamental principles of other governments may be similar to or different from those of the United States government.*

*\* Students will examine the types of government found in various world communities and compare and contrast these with the United States government.*

*3.CP.1b The process of selecting leaders, solving problems, and making decisions differs across governments in nations and communities around the world.*

*\* Students will examine different processes of selecting leaders, solving problems, and making decisions in nations and communities, and compare and contrast them to the process used in the United States.*

*3.CP.1c Different governments have different ways of maintaining order and keeping people safe. This includes making rules and laws and enforcing these rules and laws.*

*\* Students will examine how the government maintains order, keeps people safe, and makes and enforces rules and laws in various world communities.*

*\* Students will compare and contrast those government processes with the process in the United States.*

*3.CP.1d The definition of citizenship and the role of the citizen vary across different types of political systems, and citizens play a greater role in the political process in some countries than in others.*

*\* Students will examine the role of the citizen in various world communities and how this role is similar to or different from the role a citizen plays in the United States.*

**3.CP.2 The concept of universal human rights suggests that all people should be treated fairly and should have the opportunity to meet their basic needs.**

*3.CP.2a Across global communities, governments and citizens alike have a responsibility to protect human rights and to treat others fairly.*

*\* Students will explore the extent to which governments and citizens have protected human rights and treated others fairly in the world.*

*3.CP.2b Across time and place, communities and cultures have struggled with prejudice and discrimination as barriers to justice and equality for all people.*

*\* Students will examine instances of prejudice and discrimination and how they serve as barriers to justice and equality for all people.*

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**Guided Questions**

- \* How do you demonstrate your citizenship?
- \* Why is it important to promote communities and cultures with equality and justice for all?
- \* Why do governments of the world have rules and laws?

**Catholic Identity Connections**

- \* Students will recognize the interconnectedness of all creation.
- \* Students will explore Catholic social justice beliefs.
- \* Students will participate and engage in stewardship activities for discrimination and justice in response to the Gospel call.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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**Creation, Expansion, and Interaction of Economic Systems**

**3.ES.1 Communities meet their needs and wants in a variety of ways, forming the basis for their economy.**

**3.ES.1a World communities use human and natural resources in different ways.**

- \* Students will investigate available resources for various world communities and how these resources are used to meet basic needs and wants.
- \* Students will explore the concepts of surplus and scarcity in relation to resources for various world communities.

**3.ES.1b People in communities have various ways of meeting their basic needs and earning wages.**

- \* Students will investigate how various world communities meet basic needs of food, clothing, and shelter, and compare that to their own community.
- \* Students will examine the various ways people earn wages and how this has changed over time in various world communities.

**3.ES.2 Each community develops an economic system that addresses the following: what will be produced, how it will be produced, and who will get what is produced.**

**3.ES.2a Communities around the world produce goods and provide services.**

- \* Students will determine what goods are produced and services are provided in various world communities.
- \* Students will examine how the goods are produced within various world communities.
- \* Students will investigate the importance of trade for interdependence between world communities.

**3.ES.2b World communities have needs, wants, and limited resources. To meet their needs and wants, communities trade with others. Technological developments in transportation and communication have influenced trade.**

- \* Students will examine various world communities in terms of imported and exported products and services.
- \* Students will explore the basic economic concepts of supply and demand and how they influence prices and trade.
- \* Students will examine how technological developments in transportation and communication have influenced trade over time.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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**Guided Questions**

- \* Why do we need a system of trade?
- \* How do countries depend on one another?
- \* How do government policies and changes in transportation influence world economies?

**Catholic Identity Connections**

- \* Catholics believe in fair trade in response to the Catholic social teaching of human dignity.
- \* Catholic stewardship promotes providing for basic needs.
- \* Catholics believe in being responsible citizens and consumers.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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**Connections to English Language Arts and Literacy - Grade 3**

**3.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 3.A.1 Ask and answer such questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- 3.A.2 Determine the main idea in a text; recount the key details and explain how they support the main idea.
- 3.A.3 Describe the relationship between a series of historical events, using language that pertains to time, sequence, and cause/effect.

**Craft and Structure**

- 3.A.4 Determine the meanings of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject.
- 3.A.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic effectively.
- 3.A.6 Distinguish their own point of view from that of the author of a text.

**Integration of Knowledge and Ideas**

- 3.A.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to determine understanding of the text (e.g., where, when, why, and how key events occur).
- 3.A.8 Describe the logical connections between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
- 3.A.9 Compare and contrast the most important points and key details presented in two texts on the same topic.

**Range of Reading and Level of Text Complexity**

- 3.A.10 By the end of year, read and comprehend informational texts, including history/social studies, at the high end of the grades 2-3 text complexity band independently and proficiently.

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### **3.B. Writing Standards**

#### **Text Types and Purposes**

- 3.B.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.
  - 3.B.1a Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.
  - 3.B.1b Provide reasons that support the opinion.
  - 3.B.1c Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.
  - 3.B.1d Provide a concluding statement or section.
- 3.B.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
  - 3.B.2a Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.
  - 3.B.2b Develop the topic with facts, definitions, and details.
  - 3.B.2c Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.
  - 3.B.2d Provide a concluding statement or section.
- 3.B.3 Write narratives to develop real or imagined experiences or events, using effective technique, descriptive details, and clear event sequences.
  - 3.B.3a Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.
  - 3.B.3b Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.
  - 3.B.3c Use sequence words and phrases to signal event order and provide a sense of closure.

#### **Production and Distribution of Writing**

- 3.B.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.
- 3.B.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
- 3.B.6 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

#### **Research to Build and Present Knowledge**

- 3.B.7 Conduct short research projects that build knowledge about a topic.
- 3.B.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

#### **Range of Writing**

- 3.B.9 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

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### 3.C. Speaking and Listening Standards

#### Comprehension and Collaboration

- 3.C.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
  - 3.C.1a Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
  - 3.C.1b Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening with care to others, speaking one at a time about topics and texts under discussion).
  - 3.C.1c Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
  - 3.C.1d Explain their ideas and understanding in light of the discussion.
  - 3.C.1e Seek to understand and communicate with individuals from different cultural backgrounds.
- 3.C.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- 3.C.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

#### Presentation of Knowledge and Ideas

- 3.C.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- 3.C.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
- 3.C.6 Speak in complete sentences, when appropriate to the task and the situation, in order to provide requested detail or clarification.

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**Fourth Grade**

In Grade Four, the focus is on Kentucky and local communities and their change over time, incorporating the study of geography, history, economics, and government. In addition, students will learn about regions of the United States.

To further develop independent thinking and collaboration skills, the goal for learners in fourth grade is to continue fostering curiosity and engagement through learning experiences that focus on the complex and overlapping relationships within communities, states, and nations. Student experiences will allow them to interact with and evaluate the relationships through the lenses of perspective, change, and interdependence and how these viewpoints impact an individual, a society, and the world.

Through the Practices in the Inquiry Arc, students will:

- consider perspectives and how perspectives impact the reasons that people create and make changes to rules and laws to meet the needs of society
- question and evaluate context and cause and effect, as they continue to examine historical sources
- judge the validity and usefulness of sources when studying a particular topic as they sharpen historical-thinking skills
- build on the economic understandings of scarcity, opportunity costs, and human capital
- investigate how the relationships between buyers and sellers, supply and demand, trade and specialization, and changes to human capital all impact economic decision-making
- use geographic tools to examine how the cultural, environmental, and human-made characteristics impact people's interaction with their surroundings
- examine school and community relationships to identify and address issues that affect students' lives
- engage with and meet perceived needs in their communities through the application of civic readiness, sharing research and communicating solutions to local issues of importance in a meaningful and authentic way

By the end of fourth grade, students will make connections to relationships within communities, states, and nations and evaluate these relationships through the lenses of perspective, change, and interdependence.

**Archdiocese of Louisville Social Studies Curriculum Framework  
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<b>Social Studies Practices - Grade 4</b>		
<p><b>4.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>4.A.1 Develop questions about the United States and its history, geography, economics, and government.</p> <p>4.A.2 Recognize, use, and analyze different forms of evidence used to make meaning in social studies (including sources such as art, photographs, artifacts, oral histories, maps, and graphs).</p> <p>4.A.3 Identify arguments of others.</p> <p>4.A.4 Create an understanding of the past by using primary and secondary sources.</p> <p>4.A.5 Identify and explain creation and/or authorship, purpose, and format of evidence; where appropriate, identify point of view.</p>	<p><b>4.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>4.B.1 Explain how events are related chronologically.</p> <p>4.B.2 Employ mathematical skills to measure time in years and centuries. Identify the chronological significance of data presented in timelines.</p> <p>4.B.3 Identify the relationship between multiple causes and effects of an event in history or a current event.</p> <p>4.B.4 Distinguish between long-term and immediate causes and effects of an event in history or a current event.</p> <p>4.B.5 Use periods of time, such as decades and centuries, to put events into chronological order.</p> <p>4.B.6 Recognize and identify patterns of continuity and change in Kentucky and in the United States.</p>	<p><b>4.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>4.C.1 Identify a region in Kentucky by describing a characteristic that places within it have in common, and then compare it to other regions in Kentucky.</p> <p>4.C.2 Identify a region in the United States by describing a characteristic that places within it have in common, and then compare it to other regions in the United States</p> <p>4.C.3 Identify multiple perspectives on a historical event.</p> <p>4.C.4 Describe and compare Kentucky historical events.</p> <p>4.C.5 Recognize the relationship between geography, economics, and history in Kentucky.</p> <p>4.C.6 Recognize the relationship between geography, economics, and history in the regions of the United States.</p> <p>4.C.7 Describe historical developments in Kentucky with specific detail, including time and place.</p>

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Geography of the United States**

**4.G.1 The United States has a diverse geography. Various maps can be used to represent and examine the geography.**

*4.G.1a Physical maps can be used to explore the diverse geography of the United States.*

- \* *Students will identify and map major physical features, including mountains, rivers, lakes, and large bodies of water.*
- \* *Students will examine climate and vegetation maps to explore the relationship between physical features and vegetation/climate.*

*4.G.1b The United States can be represented using a political map that shows states, cities, capitals, and boundaries.*

- \* *Students will examine a political map for each region to identify the states, capitals, and major cities of each region of the United States.*
- \* *Students will learn the capitals of each state in the United States.*
- \* *Students will examine the location of major cities in the United States in relation to their home community, using directionality and latitude and longitude coordinates.*

*4.G.2c The United States is rich in natural resources.*

- \* *Students will identify the major natural resources found in each region of the United States.*
- \* *Students will explore how the natural resources are used to benefit the people of each region.*

**Guided Questions**

- \* How did the physical features of the United States affect where communities were built?
- \* How do physical features of the United States affect the jobs in various states and communities?
- \* How do the waterways in the United States affect the economy?

**Catholic Identity Connections**

- \* There is an interconnectedness between humans and all creation.
- \* God has surrounded us with a world of diverse landforms and resources.
- \* We are called to live in peace, harmony, and collaboration with others.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Government of the United States**

**4.GV.1** There are different levels of government within the United States. The purpose of government is to protect the rights of citizens and to promote the common good. The government of the United States establishes rights, freedoms, and responsibilities for its citizens.

*4.GV.1a After the Revolution, the United States of America established a federal government.*

- \* Students will examine the basic structure of the federal government, including the President, Congress, and Supreme Court.
- \* Students will explore ways that the federal government meets the needs of citizens.

*4.GV.1b The United States Constitution establishes the basic structure of government for the country. The federal government creates laws to protect the people and interests of the nation.*

- \* Students will identify and examine the elements of the United States national symbols.
- \* Students will use a graphic organizer to show the three branches of federal government and roles and responsibilities of each.
- \* Students will investigate and demonstrate the steps necessary for a bill to become a law.
- \* Students will investigate the national election process.

*4.GV.1c Citizens have rights and freedoms guaranteed in the United States Constitution.*

- \* Students will examine the rights and freedoms guaranteed to citizens.

*4.GV.1d Citizens of the United States have responsibilities that help the nation function. Some responsibilities are stated as laws.*

- \* Students will learn their responsibilities as citizens, such as obeying rules and laws.
- \* Students will discuss active citizenship and adults' responsibility to vote, to understand important issues, and to serve on a jury.

**Guided Questions**

- \* How does the structure of the federal government meet the needs of its citizens?
- \* How does the structure of the federal government carry out/uphold the rights and freedoms outlined in the Constitution?
- \* How do individuals practice democratic citizenship at the federal level?

**Catholic Identity Connections**

- \* We recognize the importance of the democratic principles of justice, equality, and responsibility.
- \* We are called to do all we can to ensure that others can live a good life.
- \* We follow rules and laws in order to provide order and protect the safety and rights of others.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Economics and Economic Systems of the United States**

**4.ES.1 Many factors have had an impact on the economic system of the United States over time.**

*4.ES.1a Geographic factors often influenced locations of early settlements. People made use of the resources and the lands around them to meet their basic needs of food, clothing, and shelter.*

- \* *Students will examine the locations of early settlers and ways they used their environment to meet their needs.*
- \* *Students will distinguish and describe the significance of the key resources within the factors of production (human, natural, and capital resources).*

*4.ES.1b The United States has a free market economy.*

- \* *Students will define and explain the free market economy in the United States.*
- \* *Students will explain the involvement of the government in a free market economy.*
- \* *Students will describe the structure of businesses in a free market economy.*
- \* *Students will distinguish the terms profit, scarcity, supply, and demand and use these terms to describe the influences of economic decision-making.*
- \* *Students will identify goods and services of regions of the United States.*
- \* *Students will examine the impact of new ideas, products, and technology on the environment and people of the United States.*
- \* *Students will compare the costs and benefits of economic decisions by demonstrating understanding of the terms trade-off and opportunity cost.*
- \* *Students will explain why individuals and businesses specialize and trade.*
- \* *Students will identify and describe key factors and examples of the three major economic activities in the United States (agriculture, service industries, and manufacturing).*
- \* *Students will define a global economy and the reliance of economic relationships among various countries worldwide.*
- \* *Students will explain the ways the government pays for the goods and services it provides, including tax revenue.*

**Guided Questions**

- \* How are needs and wants of individuals and groups met through national and global sources?
- \* How are people and environments interdependent?
- \* How do availability of resources and issues of supply and demand affect relationships and decisions?

**Catholic Identity Connections**

- \* We are called to demonstrate stewardship to God's creation, particularly through the conservation and preservation of natural resources.
- \* We recognize the relationship between rights and responsibilities as we follow the examples set by Jesus.
- \* We have an obligation to care for those who need our help.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Geography of Kentucky**

**4.GK.1 Kentucky has a diverse geography. Various maps can be used to represent and examine the geography of Kentucky.**

*4.GK.1a Physical maps can be used to explore Kentucky's diverse geography.*

- \* *Students will identify and map Kentucky's major physical features.*
- \* *Students will examine the climate and vegetation found in different regions of Kentucky.*

*4.GK.1b Kentucky can be represented using a political map that shows cities, capitals, and boundaries.*

- \* *Students will use political maps to identify and examine the location of the capital and major cities in Kentucky in relation to their home community using directionality and latitude and longitude coordinates.*
- \* *Students will create a political map of Kentucky that includes the capital city and five of the most popular cities as well as their own community.*
- \* *Students will examine the major natural resources found in Kentucky.*
- \* *Students will examine how these resources are used to benefit the people of the state.*

**Guided Questions**

- \* How did the physical features of Kentucky affect where communities were built?
- \* How do physical features of Kentucky affect the jobs in various communities in the state?
- \* How do the waterways in Kentucky affect the economy in the state?

**Catholic Identity Connections**

- \* Maryland Catholics moved west seeking better land, not religious liberty.
- \* We respect and care for all creation, seeing it as a gift of God's love.
- \* We are called to be good stewards, using resources wisely.

## Archdiocese of Louisville Social Studies Curriculum Framework Fourth Grade

### Historical Perspective and Cultural Diversity of Kentucky

**4.HP.1 Native American groups inhabited the region that became Kentucky. They interacted with the environment and developed unique cultures.**

*4.HP.1a Geographic factors often influenced locations of early settlements. Native Americans made use of the resources and the lands around them to meet their basic needs of food, clothing, and shelter.*

- \* *Students will identify Native American groups that inhabited Kentucky and describe how these groups used the natural resources of the area to meet their needs.*
- \* *Students will examine the locations of early Native American groups in Kentucky in relation to geographic features, noting how certain physical features were more likely to support settlement and larger populations.*
- \* *Students will investigate how Native Americans adapted to and modified their environment to meet their needs and wants.*

**4.HP.2 Many different groups throughout history have explored and/or settled in Kentucky.**

*4.HP.2a Different groups throughout Kentucky history, including Catholics, have explored and/or settled here.*

- \* *Students will identify different European groups that explored the region and discover their reasons for exploring.*
- \* *Students will use primary and secondary sources to explore the early settlements in Kentucky and discover how the physical environment and natural resources influenced where settlements were built.*
- \* *Students will research significant figures in Kentucky history, such as Daniel Boone, James Harrod, George Rogers Clark, Isaac Shelby, Abraham Lincoln, John Lancaster, and Jefferson Davis.*

*4.HP.2b Groups of Catholics left Maryland in search of better lives and settled in Kentucky.*

- \* *Students will explore the settlement of Catholics in Kentucky in the areas near the village of Bardstown.*
- \* *Students will explore the establishment of churches, monasteries, schools, orphanages, and hospitals by Catholics in Kentucky.*
- \* *Students will explore the creation of the Diocese of Bardstown, the first inland diocese, which stretched from the Great Lakes to the Deep South, from the Allegheny Mountains to the Mississippi River.*
- \* *Students will research significant Catholic figures in Kentucky history, such as Bishop Benedict Joseph Flaget and Mother Catherine Spalding.*

*4.HP.3 As the population of the state grew, Kentucky became the 15th state of the United States.*

- \* *Students will explore the causes that led to the people of Kentucky seeking statehood.*
- \* *Students will identify the process to become a state.*
- \* *Students will examine how the new government was set up to meet the needs of the population.*
- \* *Students will examine how the population grew and new cities developed in the state.*
- \* *Students will investigate how the development of steamboats, roads, and railroads contributed to the growth as a state.*

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### **4.HP.3 Kentucky played an important role in the growth of the United States.**

*4.HP.3a During the 1800s, people traveled west looking for opportunities. People began to move and settle farther west, including in Kentucky.*

- \* *Students will examine why people began to move west.*
- \* *Students will examine the difficulties of traveling west at this time.*

### **4.HP.4 Improved technology, such as the steam engine and the telegraph, made transportation and communication faster and easier. Later developments in transportation and communication technology had an effect on communities, the state, the nation, and the world.**

*4.HP.4a Life in Kentucky was impacted by the improvements in transportation and communication.*

- \* *Students will investigate which early means of transportation were used in their community in Kentucky and to which communities they were linked, noting why they were linked to those communities.*

### **4.HP.5 The Civil War had a major impact on the people of Kentucky. Kentucky played a unique role as a border state.**

*4.HP.5a Kentucky had a major impact on the Civil War.*

- \* *Students will examine life as a slave in Kentucky.*
- \* *Students will investigate the importance of Kentucky to both the Union and the Confederacy.*
- \* *Students will explore why Kentuckians were divided over which side to support in the war.*
- \* *Students will discover how the end of the war affected life in Kentucky.*

### **4.HP.6 Cultural diversity can be found in Kentucky.**

*4.HP.6a The cultural diversity of Kentucky has enriched the culture of the United States.*

- \* *Students will examine the importance of Kentucky's folk arts and crafts to the culture of the United States.*
- \* *Students will investigate how Kentucky's bluegrass music has enriched the music of the United States.*
- \* *Students will explore how Kentuckians have made important contributions in literature, sports, entertainment, medicine, and other areas.*
- \* *Students will give examples of traditions and customs of Kentucky.*
- \* *Students will describe how lifestyles and conditions have changed over time in Kentucky.*
- \* *Students will examine and explain problems created by prejudice and discrimination.*
- \* *Students will identify examples of culture, traditions, and customs of Kentucky.*

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Guided Questions**

- \* How does knowledge of the past influence the present and future?
- \* How have various cultural groups contributed to Kentucky's society?
- \* Why do interpretations of events, people, places, or situations vary?

**Catholic Identity Connections**

- \* As Catholics, we are called to respect and give value to the culture and customs of all people.
- \* Catholics strive to analyze history as a means to apply our beliefs into our diverse society.
- \* We must care for others in response to the Gospel call.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Government of Kentucky**

**4.GK.1** There are different levels of government within Kentucky. The purpose of government is to protect the rights of citizens and to promote the common good. The government of Kentucky establishes rights, freedoms, and responsibilities for its citizens.

*4.GK.1a After the Revolution, the colonies established state governments.*

- \* Students will examine the basic structure of state and local governments.
- \* Students will explore ways the state and local governments meet the needs of citizens, looking for similarities and differences between the federal, state, and local levels of government.

*4.GK.1b The Kentucky Constitution establishes the basic structure of government for the state. The government of Kentucky creates laws to protect the people and interests of the state.*

- \* Students will identify and examine the Kentucky state symbols.
- \* Students will identify the different branches of state government and the roles and responsibilities of each.
- \* Students will identify the present governor, local senator, and other significant representatives of the state.
- \* Students will investigate the steps necessary for a bill to become a law in Kentucky.
- \* Students will investigate the local and state election processes.

*4.GK.1c Government in Kentucky is organized into counties, cities, and towns.*

- \* Students will identify the county in which they live, noting where their city or town is within that county.
- \* Students will examine the structure of their local government and its relationship to state government.
- \* Students will identify the elected leaders of their community.

*4.GK.1d Kentuckians have rights and freedoms that are guaranteed in the Kentucky Constitution and by state laws.*

- \* Students will examine the rights and freedoms guaranteed to citizens.

*4.GK.1e Citizens of Kentucky have responsibilities that help their nation, their state, and their local communities function. Some responsibilities are stated as laws.*

- \* Students will learn their responsibilities as citizens, such as obeying rules and laws (e.g., traffic safety, see something-say something, anti-bullying).
- \* Students will discuss active citizenship and adults' responsibility to vote, to understand important issues, and to serve on a jury.

## Archdiocese of Louisville Social Studies Curriculum Framework Fourth Grade

### Guided Questions

- \* How do various social, political, religious, and economic systems help societies and communities function and thrive?
- \* How does the structure of the local and state government carry out/uphold the rights and freedoms outlined in the Constitution?
- \* How do individuals practice democratic citizenship at the local and state levels?

### Catholic Identity Connections

- \* We are called to promote peace and harmony with all those we encounter.
- \* We have a responsibility to be a productive member of our family, school, and community.
- \* We must help care for those who are unable to care for themselves.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Economics and Economic Systems of Kentucky**

**4.EK.1 Various groups have settled in Kentucky.**

*4.EK.1a Geographic factors influence locations and the economy of Kentucky. People make use of the resources and the lands around them to meet their basic needs of food, clothing, and shelter.*

- \* Students will examine the impact of geography on the economy of Kentucky.
- \* Students will examine the natural resources and production of goods in Kentucky.

**4.EK.2 Kentucky has a free market economy.**

*4.EK.2a The economy and economic systems of Kentucky impact life in Kentucky.*

- \* Students will define and explain the free market economy in Kentucky.
- \* Students will describe the structure of industries within the free market economy in Kentucky.
- \* Students will define service industries, finance, manufacturing, and mining and their impact and contributions to the economy in the state of Kentucky.
- \* Students will explain why individuals and businesses specialize and trade and use the terms imports and exports to demonstrate the connection between Kentucky's economy and the global economy.
- \* Students will identify goods and services in Kentucky.
- \* Students will examine how the economic activities in their local community have changed over the last 50 years.
- \* Students will investigate major economic activities in regions of Kentucky and create a map showing the major economic activities throughout the state.

**4.EK.3 The natural features of Kentucky contributed to farming throughout history.**

*4.EK.3a Farming has played a significant role in the economy of Kentucky over time.*

- \* Students will define the term commercial farms and will use it to compare and contrast modern-day Kentucky farming to farming in the past.
- \* Students will analyze and explain the significance of farming in Kentucky's agricultural economic activity.
- \* Students will examine key agricultural products of Kentucky during the 1800s and compare those to the key agricultural products of today.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Guided Questions**

- \* How did geographic factors lead to settlement in Kentucky?
- \* How are needs and wants of individuals and groups met through local sources?
- \* How are people and environments interdependent?

**Catholic Identity Connections**

- \* Catholics are called to demonstrate stewardship to God's creation, particularly through the conservation and preservation of natural resources.
- \* We must help ensure the fair treatment of all people so that their needs can be met.
- \* It is important that we express our gratitude for the work done by others to provide for our health and safety.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fourth Grade**

**Connections to English Language Arts and Literacy - Grade 4**

**4.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 4.A.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- 4.A.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- 4.A.3 Explain events, procedures, ideas, or concepts in a historical text, including what happened and why, based on specific information in the text.

**Craft and Structure**

- 4.A.4 Determine the meanings of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- 4.A.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- 4.A.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

**Integration of Knowledge and Ideas**

- 4.A.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
- 4.A.8 Explain how an author uses reasons and evidence to support particular points in a text.
- 4.A.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

**Range of Reading and Level of Text Complexity**

- 4.A.10 By the end of year, read and comprehend informational texts, including history/social studies, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

## Archdiocese of Louisville Social Studies Curriculum Framework Fourth Grade

### **Production and Distribution of Writing**

- 4.B.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- 4.B.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
- 4.B.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing, as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

### **Research to Build and Present Knowledge**

- 4.B.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- 4.B.8 Recall relevant information from experiences or gather information from print and digital sources; take notes and categorize information; and provide a list of sources.
- 4.B.9 Draw evidence from literary or informational texts (e.g., explain how an author uses reasons and evidence to support points in a text).

### **Range of Writing**

- 4.B.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

## Archdiocese of Louisville Social Studies Curriculum Framework Fourth Grade

### 4.C. Speaking and Listening Standards

#### Comprehension and Collaboration

4.C.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics

and texts, building on others' ideas and expressing their own clearly.

4.C.1a Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

4.C.1b Follow agreed-upon rules for discussions and carry out assigned roles.

4.C.1c Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

4.C.1d Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

4.C.1e Seek to understand and communicate with individuals from different perspectives and cultural backgrounds.

4.C.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

4.C.3 Identify the reasons and evidence a speaker provides to support particular points.

#### Presentation of Knowledge and Ideas

4.C.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

4.C.5 Add audio recordings and visual displays to presentations, when appropriate, to enhance the development of main ideas or themes.

4.C.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Fifth Grade**

In Grade Five, the focus is on the history and geography of the Western Hemisphere, including the development of cultures, civilizations, and empires; interaction between societies; and the comparison of the government and economic systems of modern nations. The course covers a time span from prehistory into modern times. Students will examine citizenship related to modern political and economic issues.

Once a sense of self and the importance of relationships are established for civic-readiness, the goal for learners in fifth grade is to examine the impacts of change.

Through the Practices of the Inquiry Arc, students will:

- develop a sense of civic-mindedness by examining how and why groups and individuals work to establish better forms of government in the United States and around the world and how rules and laws promote the greater good
- refine historical-thinking skills by interpreting historical sources to generate insights on both how and why context affects perspectives and determine why evidence is important in a historical claim
- explain how the influence of groups and individuals factor into economic decision-making both at home and abroad
- see how competition can create a healthy economy
- apply geographic-reasoning by conducting inquiries into how cultural and environmental outcomes change over time and are impacted by both natural and man-made events

Students will have meaningful opportunities to take informed action. They will start to identify their role as an important individual in local and world events. By the end of fifth grade, students will be ready to determine the power and impact of change both at home and around the world.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

<b>Social Studies Practices - Grade 5</b>		
<p><b>5.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>5.A.1 Develop questions about topics related to the historical events occurring in the Western Hemisphere that can be answered by gathering, interpreting, and using evidence.</p> <p>5.A.2 Recognize and effectively select different forms of evidence used to make meaning in social studies (including primary and secondary sources such as art, photographs, artifacts, oral histories, maps, and graphs).</p> <p>5.A.3 Identify evidence and explain content, authorship, purpose, and format; identify bias and perspective; identify point of view of sources.</p> <p>5.A.4 Draw inferences from past and current events.</p> <p>5.A.5 Recognize arguments on specific social studies topics and identify evidence supporting the argument.</p>	<p><b>5.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>5.B.1 Explain how events are related chronologically to one another in time.</p> <p>5.B.2 Understand the difference between B.C.E and C.E. Identify the chronological significance of data presented in timelines.</p> <p>5.B.3 Use periods of time, such as decades and centuries, to organize a historical narrative; compare histories in different places in the Western Hemisphere utilizing timelines.</p> <p>5.B.4 Employ mathematical skills to measure time in years and centuries.</p> <p>5.B.5 Identify causes and effects using examples from historical and current events.</p> <p>5.B.6 Identify and classify the relationship between multiple causes and multiple effects.</p> <p>5.B.7 Distinguish between long-term and immediate causes and effects of an event from history or current events.</p> <p>5.B.8 Recognize the dynamics of historical continuity and change over periods of time. Identify important turning points in history.</p> <p>5.B.9 Understand the role of periodization as a practice in history and social studies.</p>	<p><b>5.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>5.C.1 Identify a region in the Western Hemisphere by describing a characteristic that locations within it have in common, and then compare it to other regions. Understand how regions can be defined as sharing common characteristics in contrast with other regions.</p> <p>5.C.2 Categorize different perspectives of an individual historical event.</p> <p>5.C.3 Describe and compare events in the history of the Western Hemisphere in complex societies in similar chronological contexts and in various geographical contexts and make connections to broader regional or global processes.</p> <p>5.C.4 Identify how the relationship between geography, economics, and history helps to define a context for events in the study of the Western Hemisphere.</p>

## Archdiocese of Louisville Social Studies Curriculum Framework Fifth Grade

<p><b>5.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>5.D.1 Use location terms and geographic representations such as maps, photographs, satellite images, and models to describe where places in the Western Hemisphere are in relation to each other, to describe connections among places, and to evaluate the benefits of particular places for purposeful activities.</p> <p>5.D.2 Distinguish human-made features from "environments" (natural events or physical features - land, air, and water - that are not directly made by humans) in the Western Hemisphere.</p> <p>5.D.3 Identify and describe how environments affect human activities and how human activities affect/alter physical environments and regions through the study of cases in the Western Hemisphere.</p> <p>5.D.4 Recognize and explain how characteristics (cultural, economic, and physical-environmental) of regions affect the history of societies in the Western Hemisphere.</p> <p>5.D.5 Recognize that boundaries and definition of location are historically constructed.</p>	<p><b>5.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>5.E.1 Explain how scarcity necessitates decision making; employ examples from the Western Hemisphere to illustrate the role of scarcity historically and in current events.</p> <p>5.E.2 Show examples of various types of resources (human, physical, and natural) required to provide goods and services.</p> <p>5.E.3 Provide examples of how currency makes exchange easier by comparing a barter economy to a currency-based economy.</p> <p>5.E.4 Examine the role of job specialization and trade historically and during contemporary times in the Western Hemisphere.</p> <p>5.E.5 Explain the meaning of unemployment, inflation, income, and economic growth in the economy.</p>	<p><b>5.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>5.F.1 Demonstrate respect for the rights of others in discussions and classroom debates, regardless of whether one agrees with the other viewpoints. Consider alternate views in discussion.</p> <p>5.F.2 Participate in negotiating and compromising in the resolution of differences and conflicts.</p> <p>5.F.3 Participate in activities that focus on a localized issue or problem in a country other than the United States in the Western Hemisphere.</p> <p>5.F.4 Describe opportunities for and the role of citizens in social and political participation at various times and in various locations in the Western Hemisphere outside the United States.</p> <p>5.F.5 Identify situations with a global focus in which social actions are required and suggest solutions.</p> <p>5.F.6 Identify different types of political systems and ideologies used at various times and in various locations in the Western Hemisphere, and identify the roles of key groups in those political and social systems.</p> <p>5.F.7 Describe the roles of people in power in the Western Hemisphere, both historically and currently. Identify ways that current figures can influence people's rights and freedom.</p> <p>5.F.8 Identify rights and responsibilities of citizens within societies in the Western Hemisphere.</p> <p>5.F.9 Develop an understanding of the interdependence of individuals and groups in communities in the Western Hemisphere.</p>
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**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Early Peoples of the Americas**

**5.EP.1 The first humans in the Western Hemisphere modified their physical environment as well as adapted to their environment. Their interactions with their environment led to various innovations and to the development of unique cultures.**

*5.EP.1a Various forms of scientific evidence suggest that humans came to North America approximately 25,000 to 14,000 years ago and spread southward to South America.*

\* Students will examine the various theories of the migration routes by which the first humans may have arrived in the Western Hemisphere, including the Bering land bridge, using maps and archaeological evidence.

*5.EP.1b Human populations that settled along rivers, in rainforests, along oceans, in deserts, on the plains, in mountains, and in cold climates adapted to and made use of the resources and environment around them in developing distinct ways of life.*

\* Students will investigate and compare and contrast how the early peoples adapted to and used the environment in which they lived.

\* Students will examine maps that show the variety of different Native American groups located in the Western Hemisphere, noting that there are many different culture groups in many different types of physical, climate, and vegetative regions.

*5.EP.1c Early peoples living together in settlements developed shared cultures with customs, beliefs, values, and languages that give identity to the group. These early peoples also developed patterns of organization and governance to manage their societies.*

\* Students will select one Native American culture group from the United States, one group from Canada, and one group from the Caribbean region and compare and contrast them by examining elements of their culture, including customs, beliefs, values, languages, and patterns of organization and governance.

*NOTE: For this document, the term "Native American" is used with the understanding that it could say "American Indian".*

**Guided Questions**

- \* How does the environment (physical, social, cultural, political) affect the migration of people?
- \* How are people dependent on their environment?
- \* How do the beliefs and culture of people affect how they govern themselves?

**Catholic Identity Connections**

- \* Connections can be made between the spirituality of the Native Americans and the Catholic faith.
- \* The Catholic faith can also be considered according to its customs, beliefs, language, and pattern of organization and governance.
- \* Throughout time, people have formed communities and relied on one another.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Complex Societies and Civilizations**

**5.CS.1** Between 1100 B.C.E. and 1500 C.E., complex societies and civilizations developed in the Western Hemisphere. Although these complex societies and civilizations have certain defining characteristics in common, each is also known for unique cultural achievements and contributions.

*5.CS.1a Civilizations share certain common characteristics of religion, job specialization, cities, government, language and writing systems, technology, and social hierarchy.*

- \* Students will locate the complex societies and civilizations of the Mayas, Aztecs, and Incas on a map and determine when these societies and civilizations occurred.
- \* Students will investigate the characteristics of the Mayas, Aztecs, and Incas, noting similarities and differences.

*5.CS.1b Complex societies and civilizations adapted to and modified their environment to meet the needs of their people.*

- \* Students will compare how the Mayas, Aztecs, and Incas adapted to and modified their environment to meet the needs of the people, examining the clothing, farming, shelter, and transportation systems for each.

*5.CS.1c Political states can take different forms, such as city-states and empires. A city-state is comprised of a city with a government that controls the surrounding territory, while an empire is a political organization developed when a single, supreme authority conquers other geographic and/or cultural regions beyond its initial settlements.*

- \* Students will compare and contrast political states of the Maya and the Aztec, noting the territories that they controlled, the type of rule each had, and how the ruler attempted to unify the people.

**Guided Questions**

- \* How do ancient civilizations contribute to modern day society?
- \* What characteristics of a leader influence the success or demise of a society?
- \* Why is it necessary to adapt to or modify the environment to ensure survival?

**Catholic Identity Connections**

- \* People in a society often share common beliefs (e.g., those of the Catholic faith).
- \* People throughout time have been called to find ways to live in harmony and support one another.
- \* People have a responsibility to care for the marginalized and vulnerable.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**European Exploration and Its Effects**

**5.EE.1 Various European powers explored and eventually colonized the Western Hemisphere. This had a profound effect on Native Americans and led to the transatlantic slave trade.**

*5.EE.1a Europeans traveled to the Americas in search of new trade routes, including a northwest passage, and resources. Some hoped to gain wealth, power, and glory.*

- \* *Students will investigate explorers from different European countries (including Christopher Columbus, John Cabot, Jacques Cartier, Pedro Cabral, and Vasco Nunez de Balboa) and map the areas of the Western Hemisphere where they explored.*
- \* *Students will map the key areas of the Western Hemisphere that were colonized by the English, Dutch, French, Portuguese, and Spanish, comparing the locations, relative sizes, and key resources of these regions.*

*5.EE.1b Europeans encountered and interacted with Native Americans in a variety of ways.*

- \* *Students will examine how Native Americans viewed the newcomers.*
- \* *Students will examine European interactions with Native Americans, using such examples as:*
  - *Conquests by Cortez and Pizarro and the resulting demographic change*
  - *French in Canada and the fur trade*

*5.EE.1c The transatlantic trade of goods, movement of people, and spread of ideas and diseases resulted in cultural diffusion. This cultural diffusion became known as the Columbian Exchange which reshaped the lives and influenced the beliefs of people.*

- \* *Students will map the movements of people, plants, animals, and disease between Europe, the Americas, and Africa.*
- \* *Students will examine the effect of diseases introduced to the Western Hemisphere.*

*5.EE.1d Africans were captured, brought to the Americas, and sold as slaves. Their transport across the Atlantic was known as the Middle Passage.*

- \* *Students will examine the conditions experienced by enslaved Africans during the Middle Passage*

**Guided Questions**

- \* How have individuals, events, and decisions influenced society throughout history?
- \* Why did areas colonized by various European groups differ?
- \* How did cultural diffusion impact the lives of people already living in the Western Hemisphere and those who arrived from Europe?

**Catholic Identity Connections**

- \* The early explorers wanted to spread Christianity. Missionaries grew from this movement. The French had a deep influence on Kentucky Catholicism.
- \* The treatment of Africans who were captured and sold as slaves is in direct conflict with the teachings of the Catholic Church.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Geography in the Western Hemisphere**

**5.GW.1 The diverse geography of the Western Hemisphere has influenced human culture and settlement in distinct ways. Human communities in the Western Hemisphere have modified the physical environment.**

*5.GW.1a The Western Hemisphere can be divided into regions. Regions are areas that share common, identifiable characteristics such as physical, political, economic, or cultural features. Regions within the Western Hemisphere include:*

- North America (Canada and the United States)
- Mesoamerica (Mexico and Central America)
- Caribbean
- South America

\* Students will create a political map of the Western Hemisphere, noting which countries are in which region, and a political map of the United States showing the location of the states.

*5.GW.1b Physical maps reflect the varied climate zones, landforms, bodies of water, and natural resources of the Western Hemisphere.*

\* Students will map the regions within the Western Hemisphere and locate major physical features within each region.

*5.GW.1c The physical environment influences human population distribution, land use, and other forms of economic activity.*

\* Students will use physical, climate, and vegetation maps in combination with population density, land use, and resource distribution maps to discern patterns in human settlement and types of economic activity.

**Guided Questions**

- \* How do physical characteristics define regions and their boundaries?
- \* What are the similarities and differences within and across regions?
- \* How does the physical environment impact where and how people live and work?

**Catholic Identity Connections**

- \* All things on this Earth are God's creations.
- \* We are called to be stewards of the Earth.
- \* Within the area known as the Western Hemisphere, God created lands with diverse climate, landforms, and resources.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Comparative Cultures**

**5.CC.1** The countries of the Western Hemisphere are diverse and the cultures of these countries are rich and varied. Due to their proximity to each other, the countries of the Western Hemisphere share some of the same concerns and issues.

*5.CC.1a The countries of the Western Hemisphere have varied characteristics and contributions that distinguish them from other countries.*

- \* *Students will explore key cultural characteristics, such as the languages, religions, and contributions of the United States, Canada, Mexico, and one Caribbean or one South American country.*
- \* *Students will compare and contrast key cultural characteristics and contributions associated with the United States with those associated with Canada, Mexico, and a country in either the Caribbean or South America.*

*5.CC.1b Countries in the Western Hemisphere face a variety of concerns and issues specific to the region.*

- \* *Students will investigate a current issue that two or more Western Hemisphere countries are facing at this time. Some examples include environmental issues, immigration, and trade.*

**Guided Questions**

- \* How have various cultural groups contributed to society?
- \* How do countries work together to solve a common problem or need?
- \* How might the collaboration of various countries on similar issues impact the lives of the people?

**Catholic Identity Connections**

- \* We are all God's people, made in our own unique way.
- \* We are called to be tolerant of all people.
- \* Collaboration is key to finding solutions to common issues.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Government**

**5.G.1 The political systems of the Western Hemisphere vary in structure and organization across time and place.**

**5.G.1a Government structures, functions, and founding documents vary from place to place in the countries of the Western Hemisphere.**

- \* Students will examine the basic structure of the United States federal government, including the president, Congress, and the courts.
- \* Students will examine the foundational documents of the United States government for evidence of the country's beliefs, values, and principles.
- \* Students will compare and contrast the government structures and functions of the United States government with those of Canada, Mexico, and one other country in either the Caribbean or South America.

**5.G.1b Legal, political, and historic documents define the values, beliefs, and principles of constitutional democracy.**

- \* Students will examine the Declaration of Independence, the United States Constitution and Bill of Rights, the Mexican Constitution, and the Canadian Charter of Rights in terms of key values, beliefs, and principles of constitutional democracy.

**5.G.1c Across time and place, different groups of people in the Western Hemisphere have struggled and fought for equality and civil rights or sovereignty.**

- \* Students will examine at least one group of people, such as Native Americans, African Americans, women, or another cultural, ethnic, or racial minority in the Western Hemisphere, who have struggled or are struggling for equality and civil rights or sovereignty.

**5.G.1d Multinational organizations and non-governmental organizations in the Western Hemisphere seek to encourage cooperation between nations, protect human rights, support economic development, and provide assistance in challenging situations.**

- \* Students will examine multinational organizations and non-governmental organizations and their roles in promoting cooperation, peace, and cultural understanding.

**Guided Questions**

- \* How do key values, beliefs, and principles influence government?
- \* How do minorities seek equality?
- \* How do different organizations work to promote cooperation, peace, and cultural understanding?

**Catholic Identity Connections**

- \* As Catholics, we are called to be stewards of peace to all of God's people.
- \* It is important that all people are treated with respect and dignity.
- \* We are called to live in harmony and protect the human rights of others.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Economics**

**5.E.1 The peoples of the Western Hemisphere have developed various ways to meet their needs and wants. Many of the countries of the Western Hemisphere trade with each other, as well as with other countries around the world.**

*5.E.1a Different types of economic systems have developed across time and place within the Western Hemisphere. These economic systems, including traditional, market, and command, address the three economic questions: what will be produced, how will it be produced, and who will get what is produced.*

*\* Students will explore the characteristics of a traditional economy used by the Inuit, the market economy of the United States or Canada, and the command economy of Cuba, noting similarities and differences.*

*5.E.1b Peoples of the Western Hemisphere have engaged in a variety of economic activities to meet their needs and wants.*

*\* Students will identify the major natural resources of the United States, Canada, Mexico, and one Caribbean or one South American country to determine major industries of those countries in relation to available resources.*

*\* Students will determine why certain products are manufactured in particular places, taking into account the availability of resources, transportation availability, costs, and markets.*

*5.E.1c Countries trade with other countries to meet economic needs and wants. They are interdependent.*

*\* Students will examine products that are imported into markets within the United States based on demand for these products, noting how this affects the United States economy.*

*\* Students will examine products that are exported from the United States to other markets in the Western Hemisphere, noting how this affects the United States economy.*

**Guided Questions**

- \* How does the environment affect economic decisions?
- \* How do availability of resources and issues of supply and demand affect relationships and decisions?
- \* How are wants and needs of individuals and groups met through local, national, and global sources?

**Catholic Identity Connections**

- \* As Catholics, we are called to share the resources that God has blessed us with.
- \* We live in a world where interdependency is essential.
- \* God created a world that offers diverse natural resources and settings.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Fifth Grade**

**Connections to Reading Standards for Literacy in History/Social Studies - Grades 5-8**

**5-8.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 5-8.A.1 Cite specific textual evidence to support analysis of primary and secondary sources.
- 5-8.A.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- 5-8.A.3 Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes a law, how interest rates are raised or lowered).

**Craft and Structure**

- 5-8.A.4 Determine the meanings of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- 5-8.A.5 Describe how a text presents information (e.g., sequentially, comparatively, causally).
- 5-8.A.6 Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).

**Integration of Knowledge and Ideas**

- 5-8.A.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 5-8.A.8 Distinguish between fact, opinion, and reasoned judgment in a text.
- 5-8.A.9 Analyze the relationship between a primary and secondary source on the same topic.

**Range of Reading and Level of Text Complexity**

- 5-8.A.10 By the end of grade 8, read and comprehend history/social studies texts in the grades 5-8 text complexity band independently and proficiently.

## Archdiocese of Louisville Social Studies Curriculum Framework Fifth Grade

### 5-8.B. Writing Standards

#### Text Types and Purposes

- 5-8.B.1 Write arguments focused on discipline-specific content.
  - 5-8.B.1a Introduce claims about a topic or issue, acknowledge and distinguish the claims from alternate or opposing claims, and organize the reasons and evidence logically.
  - 5-8.B.1b Support claims with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
  - 5-8.B.1c Use words, phrases, and clauses to create cohesion and clarify the relationships between claims, counterclaims, reasons, and evidence.
  - 5-8.B.1d Establish and maintain a formal style.
  - 5-8.B.1e Provide a concluding statement or section that follows and supports the argument presented.
- 5-8.B.2 Write informative/explanatory texts, including the narration of historical events.
  - 5-8.B.2a Introduce a topic, clearly previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - 5-8.B.2b Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
  - 5-8.B.2c Use appropriate and varied transitions to create cohesion and clarify the relationships between ideas and concepts.
  - 5-8.B.2d Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - 5-8.B.2e Establish and maintain a formal style and objective tone.
  - 5-8.B.2f Provide a concluding statement or section that follows from and supports the information or explanation presented.

#### Production and Distribution of Writing

- 5-8.B.3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5-8.B.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- 5-8.B.5 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

## Archdiocese of Louisville Social Studies Curriculum Framework Fifth Grade

### Research to Build and Present Knowledge

- 5-8.B.5 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- 5-8.B.6 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- 5-8.B.7 Draw evidence from informational texts to support analysis, reflection, and research.

### Range of Writing

- 5-8.B.8 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

*NOTE: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical importance.*

## Archdiocese of Louisville Social Studies Curriculum Framework Fifth Grade

### 5-8.C. Speaking and Listening Standards

#### Comprehension and Collaboration

- 5-8.C.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 5-8.C.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 5-8.C.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

#### Presentation of Knowledge and Ideas

- 5-8.C.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning, and the organization, development, and style are appropriate to task, purpose, and audience.
- 5-8.C.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 5-8.C.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

#### 5-8.C. Note on Range and Content of Student Speaking and Listening

*To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations - as part of a whole class, in small groups, and with a partner - built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever the intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.*

*New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.*

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In Grade Six, the focus is on the geography and history of the Eastern Hemisphere, including the development of cultures, civilizations, and empires; interactions between societies; and the comparison of trends in government and economics. Students examine the Eastern Hemisphere today using geographic skills. This provides the foundation for making connections between the past and present. They then explore a time span from pre-history into the 1300s.

The goal in sixth grade is to search for ways to understand why change occurs and to question and evaluate the meaning of this change.

Through the Practices of the Inquiry Arc, students will:

- seek to understand how government functions to serve the interest of the greater good
- examine the multiple influences on how decisions are made and how policies are created
- engage in disciplinary thinking by investigating how humans interact with their environments and the role that communication and transportation technologies play in these interactions throughout various regions of the world and analyzing their findings to determine impacts
- engage in experiences that allow them to develop an understanding of how economic decisions affect the well-being of individuals and society as a whole
- engage in historical thinking
- seek to generate their own questions using historical sources as evidence and launch investigations that will allow them to uncover their own explanations of why change occurs

Students will develop deeper understandings and plan, implement, and reflect on taking informed action. They will not only understand true citizenship, but will also recognize that they themselves are citizens with the power and responsibility to impact their communities. By the end of sixth grade, students will be able to make meaning of these practices to uncover historical understandings and demonstrate civic competencies.

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<b>Social Studies Practices - Grade 6</b>		
<p><b>6.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>6.A.1 Develop and frame questions about topics related to historical events occurring in the Eastern Hemisphere that can be answered by gathering, interpreting, and using evidence.</p> <p>6.A.2 Identify and analyze different forms of evidence used to make meaning in social studies (including primary and secondary sources such as art, photographs, artifacts, oral histories, maps, and graphs).</p> <p>6.A.3 Explain content, authorship, point of view, purpose, and format.</p> <p>6.A.4 Draw inferences from implicit ideas.</p> <p>6.A.5 Recognize and describe the arguments of others on specific social studies topics and identify evidence to support the arguments.</p> <p>6.A.6 Examine arguments related to a specific social studies topic from multiple perspectives.</p> <p>6.A.7 Identify bias; explain the role of bias and potential audience.</p>	<p><b>6.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>6.B.1 Identify ways that events are related chronologically to one another.</p> <p>6.B.2 Employ mathematical skills to measure time in years, decades, centuries, and millennia; calculate time from the fixed points of the calendar system (B.C.E. and C.E.); and interpret data presented in timelines.</p> <p>6.B.3 Identify causes and effects from historical events and current events and classify the relationship between multiple causes and multiple effects.</p> <p>6.B.4 Examine and analyze long-term effects of an event from history or current events.</p> <p>6.B.5 Recognize and analyze patterns of historical continuity and change over periods of time.</p> <p>6.B.6 Identify the role of turning points in historical change.</p> <p>6.B.7 Compare histories in different places in the Eastern Hemisphere utilizing timelines.</p> <p>6.B.8 Identify ways that changing eras affect the historical narrative.</p>	<p><b>6.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>6.C.1 Identify a region in the Eastern Hemisphere by describing its characteristics, and then compare those characteristics to other regions.</p> <p>6.C.2 Describe and compare events in the history of civilizations in the Eastern Hemisphere during similar time periods, but in different geographical regions, and connect to global processes.</p> <p>6.C.3 Identify how the relationship between geography, economics, and history shapes events in the study of the Eastern Hemisphere.</p>

## Archdiocese of Louisville Social Studies Curriculum Framework Sixth Grade

<p><b>6.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>6.D.1 Use location terms and geographic representations such as maps, photographs, satellite images, and models to describe where places in the Eastern Hemisphere are in relation to each other, to describe connections between places, and to evaluate the benefits of particular places for purposeful activities.</p> <p>6.D.2 Distinguish human activities and human-made features from natural environments in the Eastern Hemisphere.</p> <p>6.D.3 Identify the relationship between human activities and the natural environment through the study of cases in the Eastern Hemisphere.</p> <p>6.D.4 Recognize and explain how cultural, economic, and physical-environmental characteristics of regions affect the history of societies in the Eastern Hemisphere.</p> <p>6.D.5 Describe the spatial organization of a place, considering the historical, social, political, and economic implication of that organization.</p> <p>6.D.6 Recognize that boundaries and definitions of location are historically constructed.</p>	<p><b>6.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>6.E.1 Explain how scarcity necessitates decision making; employ examples from the Eastern Hemisphere to illustrate the role of scarcity historically and in current events.</p> <p>6.E.2 Examine the role that various resources (human, physical, and natural) have in providing goods and services.</p> <p>6.E.3 Compare market economies to other economic systems in the Eastern Hemisphere.</p> <p>6.E.4 Examine the role of job specialization and trade historically and during contemporary times in the Eastern Hemisphere.</p> <p>6.E.5 Provide examples of unemployment, inflation, total production, income, and economic growth in economies in the Eastern Hemisphere.</p> <p>6.E.6 Describe government decisions that affect economies in case studies from the Eastern Hemisphere. Use historical examples to compare the costs and benefits of economic decisions.</p>	<p><b>6.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>6.F.1 Demonstrate respect for the rights of others in discussions and classroom debates, regardless of whether one agrees with the other viewpoint. Consider alternate views in discussions.</p> <p>6.F.2 Participate in negotiating and compromising in the resolution of differences and conflicts; introduce and examine the role of conflict resolution.</p> <p>6.F.3 Participate in activities that focus on a local issue or problem in a country in the Eastern Hemisphere.</p> <p>6.F.4 Develop an understanding of an interdependent global community by developing awareness and/or engaging in the political process as it relates to a global context.</p> <p>6.F.5 Identify global situations in which social actions are required and suggest solutions.</p> <p>6.F.6 Identify and explore different types of political systems and ideologies used at various times in the Eastern Hemisphere.</p> <p>6.F.7 Identify the role of key individuals and groups in political and social systems.</p> <p>6.F.8 Identify and describe opportunities for and the role of the individual in social and political participation at various times in the Eastern Hemisphere.</p> <p>6.F.9 Identify ways that current figures can influence people's rights and freedom in the Eastern Hemisphere.</p> <p>6.F.10 Identify rights and responsibilities of citizens within societies in the Eastern Hemisphere.</p>
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**Present-Day Eastern Hemisphere Geography**

**6.G.1 The diverse geography of the Eastern Hemisphere has influenced human culture and settlement patterns in distinct ways. Human communities in the Eastern Hemisphere have adapted to or modified the physical environment.**

*6.G.1a Maps can be used to represent the varied climate zones, landforms, bodies of water, and resources of the Eastern Hemisphere.*

*\* Students will use maps to identify and examine the varied climate zones, landforms, bodies of water, and resources of the Eastern Hemisphere.*

*6.G.1b The Eastern Hemisphere can be divided into regions. Regions are areas that share common identifiable characteristics, such as physical, political, economic, or cultural features. Regions within the Eastern Hemisphere include:*

*- Middle East (North Africa and Southwest Asia)*

*- Sub-Saharan Africa*

*- Europe (West, North, South, Central, and Southeast)*

*- Russia and the Independent States (Russia, Caucasus, Central Asia, and the region of Belarus, Moldova, and Ukraine)*

*- East Asia (People's Republic of China, North Korea, South Korea, Japan, and Taiwan)*

*- Southeast Asia (Vietnam, Cambodia, Laos, Thailand, Myanmar [Burma], Malaysia, Singapore, Indonesia, Brunei, Philippines)*

*- South Asia (Afghanistan, Pakistan, India, Bangladesh, Nepal, Bhutan)*

*- Oceania (Australia, New Zealand, the Pacific)*

*\* Students will identify and describe various regions of the Eastern Hemisphere.*

*6.G.1c The physical environment influences human population distribution, land use, economic activities, and political connections.*

*\* Students will use physical, climate, and vegetation maps in combination with population density, land use, and resource distribution maps in order to discern patterns in human settlement, economic activity, and the relationship to scarcity of resources in the present-day Eastern Hemisphere.*

*\* Students will work with maps at a variety of scales so they can compare patterns in population density and land use, economic activity, and political connections across the present-day Eastern Hemisphere, within a region of the Eastern Hemisphere, and in a specific country. In doing so, students will examine maps of the hemisphere, three regions within the present-day Eastern Hemisphere, and one specific country within each region.*

*6.G.1d Issues and problems experienced in the regions of the Eastern Hemisphere have roots in the past.*

*\* Students will examine current political and environmental issues in a region or country of the Eastern Hemisphere.*

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**Guided Questions**

- \* What are physical and cultural differences between North Africa and Sub-Saharan Africa?
- \* What effect did geography have on the population distribution in the Eastern Hemisphere?
- \* How do historical issues affect the current political climate in the Eastern Hemisphere?

**Catholic Identity Connections**

- \* The population of Catholics in the regions of the Eastern Hemisphere has varied over time.
- \* The Catholic faith has played a role in shaping the leadership in various Eastern Hemisphere countries.
- \* God created a world with diverse climates, landforms, and resources.

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**The First Humans through the Neolithic Revolution in the Eastern Hemisphere**

**6.NR.1 The first civilized humans modified their physical environment as well as adapted to their environment.**

*6.NR.1a Human populations that settled along rivers, in rainforests, along coastlines, in deserts, and in mountains made use of the resources and the environment around them in developing distinct ways of life.*

*\* Students will describe how humans adapted to various environments.*

*6.NR.1b Early peoples in the Eastern Hemisphere are often studied by analyzing artifacts and archaeological features. Archaeologists engage in digs and study artifacts and features in a particular location to gather evidence about a group of people and how they lived at a particular time.*

*\* Students will analyze artifacts and describe the role of archaeologists in gathering evidence about a group of people.*

*6.NR.1c The Neolithic Revolution was marked by technological advances in agriculture and domestication of animals that allowed people to form semi-sedentary and sedentary settlements.*

*\* Students will explore early human migration patterns and settlements through the use of multiple maps and the examination of various forms of archaeological evidence.*

*\* Students will be introduced to pastoral nomadic peoples as a culture type that existed throughout history.*

*\* Students will compare the use of tools and animals, types of dwellings, art, and social organizations of early peoples, and distinguish between the Paleolithic Age and the Neolithic Age.*

*6.NR.1d Historians use archaeological and other types of evidence to investigate patterns in history and identify turning points. A turning point can be an event, era, and/or development in history that has brought about significant social, cultural, ecological, political, or economic change.*

*\* Students will determine if the Neolithic Revolution is a turning point in world history, using various forms of evidence.*

**Guided Questions**

- \* How did the first civilized humans modify their environment?
- \* In what ways was the Neolithic Revolution a turning point in history?
- \* How is the work of archaeologists important to the study of early civilizations?

**Catholic Identity Connections**

- \* Throughout the ages, people have formed communities and relied on one another.
- \* People use their talents and skills in utilitarian and aesthetic ways.

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**Early River Valley Civilizations in the Eastern Hemisphere (ca. 3500 B.C.E. - ca. 500 B.C.E.)**

**6.RV.1** Complex societies and civilizations developed in the Eastern Hemisphere. Although these complex societies and civilizations have certain defining characteristics in common, each is also known for unique cultural achievements and contributions. Early human communities in the Eastern Hemisphere adapted to and modified the physical environment.

*6.RV.1a* Humans living together in settlements develop shared customs, beliefs, ideas, and languages that give identity to the group.

\* Students will identify the shared customs, beliefs, ideas, and languages that give a cultural identity to a particular group.

*6.RV.1b* Complex societies and civilizations share the common characteristics of religion, job specialization, cities, government, language/record keeping system, technology, and social hierarchy. People in Mesopotamia, the Yellow River Valley, the Indus River Valley, and the Nile River Valley developed complex societies and civilizations.

\* Students will explore at least two river valley societies and civilizations (one in the Middle East [Mesopotamia or Nile River Valley], one in South Asia [Indus River Valley], or one in East Asia [Yellow River Valley]) by examining archaeological and historical evidence to compare and contrast characteristics of these complex societies and civilizations.

\* Students will examine the major events in the history of the Israelites and the role they played in shaping future civilizations.

*6.RV.1c* Mesopotamia, Yellow River Valley, Indus River Valley, and Nile River Valley complex societies and civilizations adapted to and modified their environment to meet the needs of their population.

\* Students will explore how the selected complex societies and civilizations adapted to and modified their environment to meet their basic needs of food, clothing, and shelter.

*6.RV.1d* Political and social hierarchies influenced the access that groups and individuals had to power, wealth, and jobs and influenced their roles within society.

\* Students will compare and contrast gender roles, access to wealth and power, and division of labor within the political and social structures of the selected river valley societies and civilizations.

\* Students will examine the unique achievements of each of the selected complex societies and civilizations that served as lasting contributions.

**Guided Questions**

- \* How did the isolation of Egypt uniquely affect its development in comparison to other river valley civilizations?
- \* What are the shared cultural characteristics of each river valley civilization?
- \* How did each civilization modify or adapt to its environments?

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### Catholic Identity Connections

- \* Significant people from the Old Testament (e.g., Abraham and Moses) impacted the beginning of Christianity in this time and place.
- \* The Old Testament describes the people and their lives during this time period.
- \* Gifts and talents shared by individuals can provide lasting impacts.

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**Comparative World Religions (ca. 2000 B.C.E - ca. 630 C.E)**

**6.WR.1 Major religions and belief systems developed in the Eastern Hemisphere. There were important similarities and differences between these belief systems.**

*6.WR.1a Civilizations and complex societies developed belief systems and religions that have similar, as well as different, characteristics.*

*\* Students will compare and contrast belief systems and religions that developed in the Eastern Hemisphere.*

*6.WR.1b Belief systems and religions are based on sets of mutually held values.*

*\* Students will study the belief systems of Judaism, Christianity, Islam, Buddhism, Hinduism, and Confucianism by looking at where the belief system originated, when it originated, founder(s) if any, and the major tenets, practices, and sacred writings or holy texts for each. (Note: Although not within this historic period, students may also study Sikhism and other major belief systems at this point.)*

*6.WR.1c Belief systems and religions are based on sets of mutually held values.*

*\* Students will identify similarities and differences across belief systems, including their effect on social order and gender roles.*

*\* Students will explore the influence of various belief systems on contemporary cultures and events.*

**Guided Questions**

- \* What influences the religion and belief system of a group of people?
- \* How were belief systems in the Eastern Hemisphere different and similar to each other?
- \* How do belief systems impact social order and gender roles?

**Catholic Identity Connections**

- \* Many world religions in existence today developed during this time.
- \* Sacred writings and holy texts (e.g., the Bible) provide guidance for peoples of a particular religion.
- \* Over the course of history, people with shared values developed belief systems or religions.

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**Comparative Classical Civilizations in the Eastern Hemisphere (ca. 600 B.C.E - ca. 500 C.E.)**

**6.CC.1** As complex societies and civilizations change over time, their political and economic structures evolve. A golden age may be indicated when there is an extended period of time that is peaceful, prosperous, and demonstrates great cultural achievements.

**6.CC.1a** *Geographic factors influence the development of classical civilizations and their political structures.*

- \* Students will locate the classical civilizations on a map and identify geographic factors that influenced the extent of their boundaries, locate their cities on a map, and identify their political structures.
- \* Students will compare and contrast the similarities and differences between the Chinese (Qin, Han) and Greco-Roman classical civilizations by examining religion, job specialization, cities, government, language/record keeping system, technology, and social hierarchy.

**6.CC.1b** *Political structures were developed to establish order, to create and enforce laws, and to enable decision making.*

- \* Students will examine the similarities and differences between the political systems of Chinese (Qin, Han) and Greco-Roman (Athens, Sparta, Roman Republic, Roman Empire) classical civilizations.

**6.CC.1c** *A period of peace, prosperity, and cultural achievements may be indicative of a golden age.*

- \* Students will examine evidence related to the Qin, Han, and Greco-Roman (Athens and Roman Empire) civilizations and determine if these civilizations experienced a golden age.
- \* Students will examine how cultural achievements of these civilizations have influenced contemporary societies.

**Guided Questions**

- \* How do geographic factors influence the development of civilizations?
- \* How do political structures benefit the people of a society?
- \* Why would peace, prosperity, and cultural achievements be indicators of a golden age?

**Catholic Identity Connections**

- \* Through the Ten Commandments, God provided us with the guidelines for living in community.
- \* The gifts and talents shared at one point in time can have a lasting influence.
- \* God's people have a responsibility to protect the well-being of others by following rules and laws.

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**Mediterranean World: Feudal Western Europe, the Byzantine Empire, and the Islamic Caliphates  
(ca. 600 C.E. - ca. 1450)**

**6.MW.1 The Mediterranean world was reshaped with the fall of the Roman Empire. Three distinct cultural regions developed: feudal Western Europe, the Byzantine Empire, and the Islamic caliphates. These regions interacted with each other and clashed over control of holy lands.**

*6.MW.1a Overexpansion, corruption, invasions, civil wars, and discord led to the fall of Rome. Feudalism developed in Western Europe in reaction to a need for order and to meet basic needs.*

- \* *Students will examine reasons for the fall of the Roman Empire and the development of feudalism in Western Europe, including efforts to restore the empire, the decentralization of political authority, and the role of the Catholic Church in providing some measure of central authority.*

*6.MW.1b The Byzantine Empire preserved elements of the Roman Empire, controlled lands within the Mediterranean basin, and began to develop Orthodox Christianity.*

- \* *Students will examine how the Byzantine Empire preserved elements of the Roman Empire by blending Roman traditions with Greek culture, and developed a Christian faith, known as Orthodox Christianity, which united Church and state authority in the person of the emperor.*

*6.MW.1c Islam spread within the Mediterranean region from southwest Asia to northern Africa and the Iberian Peninsula.*

- \* *Students will examine the Umayyad and Abbasid caliphates, noting how the introduction of Islam changed the societies and cultures each conquered, blending with those societies and cultures and creating dynamic new Islamic societies and cultures.*

*6.MW.1d Competition and rivalry over religious, economic, and political control over holy lands led to conflict such as the Crusades.*

- \* *Students will examine the three distinct cultural regions of the Mediterranean world in terms of their location, the extent of each region at the height of its power, and the political, economic, and social interactions between these regions.*
- \* *Students will examine the conflict of the Crusades from three different perspectives: feudal Europe, Byzantine, and Islamic.*

**Guided Questions**

- \* What are the unique characteristics of each of the three empires (Byzantine, feudal Europe, and Islamic)?
- \* How did the spread of Christianity and Islam cause conflict between both regions?
- \* How did the fall of the Roman Empire lead to the Great Schism?

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### Catholic Identity Connections

- \* The development of the role of the Pope had a significant impact during this time.
- \* Growth of the Catholic Church was related to the development of feudal Europe.
- \* The Catholic Church provided guidance during these turbulent times.

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### Interactions across the Eastern Hemisphere (ca. 600 C.E. - ca. 1450)

#### 6.1.1 Trade networks promoted the exchange and diffusion of language, belief systems, tools, intellectual ideas, inventions, and diseases.

*6.1.1a The Silk Roads, the Indian Ocean, and the Trans-Saharan routes formed the major Afro-Eurasian trade networks connecting the East and the West. Ideas, people, technologies, products, and diseases moved along these routes.*

- \* *Students will create maps that illustrate items exchanged and ideas spread along the Silk Roads, across the Indian Ocean, and on the Trans-Saharan trade routes.*
- \* *Students will examine how the location of resources helped determine the location of trade routes and the economic impact of the exchange of resources.*
- \* *Students will study interregional travelers such as Marco Polo, Ibn Battuta, Mansa Musa, and Zheng He and examine why they traveled, the places they visited, what was learned, and what was exchanged as a result of their travel.*
- \* *Students will examine the influence of Alexander the Great on the Eastern Hemisphere.*

*6.1.1b The Mongol conquests in Eurasia fostered connections between the East and the West, and the Mongols served as important agents of change and cultural diffusion.*

- \* *Students will map the extent of the Mongol Empire at the height of its power.*
- \* *Students will examine the methods used by the Mongols to enable them to rule over a diverse population, noting how Mongol rule expanded trade.*

*6.1.1c The spread of the Black Death (Bubonic Plague) was a result of interregional exchange between various regions within Afro-Eurasia.*

- \* *Students will examine the spread of the Black Death (Bubonic Plague) as a result of interregional exchange and its effects on various regions within Afro-Eurasia, using a variety of sources, such as maps, poetry, and primary source documents.*

*6.1.1d Complex societies and civilizations adapted and designed technologies for transportation that allowed them to cross challenging landscapes and move people and goods efficiently.*

- \* *Students will examine how various technologies affected trade and exchanges. Some examples are types of ships, including junks and caravels; improvements to ships, such as sails and rudders; navigation tools, such as the compass and astrolabe; and gunpowder.*

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**Guided Questions**

- \* What were the effects of trade on various civilizations in the Eastern Hemisphere?
- \* How did the Black Death alter European societies?
- \* How did improving technology change life in the Eastern Hemisphere up to 1450 C.E.?

**Catholic Identity Connections**

- \* The Catholic Church played an important role in ministering to those affected by the Black Death.
- \* Trade had a significant influence on the spread of the Catholic faith.
- \* We are called to help those in need due to sickness, death, poverty, or other issues.

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**Connections to Reading Standards for Literacy in History/Social Studies - Grades 5-8**

**5-8.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 5-8.A.1 Cite specific textual evidence to support analysis of primary and secondary sources.
- 5-8.A.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- 5-8.A.3 Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes a law, how interest rates are raised or lowered).

**Craft and Structure**

- 5-8.A.4 Determine the meanings of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- 5-8.A.5 Describe how a text presents information (e.g., sequentially, comparatively, causally).
- 5-8.A.6 Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).

**Integration of Knowledge and Ideas**

- 5-8.A.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 5-8.A.8 Distinguish between fact, opinion, and reasoned judgment in a text.
- 5-8.A.9 Analyze the relationship between a primary and secondary source on the same topic.

**Range of Reading and Level of Text Complexity**

- 5-8.A.10 By the end of grade 8, read and comprehend history/social studies texts in the grades 5-8 text complexity band independently and proficiently.

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### 5-8.B. Writing Standards

#### Text Types and Purposes

- 5-8.B.1 Write arguments focused on discipline-specific content.
  - 5-8.B.1a Introduce claims about a topic or issue, acknowledge and distinguish the claims from alternate or opposing claims, and organize the reasons and evidence logically.
  - 5-8.B.1b Support claims with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
  - 5-8.B.1c Use words, phrases, and clauses to create cohesion and clarify the relationships between claims, counterclaims, reasons, and evidence.
  - 5-8.B.1d Establish and maintain a formal style.
  - 5-8.B.1e Provide a concluding statement or section that follows and supports the argument presented.
- 5-8.B.2 Write informative/explanatory texts, including the narration of historical events.
  - 5-8.B.2a Introduce a topic, clearly previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - 5-8.B.2b Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
  - 5-8.B.2c Use appropriate and varied transitions to create cohesion and clarify the relationships between ideas and concepts.
  - 5-8.B.2d Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - 5-8.B.2e Establish and maintain a formal style and objective tone.
  - 5-8.B.2f Provide a concluding statement or section that follows from and supports the information or explanation presented.

#### Production and Distribution of Writing

- 5-8.B.3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5-8.B.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- 5-8.B.5 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

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### Research to Build and Present Knowledge

- 5-8.B.5 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- 5-8.B.6 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- 5-8.B.7 Draw evidence from informational texts to support analysis, reflection, and research.

### Range of Writing

- 5-8.B.8 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

*NOTE: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical importance.*

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### 5-8.C. Speaking and Listening Standards

#### Comprehension and Collaboration

- 5-8.C.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 5-8.C.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 5-8.C.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

#### Presentation of Knowledge and Ideas

- 5-8.C.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning, and the organization, development, and style are appropriate to task, purpose, and audience.
- 5-8.C.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 5-8.C.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

#### 5-8.C. Note on Range and Content of Student Speaking and Listening

*To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations - as part of a whole class, in small groups, and with a partner - built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever the intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.*

*New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.*

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**Seventh Grade**

Grade Seven Social Studies is arranged chronologically and incorporates geography as well as economic, social, and political trends. Students learn about the human experience in the United States from pre-Columbian times until the Civil War, with a focus on people, events, and places. Students learn to see connections across time.

Through the Practices of the Inquiry Arc, students will:

- explore the powers, limitations, and responsibilities that both governments and citizens are afforded
- understand the impacts of economic decisions
- support and develop their explanations with evidence
- turn toward a critical examination of historical events to provide them with the insight necessary to develop and support a claim
- analyze and embrace the disciplinary thinking required of a social scientist

Students will plan, implement, and reflect upon informed action. By the end of seventh grade, students will be able to use evidence to understand and illustrate the importance of cause and effect within civic mindedness, economic decision making, and geographic reasoning and historical thinking.

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<b>Social Studies Practices - Grade 7</b>		
<p><b>7.A. Gathering, Interpreting, and Using Evidence</b>  <i>Students will independently and collaboratively:</i>            7.A.1 Define and frame questions about the United States that can be answered by gathering, interpreting, and using evidence.            7.A.2 Identify, select, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions, and other primary and secondary sources).            7.A.3 Analyze evidence in terms of historical context, content, authorship, point of view, purpose, and format; identify bias; explain the role of bias and audience in presenting and analyzing arguments or evidence.            7.A.4 Recognize an argument, make inferences, and identify supporting evidence related to a specific social studies topic.            7.A.5 Examine arguments related to a specific social studies topic from multiple perspectives.            7.A.6 Recognize that the perspective of the argument's author shapes the selection of evidence used to support it.</p>	<p><b>7.B. Chronological Reasoning and Causation</b>  <i>Students will independently and collaboratively:</i>            7.B.1 Identify how events are related chronologically to one another in time, and explain the ways in which earlier ideas and events may influence subsequent ideas and events.            7.B.2 Employ mathematical skills to measure time by years, decades, centuries, and millennia; to calculate time from the fixed points of the calendar system (B.C.E and C.E.); and to interpret the data presented in timelines.            7.B.3 Identify and analyze causes and effects, using examples from historical and current events.            7.B.4 Recognize, analyze, evaluate, and model dynamics of historical continuity and change over periods of time.            7.B.5 Recognize that changing the periodization affects the historical narrative.</p>	<p><b>7.C. Comparison and Contextualization</b>  <i>Students will independently and collaboratively:</i>            7.C.1 Identify a region of the early United States by describing multiple characteristics common to places within it, and then identify other similar regions (inside and outside the continental United States) with similar characteristics.            7.C.2 Describe, compare, and evaluate multiple historical developments and experiences within the United States in various chronological and geographical contexts.            7.C.3 Identify how the relationship between geography, economics, and history helps to define a context for events in the study of the United States.            7.C.4 Connect historical developments to specific circumstances of time and place and to the bigger picture.</p>

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<p><b>7.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>7.D.1 Use location terms and geographic representations to describe where places in United States history were in relation to each other.</p> <p>7.D.2 Distinguish human-made features from "environments" and describe the relationship between human activities and the environment.</p> <p>7.D.3 Recognize and analyze how characteristics of regions affect the history of the United States.</p> <p>7.D.4 Characterize and analyze changing interconnections between places and regions.</p> <p>7.D.5 Describe how boundaries and definition of location are historically constructed.</p>	<p><b>7.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>7.E.1 Explain how economic decisions affect different groups of people in the United States.</p> <p>7.E.2 Identify examples of buyers and sellers in product, labor, and financial markets.</p> <p>7.E.3 Describe the role that competition has in the determination of prices and wages; identify other factors that help to determine prices.</p> <p>7.E.4 Examine the roles of institutions, such as joint stock companies and banks, and government policies in the development of the United States economy before the Civil War.</p> <p>7.E.5 Examine data on the state of employment, unemployment, inflation, total production, income, and economic growth in the economy.</p>	<p><b>7.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>7.F.1 Identify and explain different types of political systems and ideologies used at various times in the history of the United States and explain the role of individuals and key groups in those political and social systems.</p> <p>7.F.2 Identify, describe, and compare the role of the individual in social and political participation in the early history of the United States.</p> <p>7.F.3 Identify how people in power have acted to extend the concept of freedom, the practice of social justice, and the protection of human rights in United States history.</p> <p>7.F.4 Identify how social and political responsibilities developed in American society.</p>
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**Native Americans**

**7.NA.1 The physical environment and natural resources of North America influenced the development of the first human settlements and the culture of Native Americans. Native American societies varied across North America.**

*7.NA.1a Geography and climate influenced the migration and cultural development of Native Americans. Native Americans in North America settled into different regions and developed distinct cultures.*

- \* *Students will examine theories of human settlement of the Americas.*
- \* *Students will compare and contrast different Native American culture groups of North America, with a focus on adaptations to their environment.*

Note: Teachers may identify different culture groups, noting the role of geography, and utilizing local history.

- \* For this document, the term "Native Americans" is used with the understanding that it could say "American Indians".

**Guided Questions**

- \* How did the first humans get to the Americas?
- \* How do the cultural regions compare? How are they different?
- \* How did geography influence political development?

**Catholic Identity Connections**

- \* We are called to use our environment and its natural resources wisely as we care for creation. (CST - Care for God's Creation)
- \* Each person should be treated with dignity and respect. (CST - Life and Dignity of the Human Person)
- \* It is important that we learn to work together for the good of all. (CST - Call to Family, Community, and Participation)

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### Colonial Developments

**7.CD.1** European exploration of the New World resulted in various interactions with Native Americans in colonization. The American colonies were established for a variety of reasons and developed differently based on economic, social, and geographic factors. Colonial America had a variety of social structures under which not all people were treated equally.

*7.CD.1a Social, economic, and scientific improvements helped European nations launch an Age of Exploration.*

- \* Students will explain the significance of the technological developments and scientific understandings that improved European exploration such as the caravel, magnetic compass, astrolabe, and Mercator projection.
- \* Students will examine the voyage of Columbus, leading to the Columbian Exchange and the voyages of other explorers.

*7.CD.1b Different European groups had varied interactions and relationships with the Native American societies they encountered. Native American societies suffered from loss of life due to disease and conflict and loss of land due to encroachment of European settlers and differing conceptions of property and land ownership.*

- \* Students will compare and contrast British interactions with Native Americans.
- \* Students will investigate other Native American societies originally found in their locality and their interactions with European groups.
- \* Students will examine the major reasons why Native American societies declined in population and lost land to the Europeans.

*7.CD.1c European nations established colonies in North America for economic, religious, and political reasons. Differences in climate, physical features, access to water, and sources of labor contributed to the development of different economies in the New England, Middle, and Southern Colonies.*

- \* Students will investigate the reasons many Europeans, including Catholics, travelled to North America.
- \* Students will investigate the reasons for colonization and the role of geography in the development of each colonial region.
- \* Students will examine the economic, social, and political characteristics of each colonial region, such as triangular trade.

*7.CD.1d Over the course of the 17th and 18th centuries, slavery grew in the colonies. Enslaved Africans utilized a variety of strategies to both survive and resist their conditions.*

- \* Students will describe the conditions of the Middle Passage.
- \* Students will explain why and where slavery grew over time in the United States and students will examine the living conditions of slaves.
- \* Students will investigate different methods enslaved Africans used to survive and resist their conditions.
- \* Students will distinguish between indentured servitude and slavery.

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### 7.CD. 2 Groups of people left the colonies following the Revolutionary War to settle in the South and West.

#### 7.CD.1d *Groups of Catholics left Maryland in search of better lives and settled in Kentucky.*

- \* *Students will explore the settlement of Catholics in Kentucky in the areas near the village of Bardstown.*
- \* *Students will explore the creation of the Diocese of Bardstown, the first inland diocese, which stretched from the Great Lakes to the Deep South, from the Allegheny Mountains to the Mississippi River.*
- \* *Students will research significant Catholic figures in Kentucky history, such as Bishop Benedict Joseph Flaget, Mother Catherine Spalding, and John Lancaster.*

#### Guided Questions

- \* Why did Europeans begin to sail west?
- \* Why were Africans chosen as slaves?
- \* How do the three colonial regions compare? How are they different?

#### Catholic Identity Connections

- \* Jesus taught us to treat others with respect and dignity (ex. treatment of Native Americans and slaves on the Middle Passage). (CST - Life and Dignity of the Human Person)
- \* We are called to resolve conflicts through peaceful means (ex. Maryland served as a Catholic refuge). (CST - Life and Dignity of the Human Person)
- \* We must determine ways to be active and productive members of society. (CST - Call to Family, Community, and Participation)

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### American Independence

#### 7.AI.1 Growing tensions over political power and economic issues sparked a movement for independence from Great Britain.

*7.AI.1a Conflicts between France and Great Britain in the 17th and 18th centuries in North America altered the relationship between the colonies and Great Britain.*

- \* *Students will locate battles fought between France and Great Britain during the 17th and 18th centuries.*
- \* *Students will examine how Native Americans attempted to maintain a diplomatic balance between themselves and the French and the English settlers.*
- \* *Students will examine the changing economic relationship between the colonies and Great Britain, including mercantilism and the practice of salutary neglect.*
- \* *Students will identify the issues stemming from the Zenger Trial that affected the development of individual rights in colonial America.*

*7.AI.1b Stemming from the French and Indian War, the British government enacted and attempted to enforce new political and economic policies in the colonies. These policies triggered varied colonial responses, including protests and dissent.*

- \* *Students will investigate plans for colonial unification made before the war.*
- \* *Students will examine actions taken by the British, including the Proclamation of 1763, the Quartering Act, the Stamp Act, the Tea Act, and the Coercive Acts, and colonial responses to those actions.*
- \* *Students will compare British and colonial patriot portrayals of the Boston Massacre, using historical evidence.*
- \* *Students will compare the proportions of loyalists and patriots in different regions.*
- \* *Students will examine the events at Lexington and Concord as the triggering events for the Revolutionary War.*

*7.AI.1c Influenced by Enlightenment ideas and their rights as Englishmen, American colonial leaders outlined their grievances against British policies and actions in the Declaration of Independence.*

- \* *Students will examine the influence Enlightenment ideas such as natural rights and social contract and ideas expressed in Thomas Paine's "Common Sense" had on colonial leaders in their debates on independence.*
- \* *Students will examine the Declaration of Independence and the arguments for independence stated within it.*

*7.AI.1d The outcome of the American Revolution was influenced by military strategies, geographic considerations, the involvement of Native American groups in the war, and aid from other nations. The Treaty of Paris (1783) established the terms of peace.*

- \* *Students will explore the different military strategies used by the Americans and their allies, including various Native American groups, during the American Revolution.*
- \* *Students will examine the strategic importance of the New York colony. Students will examine the American victory at the Battle of Saratoga in terms of its effects on American and British morale and on European views on American prospects for victory in the Revolution.*
- \* *Students will examine the terms of the Treaty of Paris, determine what boundary was set for the United States, and illustrate this on a map.*

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**Guided Questions**

- \* What are similarities between the Patriots and Loyalists? What are differences?
- \* What made George Washington an effective leader?
- \* How did the military tactics evolve through the war?

**Catholic Identity Connections**

- \* We each have not only rights, but we also have responsibilities. (CST - Rights and Responsibilities)
- \* We are called to the pursuit of justice and peace (ex. Carol was a Catholic signer of the Declaration of Independence). (CST - Solidarity)
- \* God calls us to help those who are in need of our care and assistance. ex. Catholic view of a just war). (CST - Option for the Poor and Vulnerable)

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**Historical Development of the Constitution**

**7.HC.1 The newly independent states faced political and economic struggles under the Articles of Confederation. These challenges resulted in a Constitutional Convention, a debate over ratification, and the eventual adoption of the Bill of Rights.**

*7.HC.1a Throughout the American Revolution, the colonies struggled to address their differing social, political, and economic interests and to establish unity. The Articles of Confederation created a form of government that loosely united the states, but allowed states to maintain a large degree of sovereignty.*

\* *Students will examine the differences in state laws and economies.*

*7.HC.1b The lack of a strong central government under the Articles of Confederation presented numerous challenges. A convention was held to revise the Articles, the result of which was the Constitution. The Constitution established a democratic republic with a stronger central government.*

\* *Students will investigate the successes and failures of the Articles of Confederation, determine why many felt a new plan of government was needed, and explain how the United States Constitution attempted to address the weaknesses of the Articles.*

*7.HC.1c Advocates for and against a strong central government were divided on issues of States rights, role/limits of federal power, and guarantees of individual freedoms. Compromises were needed between the states in order to ratify the Constitution.*

\* *Students will examine, from multiple perspectives, arguments regarding the balance of power between the federal and state governments, the power of government, and the rights of individuals.*

\* *Students will examine how key issues were resolved during the Constitutional Convention, including:*

- *state representation in Congress (Great Compromise or bicameral legislature)*
- *the balance of power between the federal and state governments (establishment of the three branches)*
- *the counting of the enslaved African American community for purposes of congressional representation and taxation (the Three-Fifths Compromise)*

**Guided Questions**

- \* What were weaknesses of the Articles of Confederation?
- \* What were the reasons for the Constitutional Convention?
- \* How was the Constitution written?

**Catholic Identity Connections**

- \* The rights of people must be protected (ex. Bill of Rights and freedom of religion). (CST - Rights and Responsibilities)
- \* We are called to live our lives in harmony and collaboration (ex. laws are made that are necessary and proper). (CST - Life and Dignity of the Human Person)
- \* Loving our neighbor is fundamental to human existence (ex. Catholic immigration). (CST - Solidarity)

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**The Constitution in Practice**

**7.CP.1 The United States Constitution serves as the foundation of the United States government and outlines the rights of citizens. The Constitution is considered a living document that can respond to political and social changes.**

*7.CP.1a The Constitution outlined a federalist system of government that shares powers between the federal, state, and local governments.*

\* *Students will identify powers granted to the federal government and examine the language used to grant powers to the states.*

*7.CP.1b The Constitution established three branches of government as well as a system of checks and balances that guides the relationship between the branches. Individual rights of citizens are addressed in the Bill of Rights.*

\* *Students will compare and contrast the powers granted to Congress, the president, and the Supreme Court by the Constitution.*

\* *Students will examine how checks and balances work by tracing how a bill becomes a law.*

\* *Students will identify the individual rights of citizens that are protected by the Bill of Rights.*

*7.CP.1c While the Constitution provides a formal process for change through amendments, the Constitution can respond to change in other ways.*

\* *Students will examine the process for amending the Constitution.*

\* *Students will examine the evolution of the unwritten constitution, such as Washington's creation of the presidential cabinet and the development of political parties.*

*7.CP.1d Foreign and domestic disputes tested the strength of the Constitution, particularly the separation of powers, the system of checks and balances, and the issue of states' rights. The United States sought to implement isolationism while protecting the Western Hemisphere from European interference.*

\* *Students will examine events of the early nation including Hamilton's economic plan, the Louisiana Purchase, the Supreme Court decision in Marbury v. Madison, and the War of 1812 in terms of testing the strength of the Constitution.*

\* *Students will examine the Monroe Doctrine and its effects on foreign policy.*

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**Guided Questions**

- \* Why did political parties form?
- \* What were the implications of the Adams/Jefferson election?
- \* Why didn't George Washington seek a third term?

**Catholic Identity Connections**

- \* Through collaboration and community, we live the lives we are called to live (ex. Sisters of Charity of Nazareth are co-founded in 1812 ). (CST - Call to Family, Community, and Participation)
- \* It is our responsibility to treat others fairly and with respect (ex. slavery was legal, but was it right - legal vs. moral). (CST - Life and Dignity of the Human Person)
- \* We have an obligation to care for others (ex. establishment of Catholic schools). (CST - Solidarity)

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**Westward Expansion**

**7.WE.1 Driven by political and economic motives, the United States expanded its physical boundaries to the Pacific Ocean between 1800 and 1860. This settlement displaced Native Americans as the frontier was pushed westward.**

*7.WE.1a Some Native Americans who aligned with the British during the American Revolution lost land and were forced to move.*

*\* Students will identify Native American groups that had to adapt after the British lost the Revolutionary War.*

*7.WE.1b Conflict and compromise with foreign nations occurred regarding the physical expansion of the United States during the 19th century. American values and beliefs, such as Manifest Destiny and the need for resources, increased westward expansion and settlement.*

*\* Students will compare and evaluate the ways in which the Louisiana Purchase, Florida, Texas, and territories from the Mexican Cession were acquired by the United States.*

*\* Students will examine the development of the Industrial Revolution.*

*7.WE.1c Westward expansion provided opportunities for some groups while harming others.*

*\* Students will examine new ways of transportation.*

*\* Students will examine the growth of suffrage for white men during Andrew Jackson's administration.*

*\* Students will examine the conditions faced on the Trail of Tears by the Cherokee and the effect that the removal had on their people and culture.*

*\* Students will examine examples of Native American resistance to western encroachment, including the Seminole Wars and Cherokee judicial efforts.*

*\* Students will examine immigration for political, economic, or religious reasons.*

**Guided Questions**

- \* What were reasons that the American System promoted westward movement?
- \* How did the spread of cotton and slavery affect westward movement?
- \* How did the Texas Revolution and the Mexican War increase westward movement?

**Catholic Identity Connections**

- \* We have a responsibility to help people in their time of need (ex. Catholic Irish and German immigrants). (CST - Option for the Poor and Vulnerable)
- \* Human life is sacred and we are called to treat others fairly and with respect (ex. Trail of Tears). (CST - Life and Dignity of the Human Person)
- \* We have a responsibility to protect the rights of others (ex. Manifest Destiny). (CST - Rights and Responsibilities)

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**Reform Movements**

**7.RM.1 Social, political, and economic inequalities sparked various reform movements and resistance efforts.**

**7.RM.1a The Second Great Awakening inspired reform movements.**

- \* Students will investigate examples of early 19th-century reform efforts, such as education, prisons, temperance, and mental health care, and examine the circumstances that led to the need for reform.

**7.RM.1b Enslaved African Americans resisted slavery in various ways in the 19th century. The abolitionist movement also worked to raise awareness of and generate resistance to the institution of slavery.**

- \* Students will examine ways in which enslaved Africans organized and resisted their conditions.
- \* Students will explore the efforts of William Lloyd Garrison, Frederick Douglass, and Harriet Tubman to abolish slavery.
- \* Students will examine the effects of "Uncle Tom's Cabin" on the public perception of slavery.
- \* Students will investigate Kentucky's role in the abolition movement, including the locations of Underground Railroad stations.

**7.RM.1c Women joined the movements for abolition and temperance and organized to advocate for women's property rights, fair wages, education, and political equality.**

- \* Students will examine the efforts of women to acquire more rights.
- \* Students will explain the significance of the Seneca Falls Convention and the Declaration of Sentiments.

**Guided Questions**

- \* What were ways slaves resisted their conditions?
- \* What were the working conditions in the factories?
- \* How did women acquire more rights in the mid-1800s?

**Catholic Identity Connections**

- \* We have a responsibility to care for those who need our help. (CST - Option for the Poor and Vulnerable)
- \* It is important that as citizens we lend support to the peaceful resolution of conflict (ex. Second Great Awakening - Bloody Monday in 1855). (CST - Life and Dignity of the Human Person)
- \* The dignity of work and the rights of workers must be protected. (CST - The Dignity of Work and the Rights of Workers)

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**A Nation Divided**

**7.ND.1** Westward expansion, the industrialization of the North, and the increase of slavery in the South contributed to the growth of sectionalism. Constitutional conflicts between advocates of states' rights and supporters of federal power increased tensions in the nation; attempts to compromise ultimately failed to keep the nation together, leading to the Civil War.

*7.ND.1a* Early United States industrialization affected different parts of the country in different ways. Regional economic differences and values, as well as different conceptions of the Constitution, laid the basis for tensions between states' rights advocates and supporters of a strong federal government.

\* Students will examine regional economic differences as they related to industrialization.

*7.ND.1b* As the nation expanded geographically, the question of slavery in new territories and states led to increased sectional tensions. Attempts at compromise ended in failure.

\* Students will examine attempts at resolving conflicts over whether new territories would permit slavery, including the Missouri Compromise, the Compromise of 1850, and the Kansas-Nebraska Act.

\* Students will examine growing sectional tensions, including the decision in "Dred Scott v. Sanford" (1857) and the founding of the Republican Party.

*7.ND.1c* Perspectives on the causes of the Civil War varied based on geographic region, but the election of a Republican president was one of the immediate causes for the secession of the Southern states.

\* Students will examine both long- and short-term causes of the Civil War.

\* Students will identify which states seceded to form the Confederate States of America and will explore the reasons presented for secession. Students will also identify the states that remained in the Union.

\* Students will examine the role of Kentucky in the Civil War, including its contributions to the war effort and the controversy over the draft.

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*7.ND.1d The course and outcome of the Civil War were influenced by strategic leaders from both the North and the South, decisive battles, and military strategy and technology that utilized the region's geography.*

- \* *Students will compare the advantages and disadvantages of the North and the South at the outset of the Civil War.*
- \* *Students will examine the goals and content of Lincoln's Emancipation Proclamation.*
- \* *Students will examine how the use of various technologies affected the conduct and outcome of the Civil War.*
- \* *Students will examine the enlistment of freed slaves and how this helped to change the course of the Civil War.*
- \* *Students will examine the topography and geographic conditions at Gettysburg and Antietam, and analyze the military strategies employed by the North and South at Gettysburg or Antietam.*

*7.ND.1e The Civil War affected human lives, physical infrastructure, economic capacity, and governance of the United States.*

- \* *Students will examine the roles of women, civilians, and free African Americans during the Civil War.*
- \* *Students will examine the aftermath of the war in terms of destruction, effect on population, and economic capacity by comparing effects of the war on the North and South*
- \* *Students will explain how events of the Civil War led to the establishment of federal supremacy.*

### Guided Questions

- \* What issues led to the start of the Civil War?
- \* Is war ever justifiable?
- \* What was the purpose of the Emancipation Proclamation?
- \* What were the responses after the war in the North and the South?

### Catholic Identity Connections

- \* We have an obligation to do all we can to protect the rights of others (ex. Catholic soldiers on both sides of the Civil War). (CST - Solidarity)
- \* As one human family, we are called to care for one another (ex. nuns serving as nurses in the Civil War in places such as Nazareth, Kentucky). (CST - Option for the Poor and Vulnerable)
- \* It is our responsibility to treat others fairly and with respect. (CST - Life and Dignity of the Human Person)

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**Connections to Reading Standards for Literacy in History/Social Studies - Grades 5-8**

**5-8.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 5-8.A.1 Cite specific textual evidence to support analysis of primary and secondary sources.
- 5-8.A.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- 5-8.A.3 Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes a law, how interest rates are raised or lowered).

**Craft and Structure**

- 5-8.A.4 Determine the meanings of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- 5-8.A.5 Describe how a text presents information (e.g., sequentially, comparatively, causally).
- 5-8.A.6 Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).

**Integration of Knowledge and Ideas**

- 5-8.A.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 5-8.A.8 Distinguish between fact, opinion, and reasoned judgment in a text.
- 5-8.A.9 Analyze the relationship between a primary and secondary source on the same topic.

**Range of Reading and Level of Text Complexity**

- 5-8.A.10 By the end of grade 8, read and comprehend history/social studies texts in the grades 5-8 text complexity band independently and proficiently.

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### 5-8.B. Writing Standards

#### Text Types and Purposes

- 5-8.B.1 Write arguments focused on discipline-specific content.
  - 5-8.B.1a Introduce claims about a topic or issue, acknowledge and distinguish the claims from alternate or opposing claims, and organize the reasons and evidence logically.
  - 5-8.B.1b Support claims with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
  - 5-8.B.1c Use words, phrases, and clauses to create cohesion and clarify the relationships between claims, counterclaims, reasons, and evidence.
  - 5-8.B.1d Establish and maintain a formal style.
  - 5-8.B.1e Provide a concluding statement or section that follows and supports the argument presented.
- 5-8.B.2 Write informative/explanatory texts, including the narration of historical events.
  - 5-8.B.2a Introduce a topic, clearly previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - 5-8.B.2b Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
  - 5-8.B.2c Use appropriate and varied transitions to create cohesion and clarify the relationships between ideas and concepts.
  - 5-8.B.2d Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - 5-8.B.2e Establish and maintain a formal style and objective tone.
  - 5-8.B.2f Provide a concluding statement or section that follows from and supports the information or explanation presented.

#### Production and Distribution of Writing

- 5-8.B.3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5-8.B.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- 5-8.B.5 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

## Archdiocese of Louisville Social Studies Curriculum Framework Seventh Grade

### Research to Build and Present Knowledge

- 5-8.B.5 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- 5-8.B.6 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- 5-8.B.7 Draw evidence from informational texts to support analysis, reflection, and research.

### Range of Writing

- 5-8.B.8 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

*NOTE: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical importance.*

## Archdiocese of Louisville Social Studies Curriculum Framework Seventh Grade

### 5-8.C. Speaking and Listening Standards

#### Comprehension and Collaboration

- 5-8.C.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 5-8.C.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 5-8.C.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

#### Presentation of Knowledge and Ideas

- 5-8.C.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning, and the organization, development, and style are appropriate to task, purpose, and audience.
- 5-8.C.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 5-8.C.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

#### 5-8.C. Note on Range and Content of Student Speaking and Listening

*To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations - as part of a whole class, in small groups, and with a partner - built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever the intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.*

*New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.*

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Seventh Grade**

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**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Eighth Grade**

Grade Eight Social Studies is arranged chronologically, beginning with Reconstruction and ending at the present, and incorporates geography as well as economic, social, and political trends. Students examine the human experience in the United States from Reconstruction to present day including the opportunity to explore contemporary issues.

The goal in eighth grade is that students will demonstrate civic-mindedness by clearly articulating the significance of civic participation and explaining how these processes are encouraged in order to address and influence societal needs.

Through the Practices of the Inquiry Arc, students will:

- embrace their roles in creating and sustaining change that will have positive implications in their communities, nation, and world
- seek to expand their global perspectives by analyzing how humans interact with their environment in ways that impact culture and create long-term, human-induced change
- explore their functions in this change as they seek to develop an understanding of the role that economic issues and decisions made at all levels play on their nation and their world
- uncover and effectively utilize data that support their analyses and lead to the development of informed opinions that will determine how they choose to participate in change and impact their society

These learners will embrace change and take necessary steps to move this change into action. By the end of eighth grade, students will be able to utilize knowledge about the interconnectedness of geography, economics, and history to actively engage through civic participation.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

<b>Social Studies Practices - Grade 8</b>		
<p><b>8.A. Gathering, Interpreting, and Using Evidence</b> <i>Students will independently and collaboratively:</i></p> <p>8.A.1 Define and frame questions about the United States and answer them by gathering, interpreting, and using evidence.</p> <p>8.A.2 Identify, describe, and evaluate evidence about events from diverse sources (primary and secondary sources including written documents, works of art, photographs, charts and graphs, artifacts, and oral traditions).</p> <p>8.A.3 Analyze evidence in terms of historical and/or social context, content, authorship, point of view, purpose, and format; identify bias; explain the role of bias, context, and audience in presenting arguments of evidence.</p> <p>8.A.4 Make inferences and draw conclusions from evidence.</p> <p>8.A.5 Recognize an argument and identify evidence that supports the argument; examine arguments related to a specific social studies topic from multiple perspectives; deconstruct arguments, recognizing the perspective of the argument and identifying evidence used to support that perspective.</p>	<p><b>8.B. Chronological Reasoning and Causation</b> <i>Students will independently and collaboratively:</i></p> <p>8.B.1 Articulate how events are related chronologically to one another in time, and explain the ways in which earlier ideas and events may influence subsequent ideas and events.</p> <p>8.B.2 Employ mathematical skills to interpret and create timelines.</p> <p>8.B.3 Identify causes and effects using examples from historical and current events.</p> <p>8.B.4 Identify, analyze, and evaluate the relationships among multiple causes and effects.</p> <p>8.B.5 Distinguish between long-term and immediate causes and effects of an event.</p> <p>8.B.6 Recognize, analyze, and evaluate the dynamics of historical continuity and change over periods of time.</p> <p>8.B.8 Relate patterns of continuity and change to larger historical processes and themes.</p> <p>8.B.7 Recognize that the historical narrative is a product of its period of time.</p> <p>8.B.9 Identify and describe models of historical periods that historians use to categorize events.</p>	<p><b>8.C. Comparison and Contextualization</b> <i>Students will independently and collaboratively:</i></p> <p>8.C.1 Identify and compare multiple perspectives on a given historical experience (religion, gender, class, and race).</p> <p>8.C.2 Describe, compare, and evaluate multiple historical developments (within societies, across and between societies; in various chronological and geographical contexts).</p> <p>8.C.3 Describe the relationship between geography, economics, and history as a context for events and movements in the United States.</p> <p>8.C.4 Connect historical developments to specific circumstances of time and place and to broader regional, national, or global processes.</p>

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

<p><b>8.D. Geographic Reasoning</b> <i>Students will independently and collaboratively:</i></p> <p>8.D.1 Use location terms and geographic representations such as maps, photographs, satellite images, and models to describe where places are in relation to each other and connections between places; evaluate the benefits of particular places for purposeful activities.</p> <p>8.D.2 Identify, describe, and analyze how environments affect human activities and how human activities affect physical environments in the United States.</p> <p>8.D.3 Recognize and analyze how characteristics (cultural, economic, and physical-environmental) of regions affect the history of the United States.</p> <p>8.D.4 Characterize and analyze changing interconnections between places and regions.</p> <p>8.D.5 Describe the spatial organization of place, considering the historical, social, political, and economic implication of that organization. Identify and describe how boundaries and definition of location are historically constructed.</p>	<p><b>8.E. Economics and Economic Systems</b> <i>Students will independently and collaboratively:</i></p> <p>8.E.1 Explain how economic decisions affect the well-being of individuals, businesses, and society; evaluate alternative approaches or solutions to economic issues in terms of benefits and costs for different groups of people.</p> <p>8.E.2 Explain the roles of buyers and sellers in product, labor, and financial markets.</p> <p>8.E.3 Describe the role of competition in the determination of prices and wages in a market economy.</p> <p>8.E.4 Examine the roles of institutions such as corporations, non-profit organizations, and labor unions in a market economy in the United States.</p> <p>8.E.5 Use appropriate data to evaluate the state of employment, unemployment, inflation, total production, income, and economic growth in the economy.</p> <p>8.E.6 Explain how government policies affect the economy.</p>	<p><b>8.F. Civic Participation</b> <i>Students will independently and collaboratively:</i></p> <p>8.F.1 Demonstrate respect for the rights of others in discussions and classroom debates; respectfully disagree with other viewpoints. Use techniques and strategies to be an active and engaged member of class discussions of fellow classmates' views and statements.</p> <p>8.F.2 Participate in activities that focus on a classroom, school, community, state, or national issue or problem.</p> <p>8.F.3 Participate in persuading, negotiating, and compromising in the resolution of conflicts and differences; introduce and examine the elements of a debate.</p> <p>8.F.4 Identify situations in which social actions are required and determine an appropriate course of action.</p> <p>8.F.5 Work to influence those in positions of power to strive for extensions of freedom, social justice, and human rights on a national and global level.</p> <p>8.F.6 Understand the social and political responsibilities associated with citizenship in a democratic society.</p> <p>8.F.7 Identify and explain different types of political systems and ideologies in United States history and explain the roles of individuals and key groups in those political and social systems.</p> <p>8.F.8 Identify, describe, and contrast the role of individuals in opportunities for social and political participation as an agent of change in different societies and communities, as well as at different times, in United States history.</p>
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## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Reconstruction

#### 8.R.1 Regional tensions following the Civil War complicated efforts to heal the nation and to redefine the status of African Americans.

##### 8.R.1a Different approaches toward and policies for Reconstruction highlight the challenges faced in reunifying the nation.

- \* Students will compare and contrast the differences between Reconstruction under Lincoln's plan, Johnson's plan, and Congressional (Radical) Reconstruction.

##### 8.R.1b Freed African Americans created new lives for themselves in the absence of slavery. Constitutional amendments and federal legislation sought to expand the rights and protect the citizenship of African Americans.

- \* Students will examine the Reconstruction amendments (13th, 14th, and 15th) in terms of the rights and protections provided to African Americans.
- \* Students will examine the purpose, successes, and the extent of its success of the Freedmen's Bureau.
- \* Students will examine the effects of the sharecropping system on African Americans.
- \* Students will examine the reasons for the migration of African Americans to the North.
- \* Students will examine the rise of African Americans in government.

##### 8.R.1c Federal initiatives begun during Reconstruction were challenged on many levels, leading to negative impacts on the lives of African Americans.

- \* Students will explore methods used by Southern state governments to affect the lives of African Americans, including the passage of Black Codes, poll taxes, and Jim Crow laws.
- \* Students will explore the responses of some Southerners to the increased rights of African Americans, noting the development of organizations such as the Ku Klux Klan and White Leagues.
- \* Students will examine the ways in which the federal government failed to follow up on its promises to freed African Americans.
- \* Students will examine the effects of the "Plessy v. Ferguson" ruling.

### Guided Questions

- \* How did the government structure create challenges for Reconstruction?
- \* To what extent are the challenges of Reconstruction still present in our society?
- \* Did federal Reconstruction initiatives infringe on states' rights?

### Catholic Identity Connections

- \* We have a responsibility to care for the poor and vulnerable. (CST - Option for the Poor and Vulnerable)
- \* Each person should be treated with dignity and respect. (CST - Life and Dignity of the Human Person)
- \* We each have not only rights, but we also have responsibilities. (CST - Rights and Responsibilities)

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### A Changing Society

#### **8.CS.1 Industrialization and immigration contributed to the urbanization of America. Problems resulting from these changes sparked the Progressive movement and increased calls for reform.**

*8.CS.1a Technological developments changed the modes of production, and access to natural resources facilitated increased industrialization. The demand for labor in urban industrial areas resulted in increased migration from rural areas and a rapid increase in immigration to the United States.*

- \* *Students will identify groups of people who moved into urban areas, and examine where they came from and the reasons for their migration into the cities. Students will explore the immigrant experience at Ellis Island.*
- \* *Students will compare and contrast immigrant experiences in locations such as ethnic neighborhoods in cities, rural settlements in the Midwest, Chinese communities in the Far West, and Mexican communities in the Southwest.*

*8.CS.1b Population density, diversity, technologies, and industry in urban areas shaped the social, cultural, and economic lives of people.*

- \* *Students will examine the population growth of U.S. cities and the technologies and industries which encouraged this growth.*
- \* *Students will examine the living conditions in urban areas with a focus on increasing population density and the effects that this growth had on the social, cultural, and economic lives of people.*

*8.CS.1c Increased urbanization and industrialization contributed to increasing conflicts over immigration, influenced changes in labor conditions, and led to political corruption.*

- \* *Students will examine nativism and anti-immigration policies, including the Chinese Exclusion Act, the Gentlemen's Agreement, and immigration legislation of the 1920s.*
- \* *Students will explore the growth and effects of child labor and sweatshops.*
- \* *Students will explore the development of political machines, such as Boss Tweed and Tammany Hall.*

*8.CS.1d In response to shifts in working conditions, laborers organized and employed a variety of strategies in an attempt to improve their conditions.*

- \* *Students will examine the goals and tactics of specific labor unions such as the Knights of Labor, the American Federation of Labor, and the Industrial Workers of the World.*
- \* *Students will examine key labor events such as the Haymarket affair, the Pullman Strike, and the International Ladies Garment Workers' Union strike.*

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

*8.CS.1e Progressive reformers sought to address political and social issues at the local, state, and federal levels of government between 1890 and 1920. These efforts brought renewed attention to women's rights and the suffrage movement and spurred the creation of government reform policies.*

- \* Students will examine the Populist Party as a reform effort by farmers in response to industrialization.*
- \* Students will investigate reformers and muckrakers such as Jane Addams, Florence Kelley, W. E. B. du Bois, Marcus Garvey, Ida Tarbell, Eugene V. Debs, Jacob Riis, Booker T. Washington, and Upton Sinclair. Student investigations should include the key issues in the individual's work and the actions that individual took or recommended to address those issues.*
- \* Students will explore leaders and activities of the temperance and woman's suffrage movements.*
- \* Students will examine state and federal government responses to reform efforts, including the passage of the 17th amendment, child labor and minimum wage laws, antitrust legislation, and food and drug regulations.*

### Guided Questions

- \* How did industrialization change American cities?
- \* How did immigration change American cities?
- \* How did industrialization and immigration impact the quality of life for Americans?

### Catholic Identity Connections

- \* The dignity of work and the rights of workers must be protected. (CST - The Dignity of Work and the Rights of Workers)
- \* As refugees settled in Louisville, Catholic Charities provided support. (CST - Option for the Poor and Vulnerable)

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Expansion and Imperialism

**8.EI.1 Beginning in the second half of the 19th century, economic, political, and cultural factors contributed to a push for westward expansion and more aggressive United States foreign policy.**

**8.EI.1a Continued westward expansion contributed to increased conflicts with Native Americans.**

- \* Students will examine the effects of the transcontinental railroad on the movement toward westward expansion.
- \* Students will examine examples of Native American resistance to the western encroachment, including the Sioux Wars and the flight and surrender of Chief Joseph and the Nez Perce.
- \* Students will examine policies toward Native Americans, such as the displacement of Native Americans from traditional lands, creation of reservations, efforts to assimilate Native Americans through the creation of boarding schools, the Dawes Act, and the Indian Reorganization Act and the Native Americans' various responses to these policies.

**8.EI.1b The Spanish-American War contributed to the rise of the United States as an imperial power.**

- \* Students will examine examples of yellow journalism that contributed to United States entry into the Spanish-American War, including the portrayal of the sinking of the USS Maine.
- \* Students will explain how the events and outcomes of the Spanish-American War contributed to the shift to imperialism in United States foreign policy.

**8.EI.1c Interest in Pacific trade contributed to an increase in United States foreign interactions.**

- \* Students will assess the events surrounding the annexation of Hawaii.
- \* Students will examine the purpose and effects of the Open Door Policy.

**8.EI.1d The Roosevelt Corollary expanded the Monroe Doctrine and increased United States involvement in the affairs of Latin America. This led to resentment of the United States among many in Latin America.**

- \* Students will evaluate the United States actions taken under the Roosevelt Corollary and their effects on relationships between the United States and Latin American nations, including the building of the Panama Canal.

### Guided Questions

- \* Should the United States continue to make reparations for their actions towards Native Americans?
- \* Is the United States still an imperial power?
- \* How did the role of the United States in the world change in the 19th century?

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Catholic Identity Connections

- \* The dignity of each person is fundamental to a moral vision for society. (CST - Life and Dignity of the Human Person)
- \* We are called to resolve conflicts through peaceful means. (CST - Life and Dignity of the Human Person)
- \* Each person has a responsibility to look out for those who are more vulnerable. (CST - Option for the Poor and Vulnerable)

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**World War I and the Roaring Twenties**

**8.WWI.1** Various diplomatic, economic, and ideological factors contributed to the United States decision to enter World War I. Involvement in the war significantly altered the lives of Americans. Postwar America was characterized by economic prosperity, technological innovations, and changes in the workplace.

*8.WWI.1a International, economic, and military developments swayed opinion in favor of the United States siding with the Allies and entering World War I. Domestic responses to World War I limited civil liberties within the United States.*

- \* Students will examine an overview of the causes of World War I, focusing on the factors leading to United States entry into the war.
- \* Students will examine examples of war propaganda and its effects on support for United States involvement in the war.
- \* Students will examine the restrictions placed on citizens after United States entry into the war, including the Espionage Act (1917) and the Sedition Act (1918).

*8.WWI.1b New military technologies changed military strategy in World War I and resulted in an unprecedented number of casualties.*

- \* Students will examine the effects of the changes in military technologies used during World War I, including trench warfare, chemical weapons, machine guns, and aircraft.

*8.WWI.1c Following extensive political debate, the United States refused to ratify the Treaty of Versailles. The United States then sought to return to prewar policies by focusing on domestic rather than international matters.*

- \* Students will examine Wilson's Fourteen Points and investigate why the United States Senate refused to support the Treaty of Versailles, focusing on opposition to the League of Nations.

*8.WWI.1d After World War I, the United States entered a period of economic prosperity and cultural change. This period is known as the Roaring Twenties. During this time, new opportunities for women were gained, and African Americans engaged in various efforts to distinguish themselves and celebrate their culture.*

- \* Students will investigate the efforts of women suffragists and explain the historical significance of the 19th amendment.
- \* Students will examine the reasons for and effects of prohibition on American society.
- \* Students will examine examples of World War I and postwar race relations, such as the East St. Louis riots, the Silent March, and the Tulsa riots.
- \* Students will explore the changes in American culture after World War I, such as an examination of the Harlem Renaissance.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Guided Questions**

- \* What were the United States' motivations for entering World War I?
- \* How did new technologies change the battlefield?
- \* How did American culture change after World War I?

**Catholic Identity Connections**

- \* Human life is sacred and we are called to resolve conflict through peaceful means. (CST - Life and Dignity of the Human Person)
- \* We are called to the pursuit of justice and peace. (CST - Solidarity)
- \* Loving our neighbor has taken on a global meaning. (CST - Solidarity)

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Great Depression

**8.GD.1 Economic and environmental disasters in the 1930s created hardships for many Americans. Amidst much debate about the appropriate**

**role of government, President Franklin D. Roosevelt helped to create intensive government interventions in the United States economy and society.**

*8.GD.1a Risky investing, protectionism, and overproduction led to the collapse of the stock market, a wave of bank failures, and a long and severe downturn in the economy called the Great Depression.*

*\* Students will examine how the economic practices of the 1920s contributed to the coming of the Great Depression.*

*8.GD.1b The Great Depression and the Dust Bowl affected American businesses and families.*

*\* Students will examine the effects of the Great Depression on American families in terms of the loss of jobs, wealth, and homes, noting varying effects based on class, race, and gender. Students will explore the conditions in rural and urban communities during the Great Depression.*

*\* Students will explore the man-made and environmental conditions that led to the Dust Bowl, the economic as well as*

*cultural*

*consequences of the Dust Bowl, and federal government efforts to address the problem.*

*8.GD.1c President Roosevelt issued the New Deal in an attempt to revive the economy and help Americans deal with the hardships of the Great Depression. These New Deal reforms had a long-lasting effect on the role of government in American society and its economic life, but did not resolve all of the hardships Americans faced.*

*\* Students will identify key programs adopted under the New Deal, including the creation of the Federal Deposit Insurance Corporation and the Securities and Exchange Commission, and the adoption of the Social Security Act.*

#### Guided Questions

- \* Which was the greatest contributing factor the Great Depression: a lifestyle of excess or a lack of government oversight?
- \* How did American life change during the Great Depression?
- \* How did the role of the government change as a result of the Great Depression?

#### Catholic Identity Connections

- \* As one human family, we are called to look out for one another. (CST - Solidarity)
- \* We have an obligation to help people in their time of need so that they can experience economic justice. (CST - Option for the Poor and Vulnerable)
- \* It is important that we feel that we are productive members of our society. (CST - Dignity of Work and the Rights of Workers)

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### World War II

**8.WWII.1** The aggression of the Axis powers threatened United States security and led to its entry into World War II. The nature and consequences of warfare during World War II transformed the United States and the global community. The damage from total warfare and atrocities such as the Holocaust led to a call for international efforts to protect human rights and prevent future wars.

*8.WWII.1a* Worldwide economic depression, militant nationalism, the rise of totalitarian rule, and the unsuccessful efforts of the League of Nations to preserve peace contributed to the outbreak of war in Europe and Asia.

\* Students will examine how the worldwide economic depression and militant nationalism resulted in the rise of totalitarian rule.

*8.WWII.1b* From 1939 to 1941, the United States government tried to maintain neutrality while providing aid to Britain but was drawn into the war by the Japanese attack on Pearl Harbor. The United States fought a war on multiple fronts. At home, the economy was converted to war production, and essential resources were rationed to ensure adequate supplies for military use.

\* Students will examine American involvement in World War II, including the American strategy in the Pacific and the invasion of Normandy on D-Day.

\* Students will examine the impact of segregation in the military and the contributions of minorities to the war effort (e.g., the Tuskegee Airmen and the Navajo Code Talkers).

\* Students will investigate the effects of the war on the American economy and day-to-day life.

\* Students will examine the internment of Japanese Americans in light of perceived national security concerns versus constitutional rights, including the decision in "Korematsu v. United States" (1944).

\* Students will examine the role of Kentuckians in World War II.

*8.WWII.1c* The nature and consequences of warfare during World War II transformed the United States and the global community. The damage from total warfare and human atrocities, including the Holocaust, led to a call for an international organization to prevent future wars and protect human rights.

\* Students will examine the role of air power by the allies, including the use of the atomic bombs on Hiroshima and Nagasaki.

\* Students will investigate the Holocaust and explain the historical significance of the Nuremberg trials.

\* Students will examine the structure and work of the United Nations.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Guided Questions**

- \* What were the contributing factors for the bombing of Pearl Harbor?
- \* What was the impact of propaganda before and during World War II?
- \* How did World War II bring the global community together to work for human rights?
- \* Is there such a thing as a "Just War"?

**Catholic Identity Connections**

- \* We are called to the pursuit of justice and peace. (CST - Solidarity)
- \* It is important that as citizens, we lend support to the resolution of conflicts by peaceful means. (CST - Life and Dignity of the Human Person)
- \* The rights of people must be protected. (CST - Rights and Responsibilities)

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Foreign Policy**

**8.FP.1** The period after World War II has been characterized by an ideological and political struggle, first between the United States and communism during the Cold War, then between the United States and forces of instability in the Middle East. Increased economic interdependence/competition and environmental concerns are challenges faced by the United States.

*8.FP.1a The Cold War was an ongoing struggle between the two nuclear superpowers, the United States and the Soviet Union. The Cold War shaped the reconstruction of national boundaries and political alliances across the globe.*

- \* Students will locate on a map the nations that were aligned with the United States, those aligned with the Soviet Union, and the non-aligned nations.
- \* Students will examine the term "nuclear superpower" and the threat of nuclear weapons as a cause and as an effect of the arms race between the United States and the Soviet Union.

*8.FP.1b The United States based its military and diplomatic policies from 1945 to 1990 on a policy of containment of communism.*

- \* Students will examine the policy of containment and its application in the postwar period, including the Marshall Plan, the Korean War, the Cuban Missile Crisis, and the Vietnam War.

*8.FP.1c Following the end of the Cold War, the United States sought to define a new role in global affairs, but the legacies of Cold War actions continue to affect United States foreign policy today.*

- \* Students will examine the changing relationships between the United States and foreign countries/regions such as:
  - Middle East beginning in 1950
  - China beginning in 1950
  - Afghanistan beginning in the 1980s
  - Russia beginning in 1990
  - Countries in the Western Hemisphere, focusing on NAFTA, Cuba, and Mexico
  - European Union

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*8.FP.1d Terrorist groups not representing any nation entered and reshaped global military and political alliances and conflicts. American foreign and domestic policies responded to terrorism in a variety of ways.*

- \* *Students will examine the terrorist attack of September 11, 2001, its effects on national security, and the United States responses to it, including the USA Patriot Act, the formation of the Department of Homeland Security, the War on Terror, and military attacks on suspected terrorist locations.*

*8.FP.1e Increased globalization has led to increased economic interdependence and competition.*

- \* *Students will examine the increased economic interdependence and its impact on the United States and Kentucky economies.*
- \* *Students will examine the roles of multinational corporations and their influence on the world economy.*

**Guided Questions**

- \* What ideological differences have shaped our relationships with other countries and groups since World War II?
- \* Has U.S. foreign policy really changed since the end of the Cold War?
- \* What are the effects of globalization on the U.S. economy?

**Catholic Identity Connections**

- \* There is interdependence found in a global society. (CST - Solidarity)
- \* We have a responsibility to protect the rights of others. (CST - Rights and Responsibilities)
- \* Each person is called to active participation. (CST - Call to Family, Community, and Participation)

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Demographic Change**

**8.DG.1** After World War II, the population of the United States rose sharply as a result of both natural increases and immigration. Population movements resulted in changes to the American landscape and shifting political power. An aging population is affecting the economy and straining public resources.

*8.DG.1a* After World War II, the United States experienced various shifts in population and demographics that resulted in social, political, and economic consequences.

- \* Students will explore the short-term and long-term effects of the baby boom generation on the economy, including increases in the construction of homes and schools and increased demands on both Social Security and health care.
- \* Students will examine the effects of suburbanization, including urban decay, suburban growth, and shifts in the farming industry.
- \* Students will examine the population shift from the Midwest and northern industrial states to the Sun Belt, including its effects on political power.

*8.DG.1b* The postwar United States experienced increasing immigration, debates over immigration policy, and an increase in cultural diversity.

- \* Students will examine migration and immigration trends in Kentucky such as the increase in Spanish-speaking, South Asian, East Asian, Middle Eastern, and African populations and the contributions of these groups.
- \* Students will examine the effects of immigration legislation and policy, including recent debates over immigration policy.

*8.DG.1c* Pollution, population growth, the consumption of natural resources, clearing of land for human sustenance, and large-scale industrialization have put added stress on the global environment.

- \* Students will explore the effects of pollution, industrialization, and population growth on the environment.

**Guided Questions**

- \* How have population shifts impacted the U.S. economy?
- \* How has cultural diversity defined the U.S.?
- \* How have demographic changes strained the environment?

**Catholic Identity Connections**

- \* As people age, it is our responsibility to see that they are cared for. (CST - Life and Dignity of the Human Person)
- \* We are called to use natural resources wisely as we care for creation. (CST - Care for God's Creation)
- \* It is important that we learn to live a life of harmony and respect for others. (CST - Solidarity)

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Domestic Politics and Reform

**8.DP.1** The civil rights movement and the Great Society were attempts by people and the government to address major social, legal, economic, and environmental issues. Subsequent economic recession called for a new economic program.

*8.DP.1a* The civil rights movement began in the postwar era in response to long-standing inequalities in American society; however equality under the law was slow to change economic and ideological realities.

- \* Students will compare and contrast the strategies used by civil rights activists, such as Thurgood Marshall, Rosa Parks, Martin Luther King, Jr., and Malcolm X.
- \* Students will explain the significance of key civil rights victories, including President Truman's desegregation of the military, "Brown v. Board of Education of Topeka" (1954), the Civil Rights Act of 1964, and the Voting Rights Act of 1965.
- \* Students will examine the extent to which the economic situation of African Americans improved as a result of the civil rights movement.

*8.DP.1b* The civil rights movement prompted renewed efforts for equality of women and other groups.

- \* Students will examine struggles for equality and factors that enabled or limited success on behalf of women, farm workers, Native Americans, and the disabled.
- \* Students will examine judicial actions taken to protect individual rights, such as "Miranda v. Arizona" (1966) and "Tinker v. Des Moines School District" (1969).

*8.DP.1c* The Great Society programs of President Lyndon Johnson strengthened efforts aimed at reducing poverty and providing health care for the elderly, but the Vietnam War drained resources and divided society.

- \* Students will examine the connection between the Vietnam War, especially the draft, and the growth of a counterculture and peace movement.

*8.DP.1d* Economic recession during the 1970s and concerns about the growth and size of the federal government encouraged fiscal conservatives to push for changes in regulation and policy.

- \* Students will examine President Ronald Reagan's and President George H. W. Bush's cuts to social programs and taxes in an attempt to stimulate the economy.

*8.DP.1e* Constitutional issues involving the violation of civil liberties and the role of the federal government are a source of debate in American society.

- \* Students will examine state and federal responses to gun violence, cyber-bullying, and electronic surveillance.

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Guided Questions**

- \* How do individual and public responses/perceptions set the tone for social movements?
- \* How does government policy respond to social issues?
- \* How does the government balance liberty and security?

**Catholic Identity Connections**

- \* It is our responsibility to treat others fairly and with respect. (CST - Life and the Dignity of the Human Person)
- \* We must determine ways to be active and productive members of society. (CST - Call to Family, Community, and Participation)
- \*

**Archdiocese of Louisville Social Studies Curriculum Framework  
Eighth Grade**

**Connections to Reading Standards for Literacy in History/Social Studies - Grades 5-8**

**5-8.A. Reading Standards for Informational Text**

**Key Ideas and Details**

- 5-8.A.1 Cite specific textual evidence to support analysis of primary and secondary sources.
- 5-8.A.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- 5-8.A.3 Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes a law, how interest rates are raised or lowered).

**Craft and Structure**

- 5-8.A.4 Determine the meanings of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- 5-8.A.5 Describe how a text presents information (e.g., sequentially, comparatively, causally).
- 5-8.A.6 Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).

**Integration of Knowledge and Ideas**

- 5-8.A.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 5-8.A.8 Distinguish between fact, opinion, and reasoned judgment in a text.
- 5-8.A.9 Analyze the relationship between a primary and secondary source on the same topic.

**Range of Reading and Level of Text Complexity**

- 5-8.A.10 By the end of grade 8, read and comprehend history/social studies texts in the grades 5-8 text complexity band independently and proficiently.

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### 5-8.B. Writing Standards

#### Text Types and Purposes

- 5-8.B.1 Write arguments focused on discipline-specific content.
  - 5-8.B.1a Introduce claims about a topic or issue, acknowledge and distinguish the claims from alternate or opposing claims, and organize the reasons and evidence logically.
  - 5-8.B.1b Support claims with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
  - 5-8.B.1c Use words, phrases, and clauses to create cohesion and clarify the relationships between claims, counterclaims, reasons, and evidence.
  - 5-8.B.1d Establish and maintain a formal style.
  - 5-8.B.1e Provide a concluding statement or section that follows and supports the argument presented.
- 5-8.B.2 Write informative/explanatory texts, including the narration of historical events.
  - 5-8.B.2a Introduce a topic, clearly previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - 5-8.B.2b Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
  - 5-8.B.2c Use appropriate and varied transitions to create cohesion and clarify the relationships between ideas and concepts.
  - 5-8.B.2d Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - 5-8.B.2e Establish and maintain a formal style and objective tone.
  - 5-8.B.2f Provide a concluding statement or section that follows from and supports the information or explanation presented.

#### Production and Distribution of Writing

- 5-8.B.3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5-8.B.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- 5-8.B.5 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### Research to Build and Present Knowledge

- 5-8.B.5 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- 5-8.B.6 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- 5-8.B.7 Draw evidence from informational texts to support analysis, reflection, and research.

### Range of Writing

- 5-8.B.8 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

*NOTE: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical importance.*

## Archdiocese of Louisville Social Studies Curriculum Framework Eighth Grade

### 5-8.C. Speaking and Listening Standards

#### Comprehension and Collaboration

- 5-8.C.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 5-8.C.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 5-8.C.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

#### Presentation of Knowledge and Ideas

- 5-8.C.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning, and the organization, development, and style are appropriate to task, purpose, and audience.
- 5-8.C.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 5-8.C.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

#### 5-8.C. Note on Range and Content of Student Speaking and Listening

*To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations - as part of a whole class, in small groups, and with a partner - built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever the intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.*

*New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.*

# **Foreign Language Curriculum Framework**

# FOREIGN LANGUAGE PHILOSOPHY/RATIONALE AND THE CURRICULUM GUIDE

## Philosophy/Rationale

In Archdiocese of Louisville schools, we believe that each person is created in God's image as unique and loveable. By learning a foreign language and about various cultures, we honor the diversity that God has created. Through communication with people from different cultures, students gain self-awareness, self-expression, and well being. The Foreign Language Curriculum Framework fosters a cross-curricular approach that allows all students to reach their fullest potential in all areas of human development – spiritual, intellectual, physical, social, and emotional. Foreign language learning presents opportunities for students to develop higher levels of thought through unique creative experiences that help build self-esteem and foster the recognition and the appreciation of differences among individuals and cultures. Foreign language learning encourages collaboration, communication, inquiry, discovery, and wonder. By learning a new language, students are heading toward a future that will allow them to become more connected to the global society.

## Curriculum Guide

In 2005, the *Archdiocese of Louisville Foreign Language Curriculum Guide* was developed and introduced. It was revised in 2011. The guide is based upon the latest research and best practices, was written by experienced and successful foreign language teachers within the archdiocese, and is aligned with National Standards for Foreign Language Education from the American Council on the Teaching of Foreign Languages (ACTFL).

The guide contains the Archdiocese of Louisville Foreign Language Curriculum Framework. The guide also includes assessment information, a variety of contacts and resources, and a glossary to support teachers at all levels of expertise with the implementation of the local foreign language curriculum.

Copies of the Archdiocese of Louisville Foreign Language Curriculum Framework and Curriculum Guide can be found on the Archdiocese of Louisville website, [www.archlou.org](http://www.archlou.org)

# **Foreign Language Curriculum Framework**

## **Archdiocese of Louisville**

The Archdiocese of Louisville Foreign Language Curriculum Framework is standards and performance based. The curriculum is aligned with the *National Standards for Foreign Language Education*.

### **National Standards for Foreign Language Education**

In 1993, an eleven-member task force, representing a variety of languages, levels of instruction, program models, and geographic regions, was appointed to define content standards in foreign language education. The final document, *Standards for Foreign Language Learning: Preparing for the 21<sup>st</sup> Century*, was first published in 1996. The new 3<sup>rd</sup> Edition *Standards for Foreign Language Learning* is now available.

National standards for foreign language learning guide educators in understanding what should be taught to American students learning foreign languages. The national standards outline the general knowledge and skills students should achieve in foreign language education. The national standards are not a curriculum guide. They do not describe specific course content.

The task force identified five goal areas that encompass all reasons for foreign language education. Referred to as the five C's of foreign language education, they are Communication (Communicate in Languages Other than English), Cultures (Gain Knowledge and Understanding of Other Cultures), Connections (Connect with Other Disciplines and Acquire Information), Comparisons (Develop Insight into the Nature of Language and Culture), and Communities (Participate in Multilingual Communities at Home and Around the World).

*Adapted with permission from the American Council on the Teaching of Foreign Languages (ACTFL), Alexandria, VA.  
Reprinted from: Standards for Foreign Language Learning.*

## National Standards for Foreign Language Learning

### **Communication – Communicate in Languages Other than English**

**Standard 1.1:** Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.

**Standard 1.2:** Students understand and interpret written and spoken language on a variety of topics.

**Standard 1.3:** Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

### **Cultures – Gain Knowledge and Understanding of Other Cultures**

**Standard 2.1:** Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

**Standard 2.2:** Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

### **Connections – Connect with Other Disciplines and Acquire Information**

**Standard 3.1:** Students reinforce and further their knowledge of other disciplines through the foreign language.

**Standard 3.2:** Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

### **Comparisons – Develop Insight into the Nature of Language and Culture**

**Standard 4.1:** Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.

**Standard 4.2:** Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

### **Communities – Participate in Multilingual Communities at Home and Around the World**

**Standard 5.1:** Students use the language both within and beyond the school setting.

**Standard 5.2:** Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

**Archdiocese of Louisville  
Curriculum Framework  
Foreign Language**

<b>Communication Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn a foreign language?</li> <li>• What benefits are gained from learning a foreign language?</li> <li>• How can foreign language skills be used in daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Greetings and introductions</li> <li>• Manners</li> <li>• Colors</li> <li>• Numbers 1-10</li> <li>• Days of the week</li> <li>• Months</li> <li>• Opposites</li> <li>• Body parts</li> <li>• Animals (cognates)</li> <li>• Family members</li> <li>• Food items</li> <li>• Likes and dislikes</li> <li>• Sound/letter association</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• respond logically to oral directions and questions</li> <li>• identify colors and match color names</li> <li>• state numbers in sequence</li> <li>• state days of the week and months of the year</li> <li>• identify the opposite of given words</li> <li>• identify basic body parts</li> <li>• identify animals and match cognates</li> <li>• distinguish members of immediate family</li> <li>• recognize basic food items</li> <li>• express likes and dislikes utilizing vocabulary</li> <li>• apply pre-reading skills</li> <li>• match written letter to corresponding sound</li> </ul>

**Archdiocese of Louisville  
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Foreign Language**

<b>Cultures Kindergarten</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn about other cultures?</li> <li>• How does learning about other cultures help individuals become better people?</li> <li>• How are people from various cultures connected?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ's command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products in target culture</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and compare basic cultural traditions, holidays, religion, and food with those of their own</li> <li>• discover differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• demonstrate cultural sensitivity by participating in hands-on activities (e.g., arts and crafts, music, movement)</li> </ul>

**Archdiocese of Louisville  
Curriculum Framework  
Foreign Language**

<b>Connections</b>		
Kindergarten		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How can learning a foreign language help in other content areas?</li> <li>• How is learning a foreign language the same as learning in other content areas?</li> <li>• How is knowledge shared through language?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with visual arts.</p> <p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate with music.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> <li>• Visual Arts</li> <li>• Music/Performing Arts</li> <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• relate the basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., vocabulary, speech patterns)</li> <li>• math (e.g., numbers, shapes)</li> <li>• science (e.g., body parts, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health)</li> </ul> </li> </ul>

**Archdiocese of Louisville  
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<b>Comparisons</b> Kindergarten		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• How are we similar to and different from people throughout the world?</li> <li>• How are our experiences the same as, or different from, those of other cultures?</li> <li>• How is our language similar to other languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare target language (cognates) with English</li> <li>• demonstrate knowledge of vocabulary through actions</li> <li>• identify universal aspects of cultures</li> <li>• identify aspects that are unique to a culture</li> <li>• investigate geographical features of various countries</li> <li>• recognize similarities and differences in people</li> </ul>

**Archdiocese of Louisville  
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<b>Communities</b>		
Kindergarten		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways can an individual show that others are valuable members of the community?</li> <li>• Where are examples of foreign languages and cultures found within the community?</li> <li>• How will learning a foreign language provide benefits in the future?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communication Grade One</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn a foreign language?</li> <li>• What benefits are gained from learning a foreign language?</li> <li>• How can foreign language skills be used in daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and</p>	<ul style="list-style-type: none"> <li>• Greetings, introductions, and polite expressions</li> <li>• Classroom directions and objects</li> <li>• Needs and wants</li> <li>• Colors</li> <li>• Numbers 1-20</li> <li>• Calendar vocabulary</li> <li>• Seasons/weather</li> <li>• Alphabet</li> <li>• Sound/letter association, including vowels</li> <li>• Body parts</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recall vocabulary and respond logically to oral directions and questions</li> <li>• respond logically to oral directions</li> <li>• identify classroom objects</li> <li>• express needs and wants</li> <li>• read and write color words</li> <li>• count from 1-20</li> <li>• arrange numbers in sequence</li> <li>• identify calendar vocabulary</li> <li>• show understanding of various weather conditions</li> <li>• apply pre-reading skills</li> <li>• read and write simple words</li> <li>• label and identify body parts</li> </ul>

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<p>differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Items of clothing</li> <li>• Family members</li> <li>• Animals</li> <li>• Likes and dislikes</li> <li>• Food items</li> <li>• Sports</li> <li>• Transportation</li> <li>• Feelings and emotions</li> <li>• Opposites</li> </ul>	<ul style="list-style-type: none"> <li>• name various items of clothing</li> <li>• recognize names for family members</li> <li>• identify animals and match cognates</li> <li>• categorize likes and dislikes through vocabulary terms</li> <li>• identify names of various food items</li> <li>• show understanding of vocabulary</li> <li>• identify and categorize types of transportation</li> <li>• demonstrate understanding of various feelings and emotions</li> <li>• demonstrate understanding of opposites</li> </ul>
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<b>Cultures Grade One</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn about other cultures?</li> <li>• How does learning about other cultures help individuals become better people?</li> <li>• How are people from various cultures connected?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ's command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products in target culture</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and compare basic cultural traditions, holidays, religion, and food with those of their own</li> <li>• discover differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• demonstrate cultural sensitivity by participating in hands-on activities (e.g., arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade One		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How can learning a foreign language help in other content areas?</li> <li>• How is learning a foreign language the same as learning in other content areas?</li> <li>• How is knowledge shared through language?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with visual arts.</p> <p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate with music.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> <li>• Visual Arts</li> <li>• Music/Performing Arts</li> <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• relate the basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., sound/letter association, vocabulary, speech patterns)</li> <li>• math (e.g., numbers, shapes)</li> <li>• science (e.g., weather, body parts, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency, transportation)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health)</li> </ul> </li> </ul>

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<b>Comparisons</b> Grade One		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• How are we similar to and different from people throughout the world?</li> <li>• How are our experiences the same as, or different from, those of other cultures?</li> <li>• How is our language similar to other languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare target language (cognates) with English</li> <li>• identify patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through actions</li> <li>• identify universal aspects of cultures</li> <li>• identify aspects that are unique to a culture</li> <li>• investigate geographical features of various countries</li> <li>• recognize similarities and differences in people</li> </ul>

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<b>Communities</b> Grade One		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways can an individual show that others are valuable members of the community?</li> <li>• Where are examples of foreign languages and cultures found within the community?</li> <li>• How will learning a foreign language provide benefits in the future?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communication Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn a foreign language?</li> <li>• What benefits are gained from learning a foreign language?</li> <li>• How can foreign language skills be used in daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p>	<ul style="list-style-type: none"> <li>• Greetings, introductions, and polite expressions</li> <li>• Classroom directions</li> <li>• Basic needs</li> <li>• Colors</li> <li>• Numbers 1-60</li> <li>• Calendar vocabulary</li> <li>• Seasons/weather</li> <li>• Alphabet</li> <li>• Sound/letter association, including vowels</li> <li>• Body parts</li> <li>• Items of clothing</li> <li>• Family members</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recall vocabulary and respond logically to oral directions and questions</li> <li>• respond logically to oral directions</li> <li>• express needs and wants</li> <li>• read and write color words</li> <li>• count from 1-60</li> <li>• arrange numbers in sequence</li> <li>• identify calendar vocabulary</li> <li>• recognize various weather conditions</li> <li>• apply phonetic skills</li> <li>• read and write simple words and common expressions</li> <li>• label and identify body parts</li> <li>• name and categorize various items of clothing</li> <li>• recognize names for immediate and extended family members</li> </ul>

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<p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Animals</li> <li>• Food items</li> <li>• Places in the community</li> <li>• Occupations</li> <li>• Feelings and emotions</li> <li>• Opposites</li> </ul>	<ul style="list-style-type: none"> <li>• identify animals and their habitats</li> <li>• identify and categorize various food items</li> <li>• name types of buildings and places within a community</li> <li>• identify different occupations and the places of work within a community</li> <li>• demonstrate understanding of various feelings and emotions in particular situations</li> <li>• identify and use opposites</li> </ul>
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<b>Cultures Grade Two</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to learn about other cultures?</li> <li>• How does learning about other cultures help individuals to be better people?</li> <li>• How are people from various cultures connected?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ's command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products in target culture</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and compare cultural traditions, holidays, religion, and food with those of their own</li> <li>• discover differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• demonstrate cultural sensitivity by participating in hands-on activities (e.g., arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade Two		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How can learning a foreign language help in other content areas?</li> <li>• How is learning a foreign language the same as learning in other content areas?</li> <li>• How is knowledge shared through language?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with visual arts.</p> <p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate with music.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> <li>• Visual Arts</li> <li>• Music/Performing Arts</li> <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., sound/letter association, vocabulary, speech patterns)</li> <li>• math (e.g., numbers, equations)</li> <li>• science (e.g., weather, body parts, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency, clothing)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons</b> Grade Two		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• How are we similar to and different from people throughout the world?</li> <li>• How are our experiences the same as, or different from, those of other cultures?</li> <li>• How is our language similar to other languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare target language with English</li> <li>• identify patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through actions</li> <li>• identify universal aspects of cultures</li> <li>• identify aspects that are unique to a culture</li> <li>• investigate geographical features of various countries</li> <li>• recognize similarities and differences in people</li> </ul>

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<b>Communities</b> Grade Two		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways can an individual show that others are valuable members of the community?</li> <li>• Where are examples of foreign languages and cultures found within the community?</li> <li>• How will learning a foreign language provide benefits in the future?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communication</b> Grade Three		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the value of learning a foreign language?</li> <li>• What advantages are acquired through learning a foreign language?</li> <li>• How are foreign language skills applied to daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<ul style="list-style-type: none"> <li>• Greetings, introductions, and polite expressions</li> <li>• Numbers 1-100</li> <li>• Telling time</li> <li>• Sound/letter association, including vowels</li> <li>• Simple sentence structure</li> <li>• Gender agreement</li> <li>• Number agreement</li> <li>• Definite and indefinite articles</li> <li>• Adjectives</li> <li>• Infinitives</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recall vocabulary and respond logically to oral directions and questions</li> <li>• count from 1-100</li> <li>• arrange numbers in sequence</li> <li>• tell time to the hour and half hour</li> <li>• apply phonetic skills</li> <li>• read and write simple words and common expressions</li> <li>• compose simple sentences</li> <li>• express simple ideas both orally and in writing</li> <li>• identify regular gender of nouns</li> <li>• identify and make plurals</li> <li>• show understanding of definite and indefinite articles</li> <li>• recognize proper placement of adjectives</li> <li>• recognize infinitives</li> </ul>

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<p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Birthdays and holidays</li> <li>• Seasons and weather</li> <li>• Body parts</li> <li>• Items of clothing</li> <li>• Family members</li> <li>• Animals</li> <li>• Food items</li> <li>• Places in the community</li> <li>• Occupations</li> <li>• Feelings and emotions</li> </ul>	<ul style="list-style-type: none"> <li>• recall vocabulary for specific dates</li> <li>• recognize various weather conditions</li> <li>• apply vocabulary of body parts in different contexts</li> <li>• describe various items of clothing (e.g., color, size, texture)</li> <li>• utilize terms for immediate and extended family members</li> <li>• describe family members (e.g., physical characteristics, age)</li> <li>• classify and describe animals and their habitats</li> <li>• classify and describe various food items</li> <li>• locate buildings and places within a community</li> <li>• identify different occupations and places of work within a community</li> <li>• demonstrate understanding of various feelings and emotions in particular situations</li> </ul>
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<b>Cultures</b> Grade Three		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the importance of learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• How does exposure to other cultures increase the understanding of connections between people?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ's command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and understand cultural traditions, holidays, religion, and food</li> <li>• discover differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in simple conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade Three		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How is learning in various content areas enhanced through understanding of a foreign language?</li> <li>• Which skills are learned in other content areas that are also learned in a foreign language?</li> <li>• How does language enhance the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with visual arts.</p> <p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate with music.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and adequately.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> <li>• Visual Arts</li> <li>• Music/Performing Arts</li> <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., sound/letter association, parts of speech, vocabulary, speech patterns)</li> <li>• math (e.g., numbers, equations, telling time, calendar)</li> <li>• science (e.g., weather, seasons, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency, clothing, occupations)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons</b> Grade Three		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What can be discovered through the investigation of other cultures?</li> <li>• What common experiences do all people share?</li> <li>• How are languages similar?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare target language with English</li> <li>• identify patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast universal and unique aspects of cultures</li> <li>• demonstrate knowledge of geographical features of various countries</li> <li>• recognize similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Three		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools they will use beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways does learning a foreign language promote cultural acceptance?</li> <li>• How are languages used within the community?</li> <li>• What advantages are gained through the knowledge of foreign languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• develop an appreciation for cultural diversity</li> <li>• identify and determine benefits of the use of foreign languages in various occupations</li> </ul>

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<b>Communication Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the value of learning a foreign language?</li> <li>• What advantages are acquired through learning a foreign language?</li> <li>• How are foreign language skills applied to daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<ul style="list-style-type: none"> <li>• Vocabulary               <ul style="list-style-type: none"> <li>• Seasons and weather</li> <li>• Items of clothing</li> <li>• Food items</li> <li>• Occupations</li> <li>• Feelings and emotions</li> <li>• Basic needs</li> </ul> </li> <li>• Rooms in a house</li> <li>• Household items</li> <li>• Numbers, counting by hundreds</li> <li>• Telling time</li> <li>• Bilingual dictionary</li> <li>• Sound/letter association, including vowels</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• utilize previous and newly acquired vocabulary words in various contexts</li> <li>• identify various rooms in a house</li> <li>• locate household items by appropriate room</li> <li>• apply vocabulary in different contexts</li> <li>• recognize numbers in random order from 1-500</li> <li>• arrange numbers in sequence</li> <li>• count by hundreds to 500</li> <li>• tell time to the hour, half hour, minute, minutes before and after</li> <li>• understand the structure of a bilingual dictionary</li> <li>• apply phonetic skills</li> </ul>

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<p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.3</b> Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Simple sentence structure</li> <li>• Gender and number agreement</li> <li>• Definite and indefinite articles</li> <li>• Adjectives</li> <li>• Subject pronouns</li> <li>• Infinitives</li> <li>• Regular, present tense verbs</li> <li>• Commonly used expressions with irregular verbs</li> <li>• Interrogatives</li> </ul>	<ul style="list-style-type: none"> <li>• read, write, and orally express simple sentences and common expressions</li> <li>• identify regular gender of nouns</li> <li>• identify and make plurals</li> <li>• show understanding of definite and indefinite articles</li> <li>• recognize proper placement of adjectives</li> <li>• demonstrate understanding of subject pronouns</li> <li>• recognize infinitives</li> <li>• recognize regular, present tense verbs</li> <li>• apply concepts of irregular verbs and commonly used expressions</li> <li>• identify and use interrogatives</li> </ul>
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<b>Cultures Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the importance of learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• How does exposure to other cultures increase the understanding of connections between people?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ’s command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and understand cultural traditions, holidays, religion, and food</li> <li>• define differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• describe cultural value displayed in works of art, music, and dance</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in simple conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b>		
Grade Four		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How is learning in various content areas enhanced through understanding of a foreign language?</li> <li>• Which skills are learned in other content areas that are also learned in a foreign language?</li> <li>• How does language enhance the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and adequately.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li>   <li>• Math</li>   <li>• Science</li>   <li>• Social Studies</li>   <li>• Visual Arts</li>   <li>• Music/Performing Arts</li>   <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., sound/letter association, parts of speech, vocabulary, speech patterns, dictionary skills)</li> <li>• math (e.g., numbers, equations, telling time, calendar)</li> <li>• science (e.g., weather, seasons, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency, clothing, occupations)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons Grade Four</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What can be discovered through the investigation of other cultures?</li> <li>• What common experiences do all people share?</li> <li>• How are languages similar?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare and contrast target language with English</li> <li>• identify patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast universal and unique aspects of cultures</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• recognize similarities and differences in geographical features of various countries</li> <li>• recognize similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Four		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools they will use beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways does learning a foreign language promote cultural acceptance?</li> <li>• How are languages used within the community?</li> <li>• What advantages are gained through the knowledge of foreign languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• demonstrate an appreciation for cultural diversity</li> <li>• identify and determine benefits of the use of foreign languages in various occupations</li> </ul>

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<b>Communication Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language is a gratifying experience.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the value of learning a foreign language?</li> <li>• What advantages are acquired through learning a foreign language?</li> <li>• How can we apply foreign language skills to daily life?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.12</b></p>	<ul style="list-style-type: none"> <li>• Vocabulary               <ul style="list-style-type: none"> <li>• Class subjects</li> </ul> </li> <li>• Numbers 1-1,000</li> <li>• Time</li> <li>• Use of bilingual dictionary</li> <li>• Gender and number agreement</li> <li>• Definite and indefinite articles</li> <li>• Subject pronouns</li> <li>• Regular, present tense verbs</li> <li>• Irregular verbs</li> <li>• Sentences using conjunctions</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• utilize previous and newly acquired vocabulary words in various contexts</li> <li>• translate single words, phrases, and sentences</li> <li>• recognize numbers in random order from 1-1,000</li> <li>• arrange numbers in sequence</li> <li>• count by hundreds to 1,000</li> <li>• tell time to the hour, half hour, minute, minutes before and after, time of day</li> <li>• utilize a bilingual dictionary</li> <li>• read, write, and orally express simple sentences and common expressions</li> <li>• apply concept of subject pronouns</li> <li>• show understanding of proper noun/verb agreement for regular, present tense verbs</li> <li>• apply concepts of irregular verbs and commonly used expressions</li> <li>• utilize conjunctions to construct sentences</li> </ul>

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<p>Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.3</b> Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Interrogatives</li> <li>• Adjectives</li> <li>• Personal descriptions</li> <li>• Nationalities</li> <li>• Locations using prepositions</li> <li>• States of being</li> </ul>	<ul style="list-style-type: none"> <li>• identify and use interrogatives for asking and responding to questions</li> <li>• recognize and properly use adjectives</li> <li>• describe self and others using personal descriptions</li> <li>• identify nationality of self and others</li> <li>• describe location of various items using prepositions</li> <li>• express physical and emotional condition of individuals</li> </ul>
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<b>Cultures Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the importance of learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• How does exposure to other cultures increase the understanding of connections between people?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ’s command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and understand cultural traditions, holidays, religion, and food</li> <li>• define differences between products (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• describe cultural value displayed in works of art, music, and dance</li> <li>• explore myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade Five		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enhances learning in other content areas.</li> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How is learning in various content areas enhanced through understanding of a foreign language?</li> <li>• Which skills are learned in other content areas that are also learned in a foreign language?</li> <li>• How does language enhance the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.8</b> Students understand various mathematical procedures and use them appropriately and adequately.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p> <p><b>Academic Expectation 6.3</b> Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li>   <li>• Math</li>   <li>• Science</li>   <li>• Social Studies</li>   <li>• Visual Arts</li>   <li>• Music/Performing Arts</li>   <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols)</li> <li>• language arts (e.g., listening, speaking, reading and writing skills, parts of speech, vocabulary, speech patterns, dictionary skills)</li> <li>• math (e.g., numbers, equations, telling time, calendar)</li> <li>• science (e.g., weather, seasons, animals, food, agriculture)</li> <li>• social studies (e.g., traditions, holidays, maps, currency, clothing, occupations)</li> <li>• visual arts (e.g., folk art, crafts, artifacts)</li> <li>• music/performing arts (e.g., songs, instruments, dance)</li> <li>• physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons Grade Five</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What can be discovered through the investigation of other cultures?</li> <li>• What common experiences do all people share?</li> <li>• How are languages similar?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare and contrast target language with English</li> <li>• identify patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast universal and unique aspects of cultures</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• recognize similarities and differences in geographical features of various countries</li> <li>• recognize similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Five		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• In what ways does learning a foreign language promote cultural acceptance?</li> <li>• How are languages and cultures used within the community?</li> <li>• What advantages are gained through the knowledge of foreign languages?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interact with heritage speakers using target language</li> <li>• recognize the presence of target culture throughout the community</li> <li>• demonstrate an appreciation for cultural diversity</li> <li>• identify and determine benefits of the use of foreign languages in various occupations</li> </ul>

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<b>Communication</b> Grade Six		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language impacts the individual's future success.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the significance of learning a foreign language?</li> <li>• How does learning a language impact future success?</li> <li>• How are foreign language skills applied to real-life experiences?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<ul style="list-style-type: none"> <li>• Vocabulary</li> <li>• Ordinal numbers</li> <li>• Sentences using conjunctions and prepositions</li> <li>• Gender and number agreement</li> <li>• Regular and irregular verbs</li> <li>• Negatives</li> <li>• Adjectives</li> <li>• Adverbs</li> <li>• Interrogatives</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• utilize previous and newly acquired vocabulary words in various contexts</li> <li>• translate single words, phrases, sentences, and stories</li> <li>• recognize vocabulary and position of ordinal numbers</li> <li>• read, write, and orally express sentences and common expressions</li> <li>• utilize conjunctions to construct sentences</li> <li>• describe location of items using prepositions</li> <li>• show understanding of proper noun/verb agreement for regular and irregular, present tense verbs</li> <li>• identify irregular verbs and commonly used expressions</li> <li>• create sentences in negative form</li> <li>• recognize and properly use adjectives</li> <li>• recognize and use adverbs</li> <li>• apply interrogatives when asking and responding to questions</li> </ul>

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<p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.3</b> Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Likes and dislikes</li> <li>• Personal descriptions</li> <li>• States of being</li> <li>• Pastimes and activities</li> <li>• Future plans and destinations</li> </ul>	<ul style="list-style-type: none"> <li>• express likes and dislikes</li> <li>• describe self and others using personal descriptions</li> <li>• express physical and emotional condition of individuals</li> <li>• describe pastimes and activities</li> <li>• express ideas in future tense</li> </ul>
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<b>Cultures Grade Six</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What advantages are gained from learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• What insights are gained by studying other cultures?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ’s command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• defend purposes for learning about different cultures</li> <li>• demonstrate cultural sensitivity by producing authentic cultural projects (e.g., arts and crafts, music, movement)</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• identify and interpret visual representations and products of target culture (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• investigate influences (e.g., agriculture, inventions, people, societal structures)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• describe cultural value displayed in works of art, music, and dance</li> <li>• analyze myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b>		
Grade Six		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Learning a foreign language enables students to link knowledge in all content areas.</li> <li>Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>How is knowledge in other content areas improved through learning a foreign language?</li> <li>How does the acquisition of a foreign language deepen the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.14</b> Students understand the democratic principles of justice, equality, responsibility, and freedom and apply them to real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p>	<ul style="list-style-type: none"> <li>Religion</li> <li>Language Arts</li> <li>Math</li> <li>Science</li> <li>Social Studies</li> <li>Visual Arts</li> <li>Music/Performing Arts</li> <li>Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>explore the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>religion (e.g., holidays, rites, prayers, symbols, religious architecture, religious histories of people and places)</li> <li>language arts (e.g., listening, speaking, reading and writing skills, parts of speech, vocabulary, speech patterns, dictionary skills, research)</li> <li>math (e.g., cardinal numbers, ordinal numbers, equations, telling time, calendar, temperature)</li> <li>science (e.g., weather, seasons, food, agriculture, nutrition)</li> <li>social studies (e.g., traditions, holidays, geography, currency, clothing, nationalities, recipes)</li> <li>visual arts (e.g., folk art, crafts, artifacts, artists, architecture)</li> <li>music/performing arts (e.g., songs, composers, instruments, dance, musical artists)</li> <li>physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons</b> Grade Six		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What insights are gained through the exploration of multiple cultures?</li> <li>• What is unique and what is universal across all cultures?</li> <li>• How do language patterns simplify learning?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• analyze similarities and differences between target language and English</li> <li>• identify and apply patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast aspects that are unique to a culture and aspects that are universal to cultures</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• recognize similarities and differences in geographical features of various countries</li> <li>• recognize similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Six		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of languages and culture can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• How can cultural diversity be embraced?</li> <li>• Why is cultural diversity important in every community?</li> <li>• How does learning a foreign language enhance future success?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> <li>• Role of languages in a global society</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• initiate conversation with heritage speakers</li> <li>• embrace the presence of target culture throughout the community</li> <li>• demonstrate flexibility when interacting with people of different cultural backgrounds</li> <li>• understand unique career opportunities resulting from bilingual and bi-cultural knowledge and skills</li> <li>• identify and determine benefits of the use of foreign languages in a global society</li> </ul>

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<b>Communication Grade Seven</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language impacts the individual's future success.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the significance of learning a foreign language?</li> <li>• How does learning a language impact future success?</li> <li>• How are foreign language skills applied to real-life experiences?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<ul style="list-style-type: none"> <li>• Vocabulary               <ul style="list-style-type: none"> <li>• Real-life vocabulary (e.g., shopping, traveling, dining)</li> <li>• Illness and injuries</li> <li>• Environment and nature</li> </ul> </li> <li>• Paragraphs               <ul style="list-style-type: none"> <li>• Gender and number agreement</li> <li>• Adverbs</li> <li>• Negatives</li> <li>• Interrogatives</li> <li>• Comparatives and superlatives</li> </ul> </li> <li>• Verbs               <ul style="list-style-type: none"> <li>• Regular and irregular verbs</li> <li>• Present progressive tense</li> <li>• Reflexive verbs</li> <li>• Past tense</li> <li>• Future tense (Ir)</li> </ul> </li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• utilize previous and newly acquired vocabulary words in various contexts</li> <li>• respond logically using target language</li> <li>• read, write, and orally express sentences and common expressions</li> <li>• translate written material</li> <li>• apply grammatical concepts to express ideas</li> <li>• show understanding of proper noun/verb agreement for regular and irregular, present, present progressive, reflexive, past, and future tense verbs</li> </ul>

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<p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.3</b> Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>		
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<b>Cultures</b> Grade Seven		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What advantages are gained from learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• What insights are gained by studying other cultures?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ’s command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• defend purposes for learning about different cultures</li> <li>• demonstrate cultural sensitivity by producing authentic cultural projects (e.g., arts and crafts, music, movement)</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• identify and interpret visual representations and products of target culture (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• analyze influences and contributions (e.g., agriculture, inventions, people, societal structures)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• describe cultural value displayed in works of art, music, and dance</li> <li>• analyze myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade Seven		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language enables students to link knowledge in all content areas.</li> <li>• Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• How is knowledge in other content areas improved through learning a foreign language?</li> <li>• How does the acquisition of a foreign language deepen the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.14</b> Students understand the democratic principles of justice, equality, responsibility, and freedom and apply them to real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p>	<ul style="list-style-type: none"> <li>• Religion</li> <li>• Language Arts</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> <li>• Visual Arts</li> <li>• Music/Performing Arts</li> <li>• Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore the connections to basic concepts and skills from other disciplines:               <ul style="list-style-type: none"> <li>• religion (e.g., holidays, rites, prayers, symbols, religious architecture, religious histories of people and places)</li> <li>• language arts (e.g., listening, speaking, reading and writing skills, parts of speech, vocabulary, speech patterns, dictionary skills, research)</li> <li>• math (e.g., monetary values, conversions, cardinal numbers, ordinal numbers, equations)</li> <li>• science (e.g., weather, food, agriculture, nutrition, temperature, forecasts)</li> <li>• social studies (e.g., traditions, holidays, geography, currency, clothing, recipes, natural phenomenon)</li> <li>• visual arts (e.g., folk art, crafts, artifacts, artists, architecture)</li> <li>• music/performing arts (e.g., songs, composers, instruments, dance, musical artists)</li> <li>• physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons Grade Seven</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What insights are gained through the exploration of multiple cultures?</li> <li>• What is unique and what is universal across all cultures?</li> <li>• How do language patterns simplify learning?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• evaluate similarities and differences between target language and English</li> <li>• identify and apply patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast aspects that are unique to a culture and aspects that are universal to cultures</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• recognize similarities and differences in geographical features of various countries</li> <li>• recognize similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Seven		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• How can cultural diversity be embraced?</li> <li>• Why is cultural diversity important in every community?</li> <li>• How does learning a foreign language enhance future success?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> <li>• Role of languages in a global society</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• initiate conversation with heritage speakers</li> <li>• embrace the presence of target culture throughout the community</li> <li>• demonstrate flexibility when interacting with people of different cultural backgrounds</li> <li>• understand unique career opportunities resulting from bilingual and bi-cultural knowledge and skills</li> <li>• identify and determine benefits of the use of foreign languages in a global society</li> </ul>

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<b>Communication Grade Eight</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language is relevant and useful in a global society.</li> <li>• Learning a foreign language impacts the individual's future success.</li> <li>• Learning a foreign language enables students to communicate with people of other cultures.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the significance of learning a foreign language?</li> <li>• How does learning a language impact future success?</li> <li>• How are foreign language skills applied to real-life experiences?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.1</b> Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.</p> <p><b>Academic Expectation 1.2</b> Students make sense of the variety of materials they read.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.11</b> Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p>	<ul style="list-style-type: none"> <li>• Vocabulary               <ul style="list-style-type: none"> <li>• Real-life vocabulary (e.g., shopping, traveling, dining, environment, nature)</li> <li>• Illness and injuries</li> <li>• Environment and nature</li> <li>• Current events</li> </ul> </li> <li>• Paragraphs               <ul style="list-style-type: none"> <li>• Gender and number agreement</li> <li>• Adverbs</li> <li>• Negatives</li> <li>• Interrogatives</li> <li>• Comparatives and superlatives</li> <li>• Demonstrative adjectives</li> <li>• Direct and indirect objects</li> </ul> </li> <li>• Verbs               <ul style="list-style-type: none"> <li>• Regular and irregular verbs</li> <li>• Present progressive tense, including irregular verbs</li> </ul> </li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• utilize previous and newly acquired vocabulary words in various contexts</li> <li>• respond logically using target language</li> <li>• read, write, and orally express sentences and common expressions</li> <li>• translate and interpret written material</li> <li>• apply grammatical concepts to express ideas</li> <li>• show understanding of proper noun/verb agreement for regular and irregular, present, present progressive, reflexive, past, and future tense verbs</li> <li>• utilize various verb tenses in speaking and writing</li> </ul>

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<p><b>Academic Expectation 1.12</b> Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.7</b> Students understand number concepts and use numbers appropriately and accurately.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p> <p><b>Academic Expectation 3.3</b> Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.</p> <p><b>Academic Expectation 3.4</b> Students demonstrate the ability to be resourceful and creative.</p>	<ul style="list-style-type: none"> <li>• Reflexive verbs</li> <li>• Past tense</li> <li>• Future tense (Ir)</li> <li>• Formal regular and irregular commands</li> </ul>	
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<b>Cultures Grade Eight</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning about other cultures promotes understanding and acceptance of others.</li> <li>• Culture impacts the way people interact with others.</li> <li>• Exposure to other cultures helps students to understand that all people are connected in some way.</li> </ul>	<ul style="list-style-type: none"> <li>• What advantages are gained from learning about other cultures?</li> <li>• How does learning about other cultures enhance the quality of interactions with others?</li> <li>• What insights are gained by studying other cultures?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.16</b> Students observe, analyze, and interpret human behaviors, social groupings, and institutions to better understand people and the relationships among individuals and among groups.</p> <p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.65</b> Students demonstrate an understanding of Christ’s command to love and serve one another.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Cultural perspectives and practices in target culture</li> <li>• Products</li> <li>• Influences of the target culture</li> <li>• Visual and performing arts</li> <li>• Myths and folklore</li> <li>• Visual representations</li> <li>• Verbal and non-verbal forms of communication in target culture</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• defend purposes for learning about different cultures</li> <li>• demonstrate cultural sensitivity by producing authentic cultural projects (e.g., arts and crafts, music, movement)</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• identify and interpret visual representations and products of target culture (e.g., currency, artifacts, manufactured goods, traditional dress)</li> <li>• analyze influences and contributions (e.g., agriculture, inventions, people, societal structures)</li> <li>• demonstrate appreciation (e.g., music, instruments, dance, fine art)</li> <li>• describe cultural value displayed in works of art, music, and dance</li> <li>• analyze myths and folklore of the target culture</li> <li>• critique visual representations (e.g., flags, Mayan calendar, maps, architecture)</li> <li>• engage in conversations</li> <li>• demonstrate appreciation of various cultures through hands-on activities (e.g., writing, arts and crafts, music, movement)</li> </ul>

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<b>Connections</b> Grade Eight		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>Learning a foreign language enables students to link knowledge in all content areas.</li> <li>Language is the way people share knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>How is knowledge in other content areas improved through learning a foreign language?</li> <li>How does the acquisition of a foreign language deepen the sharing of knowledge?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.14</b> Students understand the democratic principles of justice, equality, responsibility, and freedom and apply them to real-life situations.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.68</b> Students acknowledge the diverse cultural expressions of Catholicism.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 6.2</b> Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.</p>	<ul style="list-style-type: none"> <li>Religion</li> <li>Language Arts</li> <li>Math</li> <li>Science</li> <li>Social Studies</li> <li>Visual Arts</li> <li>Music/Performing Arts</li> <li>Physical Education</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>explore the connections to basic concepts and skills from other disciplines: <ul style="list-style-type: none"> <li>religion (e.g., holidays, rites, prayers, symbols, religious architecture, religious histories of people and places)</li> <li>language arts (e.g., listening, speaking, reading and writing skills, storytelling, parts of speech, vocabulary, speech patterns, dictionary skills, research)</li> <li>math (e.g., monetary values, conversions, cardinal numbers, ordinal numbers, equations)</li> <li>science (e.g., weather, food, agriculture, nutrition, temperature, forecasts)</li> <li>social studies (e.g., traditions, holidays, geography, currency, clothing, recipes, natural phenomenon, current events)</li> <li>visual arts (e.g., folk art, crafts, artifacts, artists, architecture)</li> <li>music/performing arts (e.g., songs, composers, instruments, dance, musical artists)</li> <li>physical education (e.g., movement, health, sports)</li> </ul> </li> </ul>

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<b>Comparisons Grade Eight</b>		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• There are similarities and differences in languages and cultures.</li> <li>• People are unique, yet they share common experiences.</li> <li>• Discovering linguistic similarities simplifies learning a foreign language.</li> </ul>	<ul style="list-style-type: none"> <li>• What insights are gained through the exploration of multiple cultures?</li> <li>• What is unique and what is universal across all cultures?</li> <li>• How do language patterns simplify learning?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.27</b> Students recognize and understand the similarities and differences among languages.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p>	<ul style="list-style-type: none"> <li>• Linguistic patterns</li> <li>• Grammatical and structural patterns</li> <li>• Verbal and non-verbal forms of communication</li> <li>• Cultural aspects and traditions</li> <li>• Geographical features</li> <li>• Traits of peoples</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• evaluate similarities and differences between target language and English</li> <li>• identify and apply patterns in sentence construction</li> <li>• demonstrate knowledge of vocabulary through speaking, actions, and writing</li> <li>• compare and contrast aspects that are unique to a culture and aspects that are universal to cultures</li> <li>• demonstrate flexibility for multiple perspectives</li> <li>• describe similarities and differences in geographical features of various countries</li> <li>• examine similarities and differences in people</li> <li>• develop an appreciation for cultural diversity</li> </ul>

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<b>Communities</b> Grade Eight		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Learning a foreign language promotes cooperation in a global society.</li> <li>• Knowledge of foreign languages and cultures can be applied in the community.</li> <li>• Foreign language skills provide students with tools that will be used beyond the school setting now and in the future.</li> </ul>	<ul style="list-style-type: none"> <li>• How can cultural diversity be embraced?</li> <li>• Why is cultural diversity important in every community?</li> <li>• How does learning a foreign language enhance future success?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.19</b> Students recognize and understand the relationship between people and geography and apply their knowledge in real-life situations.</p> <p><b>Academic Expectation 2.33</b> Students demonstrate the skills to evaluate and use services and resources available in their community.</p> <p><b>Academic Expectation 2.37</b> Students demonstrate skills and work habits that lead to success in future schooling and work.</p> <p><b>Academic Expectation 4.4</b> Students demonstrate the ability to accept the rights and responsibilities for self and others.</p> <p><b>Academic Expectation 7.6</b> Students apply Catholic principles to interpersonal relationships as found in the family, the workplace, society, Church, and with all creation.</p>	<ul style="list-style-type: none"> <li>• Awareness of culture and language in local community</li> <li>• Possible career options that use a foreign language</li> <li>• Role of languages in a global society</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• initiate conversation with heritage speakers</li> <li>• embrace the presence of target culture throughout the community</li> <li>• demonstrate flexibility when interacting with people of different cultural backgrounds</li> <li>• evaluate personal talents and skills in light of career opportunities resulting from bilingual and bi-cultural knowledge and skills</li> <li>• internalize the use of foreign languages in a global society</li> </ul>

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**Suggested Applications for Technology and Library Media**

**Reinforce core content through the use of:**

- Software
- Web pages
- Word processing documents
- Computer
- Digital camera and document camera
- Multimedia projects
- Interactive whiteboard
- Student response systems
- Video equipment
- Audio equipment
- Scanners
- Video conferencing equipment
- Skype
- Interactive Software
- Wikis
- Blogs

**Include multimedia resources:**

- Internet websites
- DVDs
- CDs

**Incorporate a variety of print materials:**

- Books (including picture books)
- Charts
- Magazines
- Dictionaries
- Maps
- Newsprint
- Encyclopedias
- Almanacs
- Reference tools

**Include multimedia presentations:**

- PowerPoint
- Slide shows
- Brochures
- Prezi

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**Examples of Formative and Summative Assessment**

Anchor activities  
Anecdotal records  
Art, dance, and music performances  
Brochures  
Collages and posters  
Debates  
Diagrams  
Dramatizations  
Entrance and exit slips  
File folder games  
Graphic organizers  
Group projects and presentations  
Interviews  
K-W-L chart  
Maps and drawings  
Mobiles  
Models

Multiple choice assessments  
Observations  
Oral presentations  
Oral response  
PowerPoint presentations  
Pre- and post-assessments  
Real-life task performances  
Self-evaluation  
Slide show presentations  
Songs  
Student created questions, tests, and quizzes  
Student taught lessons  
Summaries  
Teacher created/book generated tests and quizzes  
Video productions  
Web pages  
Writing

# **Visual Arts Curriculum Framework**

# VISUAL ARTS

## PHILOSOPHY/RATIONALE AND THE CURRICULUM GUIDE

### **Philosophy/Rationale**

In Archdiocese of Louisville schools, we believe that as human beings, we reflect our humanity, the beauty of creation, and our understanding of God's love through our own creative, artistic endeavors. We believe that art is a conscious expression in a visual form. Multiple opportunities for conscious expression are vital to the fullest possible development of young minds. Consequently, art is a critical component of a comprehensive and rich curriculum, whether implemented formally or informally, because it promotes self-expression, makes connections to higher levels of thinking, and fosters the recognition and the appreciation of differences among individuals and cultures. Art encourages discovery, inquiry, and wonder, and art can be a key to understanding past times and cultures and to envisioning the future.

### **Curriculum Guide**

In 2001, the *Archdiocese of Louisville Visual Arts Curriculum Guide* was developed and introduced. It was revised in 2005 and again in 2010. The 2001 curriculum guide replaced the former art curriculum guide from 1985.

The *Archdiocese of Louisville Visual Arts Curriculum Guide* is based upon research and best practices, was written by experienced and successful art teachers within the archdiocese, and is aligned with *National Standards for Arts Education* from the Consortium of National Arts Education Associations.

The guide also includes assessment information and a variety of resources to support teachers at all levels of expertise with the implementation of the local art curriculum.

Each elementary school received copies of the guide and curriculum framework. If a school does not have a full time/part time art teacher and the art curriculum is taught in the regular classroom, those teachers should have copies of the curriculum framework and access to the curriculum guide to assist them with implementation of the local art curriculum.

Copies of the Archdiocese of Louisville Visual Arts Curriculum Framework and Curriculum Guide can be found on the Archdiocese of Louisville website, [www.archlou.org](http://www.archlou.org).

# **Visual Arts Curriculum Framework**

## Archdiocese of Louisville

The Archdiocese of Louisville Visual Arts Curriculum Framework is standards and performance based. The curriculum framework is aligned with the *National Standards for Arts Education* put forth by the National Art Education Association. These national standards specify the understandings and levels of achievement (benchmarks) that students are expected to attain in the competencies, for each of the arts, at the completion of grades 4, 8, and 12.

### **National Standards for Arts Education**

The following Content Standards specify what students should know and be able to do in the visual arts discipline:

1. Understanding and applying media, techniques, and processes.
2. Using knowledge of structures and functions.
3. Choosing and evaluating a range of subject matter, symbols, and ideas.
4. Understanding the visual arts in relation to history and cultures.
5. Reflecting upon and assessing the characteristics and merits of their work and the work of others.
6. Making connections between visual arts and other disciplines.

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## **Alignment with National Standards**

The Visual Arts Curriculum Framework in the Archdiocese of Louisville is aligned with the ***National Standards for Arts Education*** and with the **Learning Goals and Academic Expectations of the Kentucky Department of Education** and the **Archdiocese of Louisville**.

The National Standards state that:

**Students should be able to communicate at a basic level in the visual arts discipline.** *This includes knowledge and skills in the use of the basic vocabularies, materials, tools, techniques, and intellectual methods.*

**Students should be able to communicate proficiently in at least one art form,** *including the ability to define and solve artistic problems with insight, reason, and technical proficiency.*

**Students should be able to develop and present basic analysis of works of art** *from structural, historical, and cultural perspectives, and from combinations of those perspectives. This includes the ability to understand and evaluate work in the various arts disciplines.*

**Students should have an informed acquaintance with exemplary works of art from a variety of cultures and historical periods,** *and a basic understanding of historical development in the arts disciplines and within cultures.*

**Students should be able to relate various types of art knowledge and skills within and across the arts disciplines.** *This includes mixing and matching competencies and understandings in art making, history and culture, and analysis in any arts-related project.*

The existence of state and national standards for art learning demands that students be evaluated on their ability to achieve those standards. Art teachers must know the standards, base their instruction on the standards, and assess the degree to which their students have demonstrated the standards.

As a result of developing these capabilities, students can arrive at their own knowledge, beliefs, and values for making personal and artistic decisions. In other terms, they can arrive at a broad-based, well-grounded understanding of the nature, value, and meaning of the arts as a part of their own humanity.

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## Creativity and the Arts – Pre-K

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Art fosters creativity and is an avenue for personal expression.</li> <li>• Creativity and the arts promote the development of the whole child.</li> </ul>	<ul style="list-style-type: none"> <li>• How does this creation/experience make you feel?</li> <li>• What did you gain from this experience?</li> <li>• How does being exposed to the different art forms expand your awareness of the world around you?</li> </ul>
Content Guidelines	Performance Standards
<p>Creativity</p> <p>Appreciation</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use a variety of media, materials, and tools for creative expression</li> <li>• demonstrate self-expression and creativity in a variety of forms and contexts, including play, visual arts, music, drama, and dance</li> <li>• show and talk about what they have made or done</li> <li>• show interest and respect for the creative work of self and others</li> <li>• demonstrate appreciation for different forms of artistic expression</li> <li>• share opinions and thoughts about art and creative expression in a respectful manner</li> </ul>

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**Understanding and Applying Media, Techniques, and Processes**  
**Kindergarten through Grade Two**

<b>Essential Understandings</b>	<b>Guided Questions</b>	
<p>Art forms have basic elements.</p> <p>Art materials and tools have a specific purpose.</p>	<ul style="list-style-type: none"> <li>• What are the basic elements of various art forms?</li> <li>• Why is it important to take care of art materials and use them safely?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>• 2-D and 3-D art</li> <li>• Safety</li> <li>• Technology and tools</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate and express understanding of a variety of media techniques and processes in 2-D and 3-D art</li> <li>• use materials and tools in a safe and responsible manner</li> <li>• explore the uses of technology and tools</li> </ul>

**Using Knowledge of Structures and Functions**  
**Kindergarten through Grade Two**

Essential Understandings	Guided Questions	
<p>Artists create different effects by changing elements of an art form.</p> <p>Artists use visual structures and functions of art to communicate ideas.</p>	<ul style="list-style-type: none"> <li>• How does changing one element in an artwork make people feel differently?</li>   <li>• How do artists communicate ideas to an audience?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>• Elements of art</li>   <li>• Art mediums</li>   <li>• Types of art</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate an understanding of the elements of art (line, shape, color, value, form, texture, and space)</li>   <li>• create with a variety of art mediums</li>   <li>• create works of art using portraiture, landscape, narrative, and still life</li> </ul>

**Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas**  
**Kindergarten through Grade Two**

<b>Essential Understandings</b>	<b>Guided Questions</b>	
<p>Creating art involves problem-solving.</p> <p>Artists express ideas and emotions through the arts.</p> <p>Artists select and use subject matter, symbols, and ideas to communicate meaning.</p>	<ul style="list-style-type: none"> <li>• How does planning ahead and problem-solving help in producing art?</li> <li>• Why do artists create different kinds of art?</li> <li>• How does the artist communicate ideas and feelings?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.24</b>            Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 5.4</b>            Students use a decision-making process to make informed decisions among options.</p>	<ul style="list-style-type: none"> <li>• Purposes of art</li> <li>• Relevant artists</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• create art work using ceremonial, expressive, narrative, functional, persuasive, and/or decorative art forms</li> <li>• explore various artists and their work</li> <li>• use various artists as inspiration for their own work</li> </ul>

## Understanding the Visual Arts in Relation to History and Cultures

Kindergarten through Grade Two

Essential Understandings	Guided Questions	
<p>Art reflects an artist's experience and background.</p> <p>Cultures express ideas through a variety of works of art.</p>	<ul style="list-style-type: none"> <li>• How do artists' experiences influence their art?</li> <li>• What do you learn about various cultures from the art they make?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p>	<ul style="list-style-type: none"> <li>• Multicultural art</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore and experience art of different cultures, periods, and forms (e.g., masks, sculptures, ritual objects)</li> </ul>

**Reflecting upon and Assessing the Characteristics and Merits of Their Work and the Work of Others**  
**Kindergarten through Grade Two**

Essential Understandings	Guided Questions	
<p>People interpret the arts in different ways.</p> <p>Standards of quality guide evaluation of a work of art.</p>	<ul style="list-style-type: none"> <li>• How do likes and dislikes influence personal responses to art?</li> <li>• What are appropriate audience behaviors for various art forms and presentations?</li> <li>• How do the arts help people to see things in different ways?</li>   <li>• How do artists determine the quality of their work?</li> <li>• Why is critiquing important to the artist?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 2.23</b> Students analyze their own and others' artistic products and performances using accepted standards.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p> <p><b>Academic Expectation 5.3</b> Students organize information to develop or change their understanding of a concept</p>	<ul style="list-style-type: none"> <li>• Artist statement</li>   <li>• Active listening</li>   <li>• Critique</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize various purposes for creating art</li> <li>• create an artist statement about their work (verbal and/or written)</li>   <li>• listen in a respectful Christian manner to a variety of opinions</li>   <li>• voice opinions in a respectful Christian manner</li> <li>• offer constructive criticism when critiquing a piece of art</li> </ul>

## Making Connections between Visual Arts and Other Disciplines

Kindergarten through Grade Two

Essential Understandings	Guided Questions	
Art and other content areas are interconnected.	<ul style="list-style-type: none"> <li>• How is art connected to other subjects?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 7.4</b> Students participate actively in a community of faith.</p>	<ul style="list-style-type: none"> <li>• Collaborative projects</li> <li>• Community involvement</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore connections between art and other disciplines</li> <li>• create public art (e.g., displays in the hall, art contests, art fairs, auction projects)</li> <li>• create works of art for community outreach (e.g., Pinwheels for Peace, projects for the homebound, stewardship projects)</li> </ul>

## Understanding and Applying Media, Techniques, and Processes

Grades Three through Five

Essential Understandings	Guided Questions	
<p>Unique elements characterize different art forms.</p> <p>Art materials and tools have a specific purpose.</p>	<ul style="list-style-type: none"> <li>• How are forms of art similar and different?</li> <li>• Why is it important to take care of art materials and use them safely?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>• Media techniques and processes</li> <li>• 2-D and 3-D art</li> <li>• Safety</li> <li>• Technology and tools</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate how different media techniques and processes cause different effects (drawing, painting, video, and installations)</li> <li>• use the creative process from beginning to end (pre-planning, brainstorming, writing, creation, and critique)</li> <li>• create using a variety of art media</li> <li>• use materials and tools in a safe and responsible manner</li> <li>• explore the uses of technology and tools</li> <li>• use technology and tools to create images and communicate ideas</li> </ul>

**Using Knowledge of Structures and Functions**  
**Grades Three through Five**

<b>Essential Understandings</b>	<b>Guided Questions</b>	
Artists use elements of art and principles of design to produce a variety of effects.	<ul style="list-style-type: none"> <li>• How do the elements of art and the principles of design influence art forms?</li> <li>• How do artists use art forms to communicate?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>• Elements of art</li> <li>• Principles of design</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• discuss and create using the elements of art (line, shape, color, value, form, texture, and space)</li> <li>• apply and discuss the principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and unity)</li> </ul>

**Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas**  
**Grades Three through Five**

Essential Understandings	Guided Questions	
<p>Creating art involves analytical and creative thinking.</p> <p>Arts enhance communication of information, ideas, and feelings.</p>	<ul style="list-style-type: none"> <li>• How do artists evaluate their work during the creation process?</li> <li>• How does critique help in refining art?</li> <li>• What is the difference between copying and creating original work?</li>   <li>• What role does art play in the act of communication?</li> <li>• How does art reflect feelings and attitudes?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.24</b>            Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 5.4</b>            Students use a decision-making process to make informed decisions among options.</p>	<ul style="list-style-type: none"> <li>• Symbolism and ideas</li>   <li>• Types of art</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• discuss ideas and symbols that communicate meaning</li> <li>• create works with various ideas and symbolic meanings</li>   <li>• create works of art using portraiture, landscape, narrative, abstract, non-objective, genre, and/or still life</li> </ul>



**Reflecting upon and Assessing the Characteristics and Merits of Their Work and the Work of Others**  
**Grades Three through Five**

Essential Understandings	Guided Questions	
<p>Art enriches experiences and understandings.</p> <p>Standards of quality guide evaluation of a work of art.</p>	<ul style="list-style-type: none"> <li>• What are appropriate audience behaviors for various art forms and presentations?</li> <li>• How do the arts help people see a different viewpoint?</li> <li>• How do listening to and observing others help people to generate new ideas?</li> <li>• What factors influence an artist's style?</li>   <li>• How are standards of quality determined?</li> <li>• How do standards impact responses and interpretations?</li> <li>• What standards of quality are used to evaluate specific forms of art?</li> <li>• How do evaluation or critique of art impact the artist's work?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 2.23</b> Students analyze their own and others' artistic products and performances using accepted standards.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p> <p><b>Academic Expectation 5.3</b> Students organize information to develop or change their understanding of a concept.</p>	<ul style="list-style-type: none"> <li>• Artist statements</li>   <li>• Critiques</li>     <li>• Active listening</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• produce an artist statement which includes process and rationale</li>   <li>• compare and contrast a variety of artworks</li> <li>• discuss basic standards (history, elements and principles, theme, culture)</li> <li>• identify elements of art and principles of design in a variety of art works</li>   <li>• demonstrate active listening skills and respectful Christian behaviors during critiques</li> </ul>

## Making Connections between Visual Arts and Other Disciplines

Grades Three through Five

Essential Understandings	Guided Questions	
<p>All knowledge is interconnected.</p> <p>The arts are unique in that they stand alone and enrich other content areas.</p>	<ul style="list-style-type: none"> <li>• How do art professions enhance society?</li> <li>• How do art galleries and museums impact their community?</li> <li>• Why do we value the arts?</li>   <li>• How do the arts connect to other content areas?</li> <li>• Why do we collaborate?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 7.4</b> Students participate actively in a community of faith.</p>	<ul style="list-style-type: none"> <li>• Cultural experiences</li>   <li>• Art professions</li>   <li>• Community involvement</li>   <li>• Collaborative projects</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• understand the contribution of galleries, studios, and museums to society (e.g., virtual tours, classroom exhibits, travelling suitcases, online collections)</li>   <li>• identify careers available to artists</li>   <li>• create public art (e.g., displays in the hall, art contests, art fairs, auction projects)</li> <li>• create works of art for community outreach (e.g., Pinwheels for Peace, projects for the homebound, stewardship projects)</li>   <li>• expand connections between art and other disciplines</li> <li>• participate in collaborative projects</li> </ul>

## Understanding and Applying Media, Techniques, and Processes

### Grades Six through Eight

Essential Understandings	Guided Questions	
Form follows function.	<ul style="list-style-type: none"> <li>How does function influence the design of an object?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>Media techniques and processes</li> <li>2-D and 3-D art</li> <li>Safety</li> <li>Technology and tools</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>select appropriate media, techniques, and processes to convey their artistic vision</li> <li>use the creative process from beginning to end (pre-planning, brainstorming, writing, creation, and critique)</li> <li>create using a variety of art media</li> <li>use materials and tools in a safe and responsible manner</li> <li>explore the uses of technology and tools</li> <li>use technology and tools to create images and communicate ideas</li> </ul>

**Using Knowledge of Structures and Functions**  
**Grades Six through Eight**

Essential Understandings	Guided Questions	
Artists manipulate elements of art and principles of design to create art.	<ul style="list-style-type: none"> <li>• How do the elements of art and the principles of design influence the viewer?</li> <li>• How does art influence and manipulate the viewing public?</li> <li>• How does art drive consumerism?</li> <li>• How important is the audience in art production?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.10</b> Students organize information through development and use of classification rules and systems.</p> <p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p>	<ul style="list-style-type: none"> <li>• Elements of art</li>   <li>• Principles of design</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• evaluate the use of the elements of art (line, shape, color, value, form, texture, and space) to convey a personal message (e.g., social justice, environmental themes, political message, advertisement, consumerism)</li>   <li>• evaluate the use of the principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and unity) to convey a personal message (e.g., social justice, environmental themes, political message, advertisement, consumerism)</li> </ul>

**Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas**  
**Grades Six through Eight**

Essential Understandings	Guided Questions	
Arts and artistic style enhance communication of information and influence ideas and feelings.	<ul style="list-style-type: none"> <li>• How do artists use symbols to create and express ideas, moods, and feelings?</li> <li>• How are consumer choices influenced by the arts?</li> <li>• How does risk-taking influence personal style?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.24</b>            Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b>            In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p>	<ul style="list-style-type: none"> <li>• Symbolism and ideas</li>   <li>• Styles of art</li> </ul>	Students will: <ul style="list-style-type: none"> <li>• communicate points of view through manipulation of symbols and media</li> <li>• create works with various ideas and symbolic meanings</li>   <li>• explain ways an artist's intent plays a crucial role in the aesthetic value of an object</li> <li>• use research and contextual information to identify responses to a work of art</li> <li>• integrate appropriate skills and techniques with the subject matter to communicate the intended meaning of the artwork</li> </ul>

**Understanding the Visual Arts in Relation to History and Cultures**  
**Grades Six through Eight**

Essential Understandings	Guided Questions	
Art forms are an integral part of the human experience.	<ul style="list-style-type: none"> <li>• How is art part of the human experience?</li> <li>• How can art influence culture and events over time?</li> <li>• How does art contribute to an appreciation and respect of multiple cultures?</li> <li>• How do cultural elements affect artistic styles?</li> <li>• How does personal experience influence appreciation of art?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p>	<ul style="list-style-type: none"> <li>• Multicultural art</li>   <li>• Art history</li>   <li>• Movements of art</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• interpret the contribution of various cultures, periods, and styles to the human experience</li> <li>• evaluate the importance of craft as an art form</li> <li>• create crafts reflecting various cultures (e.g., textiles, quilts, weavings, arpilleras, masks, jewelry, ceramics, embossing, basketry, woodworking, folk art)</li>   <li>• examine the role of art throughout history and its effect on culture</li> <li>• create projects that demonstrate forms of art throughout history (prehistoric through present day)</li>   <li>• identify different movements in art and their characteristics</li> <li>• understand the influences that brought about the different art movements</li> </ul>

**Reflecting upon and Assessing the Characteristics and Merits of Their Work and the Work of Others**  
**Grades Six through Eight**

Essential Understandings	Guided Questions	
<p>Standards of quality guide evaluation of a work of art.</p> <p>Standards of quality facilitate analysis and interpretation of an art form.</p>	<ul style="list-style-type: none"> <li>• What are the criteria for judging how effectively a work of art communicates?</li> <li>• Why do the standards of quality change over time?</li> <li>• How does a society influence the standards of quality?</li>   <li>• How does the artist know if a work of art communicates intended ideas or feelings?</li> <li>• What is the responsibility of the artist and the viewer?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.13</b> Students make sense of ideas and communicate ideas with the visual arts.</p> <p><b>Academic Expectation 1.4</b> Students make sense of the various messages to which they listen.</p> <p><b>Academic Expectation 2.23</b> Students analyze their own and others' artistic products and performances using accepted standards.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.6</b> Students demonstrate an open mind to alternative perspectives.</p> <p><b>Academic Expectation 5.3</b> Students organize information to develop or change their understanding of a concept.</p>	<ul style="list-style-type: none"> <li>• Artist statements</li>   <li>• Critiques</li>   <li>• Active listening</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• produce an artist statement which includes process and rationale</li> <li>• understand the intent of a work through the artist's statement</li>   <li>• compare and contrast a variety of artworks</li> <li>• evaluate the basic standards (history, elements and principles, themes, culture)</li> <li>• analyze elements of art and principles of design in a variety of art works</li>   <li>• demonstrate active listening skills and respectful Christian behaviors during critiques</li> </ul>

## Making Connections between Visual Arts and Other Disciplines

### Grades Six through Eight

Essential Understandings	Guided Questions	
<p>All knowledge is interconnected.</p> <p>Creating art requires ethical awareness, responsibility, and collaboration.</p>	<ul style="list-style-type: none"> <li>• How do the arts connect to the real world and other professions?</li> <li>• How are the lessons taught through the arts essential to the business world?</li> <li>• How does consumerism drive art?</li> <li>• How can the arts connect with other disciplines in an ever-changing world?</li>   <li>• How does collaboration with others contribute to the production of art?</li> <li>• What role do ethics play in selecting ideas for creating a work of art?</li> <li>• How is plagiarism related to responsible choices in art production?</li> <li>• How does the artist use humor responsibly?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 6.1</b> Students connect knowledge and experiences from different subject areas.</p> <p><b>Academic Expectation 7.4</b> Students participate actively in a community of faith.</p>	<ul style="list-style-type: none"> <li>• Cultural experiences</li>   <li>• Professions and careers</li>   <li>• Community involvement</li>   <li>• Collaborative projects</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• analyze the contribution of galleries, studios, and museums to society (e.g., virtual tours, classroom exhibits, travelling suitcases, online collections)</li>   <li>• investigate ways the arts are used in different professions and careers</li> <li>• explore ways communication, collaboration, creative problem solving, critical thinking, and technology skills connect art with other professions</li>   <li>• create public art (e.g., displays in the hall, art contests, art fairs, auction projects)</li>   <li>• create works of art for community outreach (e.g., Pinwheels for Peace, projects for the homebound, stewardship projects)</li> <li>• participate in collaborative projects</li> </ul>

# **Music and Performing Arts Curriculum Framework**

# MUSIC AND PERFORMING ARTS PHILOSOPHY AND RATIONALE

## Philosophy

Music is a part of daily life and essential to the development of the whole child (physical, emotional, mental, and spiritual). Music education fosters thinking, socialization, and communication skills; promotes self-expression; and stimulates creativity. All human beings are innately musical regardless of age, talent, or ability level. The study of music/performing arts benefits both students and society, touching human beings in ways that are solely unique to the music/performing arts disciplines.

## Rationale for a Music/Performing Arts Program

In Archdiocese of Louisville schools, we believe and understand that each person is created in the image of God as unique and loveable. We are endowed with personal and collective worth through God's love. As independent thinkers and lifelong learners, we must practice the principles of stewardship and share our God-given innate talents and gifts.

Because of these beliefs, each school must work toward developing a comprehensive and fully implemented Music/Performing Arts Program.

Such a program:

- provides avenues for self-expression, communication, and creativity
- promotes socialization and appreciation for diversity
- addresses a variety of interests, learning styles, and readiness levels
- increases cognitive development, critical thinking and problem-solving skills, and higher-order thinking skills
- improves student self-esteem, attendance, and school atmosphere
- reinforces cross-curricular and life-skills learning
- engages spiraling, life-long learning processes

If a school does not have a full time/part time music/performing arts teacher and the music curriculum is taught in the regular classroom, those teachers should have copies of the curriculum framework and access to the curriculum guide to assist them with implementation of the local music curriculum. Copies of the Archdiocese of Louisville Music/Performing Arts Curriculum Framework and Curriculum Guide can be found on the Archdiocese of Louisville website, [www.archlou.org](http://www.archlou.org).

# **Music and Performing Arts Curriculum Framework**

## Archdiocese of Louisville

The Archdiocese of Louisville Music and Performing Arts Curriculum Framework is standards and performance based. The curriculum framework is aligned with the Music Educators National Conference *National Standards for Arts Education*.

### **National Content Standards for Music/Performing Arts**

#### **Music Educators National Conference**

A musically educated person will demonstrate:

1. Singing, alone and with others, a varied repertoire of music
2. Performing on instruments, alone and with others, a varied repertoire of music
3. Improvising melodies, variations, and accompaniments
4. Composing and arranging music within specified guidelines
5. Reading and notating music
6. Listening, analyzing, and describing music
7. Evaluating music and music performances
8. Understanding relationships between music, the other arts, and disciplines outside the arts
9. Understanding music in relation to history and culture

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## Creativity and the Arts – Pre-K

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Art fosters creativity and is an avenue for personal expression.</li> <li>• Creativity and the arts promote the development of the whole child.</li> </ul>	<ul style="list-style-type: none"> <li>• How does this creation/experience make you feel?</li> <li>• What did you gain from this experience?</li> <li>• How does being exposed to the different art forms expand your awareness of the world around you?</li> </ul>
Content Guidelines	Performance Standards
<p>Creativity</p> <p>Appreciation</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use a variety of media, materials, and tools for creative expression</li> <li>• demonstrate self-expression and creativity in a variety of forms and contexts, including play, visual arts, music, drama, and dance</li> <li>• show and talk about what they have made or done</li> <li>• show interest and respect for the creative work of self and others</li> <li>• demonstrate appreciation for different forms of artistic expression</li> <li>• share opinions and thoughts about art and creative expression in a respectful manner</li> </ul>

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<b>Singing</b> Kindergarten through Grade Two		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Vocal repertoire incorporates the ten elements of music.</li> <li>• Accurate participation involves engaged listening.</li> <li>• Singers express ideas and emotions through music.</li> <li>• Singers interpret music in different ways.</li> </ul>	<ul style="list-style-type: none"> <li>• How are the elements of music incorporated when singing a song?</li> <li>• How does changing one musical element make the listener feel differently?</li> <li>• Why is it important to listen while singing?</li> <li>• What occurs during group singing when singers do not listen to each other?</li> <li>• What are the ideas and emotions expressed in a given song?</li> <li>• How does the singer communicate ideas and feelings?</li> <li>• How does the song make you feel?</li> <li>• How does the song help the listener to see things in different ways?</li> <li>• Why do particular songs make the listener want to move?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate ideas with music.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.64</b> Students demonstrate recognition of the sacredness of time through the celebration of the hours, liturgical seasons, and special feasts and days.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 7.4</b> Students participate actively in a community of faith.</p>	<ul style="list-style-type: none"> <li>• Vocal pedagogy</li> <li>• Speech, chant, and song repertoire</li> <li>• Solfege syllables</li> <li>• Rhythmic syllables</li> <li>• Meter</li> <li>• Vocal harmony</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• participate in vocal warm-up exercises (e.g., breathing, vowels, tone placement, body alignment, diction)</li> <li>• demonstrate high/low melodic contour</li> <li>• produce sound using head voice and chest voice</li> <li>• sing with appropriate timbre, diction, and body alignment, maintaining a steady tempo</li> <li>• follow simple, basic conducting cues related to dynamics, phrasing, and interpretation</li> <li>• speak, chant, and sing expressively and accurately while following the conductor</li> <li>• sing, individually and in groups, a variety of musical styles, tempi, rhythms, pentatonic melodies, and tonal centers</li> <li>• perform a varied repertoire (e.g., American folk songs, world folk songs, popular songs, nursery rhymes, poetry)</li> <li>• sing simple songs, responses, and refrains for seasonal liturgies</li> <li>• match and perform simple pitches (e.g., sol, mi, la and/or mi, re, do)</li> <li>• perform simple rhythm patterns with use of syllables (e.g., ta and ti-ti)</li> <li>• perform simple ostinati in duple and triple patterns</li> <li>• perform partner songs, canons, rounds, and vocal ostinati</li> </ul>

<b>Instruments</b> Kindergarten through Grade Two		
<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Instrumental repertoire incorporates the ten elements of music.</li> <li>• Accurate participation involves engaged listening.</li> <li>• People experience music through their various senses.</li> <li>• Musicians express ideas and emotions through music.</li> <li>• Musicians create different effects by changing musical elements.</li> </ul>	<ul style="list-style-type: none"> <li>• How are the elements of music incorporated when playing a piece?</li> <li>• How does changing one musical element make the listener feel differently?</li> <li>• Why is it important to listen while playing an ensemble piece?</li> <li>• What occurs during ensemble playing when musicians do not listen to each other?</li> <li>• How does playing the music make the listener feel?</li> <li>• How does the music help the listener to respond in a different way?</li> <li>• How does the musician communicate ideas and feelings?</li> <li>• What are the ideas and emotions expressed in a given piece?</li> <li>• How do musicians create different effects by changing musical elements?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Instrumental pedagogy</li> <li>• Speech, chant, body percussion, and pitched and non-pitched percussion repertoire</li> <li>• Meter and rhythmic imitation</li> <li>• Melodic and harmonic imitation</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate simple procedures for the care, management, and playing of instruments</li> <li>• model body placement relating to use of pitched and non-pitched percussion technique</li> <li>• perform in ensembles expressively and accurately, blending timbres, dynamic levels, phrasing and interpretation while responding correctly to conducting cues</li> <li>• perform simple accompaniments: speech, chant, body percussion, bordun, rhythmic ostinati, tremolos, and glissandi</li> <li>• perform on instruments, in a group/individually, a variety of musical styles, rhythms, and tonal centers</li> <li>• perform on a wide assortment of standard, ethnic, and homemade instruments (e.g., xylophones, drums, and shakers)</li> <li>• perform using body percussion and/or instruments in a liturgical setting</li> <li>• recognize conducting patterns</li> <li>• echo simple rhythms with the use of syllables (e.g., ta and ti-ti for rhythm)</li> <li>• play simple ostinato patterns</li> <li>• echo-sing melodic patterns using pitches with text, letter names, and solfege syllables</li> <li>• play melodic ostinati, canons, and rounds</li> </ul>

## Improvising and Composing Kindergarten through Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Music has basic elements and structure.</li> <li>• Musicians create different effects by changing musical elements.</li> <li>• Creating music involves problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the composer use the basic elements of music within a select structure?</li> <li>• How does changing one musical element alter the composition?</li> <li>• How does a composer's experience influence music?</li> <li>• How might a composer refine a musical creation?</li> <li>• What cooperative skills and social skills might composers use?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p>	<ul style="list-style-type: none"> <li>• Exploring and improvising</li> <li>• Composing and arranging</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• explore musical instruments</li> <li>• invent "question" and "answer" phrases of a determined length</li> <li>• improvise both rhythmic and melodic "question" and "answer" phrases</li> <li>• improvise simple rhythmic and melodic ostinato patterns</li> <li>• improvise to familiar melodies through movement</li> <li>• compose short songs and instrumental pieces within given musical guidelines</li> <li>• use a variety of sound sources when composing music (e.g., body percussion, invented instruments)</li> <li>• compose rhythmic/melodic ostinatos</li> <li>• arrange simple original pieces for voices or instruments using a variety of forms (canon, round, binary, ternary, and rondo form)</li> <li>• use technology to collect and organize ideas, and compose musical pieces (e.g., finale)</li> </ul>

**Reading and Notating Music**  
Kindergarten through Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Music consists of basic elements and form.</li> <li>• Musicians utilize a system of symbols to convey meaning.</li> </ul>	<ul style="list-style-type: none"> <li>• How are musical elements and form indicated?</li> <li>• How are forms of music similar and different?</li> <li>• How do musicians identify individual written symbols?</li> <li>• How do musicians create combinations of written symbols?</li> <li>• How does working together benefit the production of music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 1.3</b> Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p>	<ul style="list-style-type: none"> <li>• Reading and notating music</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• represent musical elements through movement and graphic and standard notation</li> <li>• recognize, read, notate, and correctly perform music using graphic and standard notation for form, timbre, meter, rhythm, tonality, intervals, dynamics, tempo (fast and slow), and articulation</li> <li>• use systems describing how music is similar or different (e.g., verse/refrain, binary, ternary)</li> <li>• recognize duple and triple meters ((2/4, 4/4, and 3/4)</li> <li>• apply and organize rhythm (eighth, quarter, half, and whole notes/rests)</li> <li>• use a system (i.e. syllables, numbers, or letters) to read simple pitch notation in treble clef</li> <li>• recognize melodic intervals (step, skip, leap, repeat)</li> <li>• practice reading and notating with technology (e.g., Music Ace Maestro)</li> </ul>

## Listening, Analyzing, Describing, and Evaluating Music and Music Performances Kindergarten through Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Musicians express ideas and emotions through music and assorted performance venues.</li> <li>• People interpret music and musical performances in different ways.</li> <li>• People experience music and performances through their various senses.</li> <li>• Musical performances portray and transmit culture.</li> </ul>	<ul style="list-style-type: none"> <li>• How are new ideas generated by listening to and watching others?</li> <li>• Why do people have diverse responses to music?</li> <li>• How does the musician communicate ideas and feelings?</li> <li>• How do different types of music and performances make you feel?</li> <li>• What are appropriate audience responses and behaviors for various musical venues?</li> <li>• How do purpose and audience influence choices in music?</li> <li>• How might an understanding of a culture enhance the listener's experience?</li> <li>• Why are there different styles in music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.3</b> Students identify and analyze systems and the ways the components work together or affect each other.</p> <p><b>Academic Expectation 2.34</b> Students perform physical movement skills effectively in a variety of settings.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Listening, analyzing , and describing</li> <li>• Evaluating music and music performances</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• respond through movement to musical and drama elements and styles</li> <li>• use appropriate music terminology to explain dynamics, tempi, articulation, and musical performances</li> <li>• identify simple music forms (e.g., call and response, binary, ternary )</li> <li>• identify instrumental sounds and human voices</li> <li>• compare and contrast similarities and differences between musical selections and performances</li> <li>• use musical terminology, movement, and/or art to positively critique their own and others' performances and compositions</li> <li>• evaluate the effectiveness of sets, music, costumes, lighting, and sound in conveying the intended emotion and message</li> </ul>

## Understanding Relationships between Music, Fine Arts, and Other Academic Disciplines

### Kindergarten through Grade Two

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Musical study can highlight basic relationships between fine arts and other academic disciplines.</li>   <li>• Historical and cultural influences shape music.</li>   <li>• Musical evolution enriches and deepens human understanding.</li> </ul>	<ul style="list-style-type: none"> <li>• How does music study help people perceive things in different ways?</li> <li>• How does music study promote the understanding of relationships between fine arts and other disciplines?</li>   <li>• How do historical and cultural influences impact music?</li> <li>• What influences a musician's style?</li>   <li>• How is the music of various cultures similar and different?</li> <li>• How do people understand history and cultures through the study of music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate ideas with music.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.58</b> Students demonstrate an understanding of the relationship between faith and culture as it is found in the arts, sciences, and technology.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Music and fine arts</li>   <li>• Music and other disciplines</li>   <li>• Music culture and history</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare and contrast the use of terms common to the various fine arts (e.g., line, color, pattern)</li> <li>• identify and describe relationships between the study of music and theatre, dance, opera, and visual art</li>   <li>• apply music principles to curricular areas (e.g., math: geometric shapes used in simple folk dancing; science: sound production related to vibrations)</li>   <li>• perform world songs, speech chants, poems, and rhymes in English and other languages</li> <li>• perform body percussion, hand clap games, jump rope rhymes, circle games, marches, and folk dances from a variety of world cultures</li> <li>• dramatize childhood stories and literature (e.g., Mother Goose, multicultural fables, and fairy tales)</li> <li>• compare and contrast how elements of music are used throughout the world</li> <li>• identify various uses of music within culture (e.g., lullaby, patriotic songs, work songs, religious hymns)</li> <li>• identify the role of musicians within a social structure (e.g., cantor, orchestral conductor, master drummer)</li> <li>• model appropriate audience behavior according to cultural etiquette</li> </ul>

## Singing Grades Three through Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>Participation involves engaged listening and focused performance skills.</li> <li>Unique elements characterize different vocal styles and interpretations.</li> <li>Music enhances communication of information, ideas, and feelings.</li> </ul>	<ul style="list-style-type: none"> <li>How does working together benefit the production of music?</li> <li>How does engaged listening improve the sound of the ensemble?</li> <li>How do the elements of music distinguish distinctive vocal styles?</li> <li>How does changing one or more musical elements make the listener respond differently?</li> <li>How are ideas and emotions expressed in a song?</li> <li>How does the singer communicate information, ideas, and feelings?</li> <li>How does the same song evoke different reactions from different listeners?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate ideas with music.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.64</b> Students demonstrate recognition of the sacredness of time through the celebration of the hours, liturgical seasons, and special feasts and days.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p> <p><b>Academic Expectation 7.4</b> Students participate actively in a community of faith.</p>	<ul style="list-style-type: none"> <li>Vocal pedagogy</li> <li>Speech, chant, and song repertoire</li> <li>Solfege syllables</li> <li>Rhythmic syllables</li> <li>Meter</li> <li>Vocal harmony</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>participate in vocal warm-up exercises (e.g., breathing, vowels, tone placement, body alignment, diction)</li> <li>demonstrate high/low melodic contour</li> <li>produce sound using head voice and chest voice</li> <li>sing with appropriate timbre, diction, and body alignment, maintaining a steady tempo</li> <li>follow conducting cues related to dynamics, phrasing, and interpretation</li> <li>speak, chant, and sing expressively and accurately while following the conductor</li> <li>sing, individually and in groups, a variety of musical styles, tempi, rhythms, pentatonic melodies, and tonal centers</li> <li>perform a varied repertoire (e.g., American folk songs, world folk songs, popular songs, nursery rhymes, poetry)</li> <li>sing hymns and responses for liturgies</li> <li>match and perform pitches</li> <li>perform rhythm patterns</li> <li>perform simple ostinati in varied metric patterns</li> <li>model basic conducting patterns</li> <li>perform partner songs, canons, rounds, and vocal ostinati</li> <li>perform in two-part and three-part harmony</li> </ul>

Instruments Grades Three through Five		
Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>Performing on instruments enriches and extends experiences and understandings.</li> <li>Musicians change and combine elements of music to produce an effect.</li> <li>Music enhances communication of information, ideas, and feelings.</li> <li>Music portrays and transmits culture.</li> </ul>	<ul style="list-style-type: none"> <li>How does performing on instruments enrich and extend experiences and understandings?</li> <li>What influences musicians when they choose to perform on select instruments?</li> <li>How does working together benefit the production of instrumental ensemble music?</li> <li>How do musicians change the instrumentation and dynamics to serve the music?</li> <li>How does the change and combination of elements of music lead to a desired effect?</li> <li>How are forms of music similar and different?</li> <li>How does performing instrumental music enhance the communication of information, ideas, and feelings?</li> <li>What factors influence a musician's style?</li> <li>How is the music of various cultures similar and different?</li> <li>In what ways does multicultural music impact our knowledge and understanding of history, people, and environments?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>Instrumental pedagogy</li> <li>Speech, chant, body percussion, and pitched and non-pitched percussion repertoire</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>demonstrate competence in setting up, playing, caring for, and putting away instruments</li> <li>model body placement, breath control, and bowing/stick control relating to use of pitched and non-pitched instruments</li> <li>perform in ensembles expressively and accurately, blending timbres, dynamic levels, phrasing, and interpretation while responding correctly to teacher/student conducting cues</li> <li>perform with an increasing range of dynamics, phrasing, and expression</li> <li>analyze ways instruments of various families create sound, ways size of instruments affects pitch, and ways different playing techniques affect sound</li> <li>perform complex accompaniments: speech, chant, body percussion, bordun, rhythmic ostinati, tremolos, and glissandi</li> <li>perform on instruments, in a group/individually, a variety of musical styles, rhythms, and tonal centers</li> <li>perform on a wide assortment of standard, ethnic, and homemade instruments (e.g., xylophones, drums, recorders, PVC pipe, tuned glasses)</li> <li>perform using body percussion and/or instruments in a liturgical setting</li> </ul>

	<ul style="list-style-type: none"> <li>• Meter and rhythmic imitation</li>   <li>• Melodic and harmonic imitation</li> </ul>	<ul style="list-style-type: none"> <li>• perform in instrumental ensembles (e.g., recorder, hand bells, strings, brass, keyboard)</li>   <li>• apply conducting patterns</li> <li>• play ostinato patterns</li> <li>• perform complex rhythms</li>   <li>• echo-sing melodic patterns using pitches with text, letter names, and solfege syllables</li> <li>• play melodic ostinati, canons, and rounds</li> <li>• perform complex pitches</li> <li>• sight-read music for a variety of instruments using limited pitches and rhythms</li> <li>• perform two- to four-part canons/rounds</li> </ul>
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**Improvising and Composing  
Grades Three through Five**

<b>Essential Understandings</b>	<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>• Creating and composing music involves analytical and divergent thinking.</li> <li>• Musicians change, develop, and combine unique elements to create different musical forms.</li> <li>• Independent musical improvisation occurs as a result of ongoing melodic and harmonic exploration and practice.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the musician determine the most appropriate musical form?</li> <li>• What is the difference between imitating given material and creating new material?</li> <li>• How do feedback and self-reflection help in refining music?</li> <li>• How does positive evaluation or critique of music impact the musician’s work?</li> <li>• How do purpose and audience influence choices in music?</li> <li>• How can listening to and watching others generate new ideas?</li> <li>• How does working together benefit the production of music?</li> <li>• How does the musician improvise through exploration of melody?</li> <li>• How does the musician improvise through exploration of harmony?</li> <li>• How does an evaluation process impact the musician’s work?</li> </ul>	
<b>Academic Expectations</b>	<b>Content Guidelines</b>	<b>Performance Standards</b>
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p>	<ul style="list-style-type: none"> <li>• Exploring and improvising</li> <li>• Composing and arranging</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• invent “question” and “answer” phrases of a determined length</li> <li>• improvise both rhythmic and melodic “question” and “answer” phrases</li> <li>• improvise rhythmic and melodic ostinato patterns</li> <li>• create improvisation based on familiar melodies using movement, rhythmic variation, and melodic and/or harmonic embellishment</li> <li>• improvise within given musical guidelines exploring how musical elements create unity and variety</li> <li>• create music to accompany literature/poetry, liturgical readings, folklore, and dramatizations</li> <li>• improvise more complex rhythmic, melodic, and harmonic accompaniments</li> <li>• improvise short melodies using varied styles, meters, and tonalities</li> <li>• compose short songs and instrumental pieces within given musical guidelines (e.g., unison, two-part and three-part harmony)</li> <li>• use a variety of sound sources when composing music (e.g., body percussion, invented instruments)</li> <li>• compose rhythmic/melodic ostinati</li> <li>• arrange simple original pieces for voices or instruments using a variety of forms (canon, round, binary, ternary, and rondo form)</li> <li>• compose within given musical guidelines exploring how musical elements create unity and variety</li> <li>• compose music to accompany literature/poetry, liturgical readings, folklore, and dramatizations</li> <li>• use technology to collect and organize ideas and compose musical pieces (e.g., finale)</li> </ul>

**Reading and Notating Music**  
**Grades Three through Five**

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Musicians make sense of symbols.</li> <li>• Many musicians communicate through a common written language.</li> <li>• Musicians create varied forms.</li> </ul>	<ul style="list-style-type: none"> <li>• How do musicians make sense of individual written symbols?</li> <li>• How do musicians make sense of combinations of written symbols?</li> <li>• How do musicians communicate through a common written language?</li> <li>• Why is music sometimes called the “universal language”?</li> <li>• What might be the limitations of a written musical language?</li> <li>• How are forms of music similar and different?</li> <li>• How does working together benefit the production of music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b>            Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 1.3</b>            Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b>            Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b>            Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p>	<ul style="list-style-type: none"> <li>• Reading and notating music</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• represent musical elements through movement and graphic and standard notation</li> <li>• recognize, read, notate, and correctly perform music using graphic and standard notation</li> <li>• use systems describing how music is similar or different (e.g., verse/refrain, binary, ternary)</li> <li>• recognize duple (2/4 and 4/4), triple (3/4), and compound meters (6/8)</li> <li>• apply and organize rhythm (simple syncopation, dotted quarter note, dotted half note, eighth rest, sixteenth notes, sixteenth rest, triplets )</li> <li>• use a system (i.e. syllables, numbers, or letters) to read simple pitch notation in treble clef with pentatonic, major, minor, ethnic scales</li> <li>• recognize melodic intervals (step, skip, leap, repeat)</li> <li>• perform with additional solfege fa and ti syllables</li> <li>• perform chordal patterns (e.g., bordun, triads, arpeggio, I, IV, V)</li> <li>• illustrate two and three part harmonizations</li> <li>• apply ff, f, mf, mp, pp, crescendo, and decrescendo</li> <li>• apply tempo markings (e.g., allegro, moderato, adagio, largo)</li> <li>• perform articulation markings (e.g., legato, staccato, marcato, accent)</li> <li>• perform expression markings (e.g., animato, cantabile, dolce)</li> <li>• practice reading and notating with technology (e.g., Music Ace Maestro)</li> <li>• sight-read music for a variety of instruments</li> </ul>

## Listening, Analyzing, Describing, and Evaluating Music and Music Performances

### Grades Three through Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Unique elements characterize different musical forms.</li> <li>• Music enhances communication of information, ideas, and feelings.</li> <li>• Musical performances portray and transmit culture.</li> <li>• Evaluating a variety of musical performances promotes deeper understanding of the universality of musical expression.</li> </ul>	<ul style="list-style-type: none"> <li>• How are unique elements characteristic of different musical forms?</li> <li>• How are forms of music similar and different?</li> <li>• How can music increase the effectiveness of communication?</li> <li>• How are feelings and attitudes reflected in music?</li> <li>• How do artists choose and combine art forms to communicate?</li> <li>• How do purpose and audience influence choices in music?</li> <li>• How are new ideas generated by listening to and watching others?</li> <li>• Why do people have diverse responses to music?</li> <li>• What are appropriate audience responses to an art form or presentation?</li> <li>• In what way is an evaluation process most meaningful?</li> <li>• How does constructive feedback and self-reflection help in refining music?</li> <li>• How can listening to and watching others generate new ideas?</li> <li>• How does working together benefit the production of music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.3</b> Students identify and analyze systems and the ways the components work together or affect each other.</p> <p><b>Academic Expectation 2.34</b> Students perform physical movement skills effectively in a variety of settings.</p>	<ul style="list-style-type: none"> <li>• Listening, analyzing, and describing</li> <li>• Evaluating music and music performances</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• respond through movement to musical elements and styles</li> <li>• describe musical styles (e.g., ethnic, band, orchestral, jazz, folk)</li> <li>• use appropriate music terminology to explain meter, rhythm, dynamics, tempi, articulation, tonality, chords, harmonization, and musical performances</li> <li>• identify music forms (e.g., call and response, binary, ternary, rondo, theme, variation)</li> <li>• classify instrumental sounds and human voices</li> <li>• compare and contrast similarities and differences between musical selections and performances</li> <li>• demonstrate similarities/differences between musical instrumentation, elements, and style through written, verbal, and artistic expression</li> <li>• apply rubrics to assess peers and self</li> <li>• evaluate the effectiveness of sets, music, costumes, lighting, and sound in conveying the intended emotion and message</li> </ul>

## Understanding Relationships between Music, Fine Arts, and Other Academic Disciplines

### Grades Three through Five

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Musical study can clarify and illuminate myriad relationships between fine arts and other academic disciplines.</li> <li>• Music is shaped by and influences history and culture.</li> <li>• Musical evolution enriches and deepens understanding of history and culture.</li> </ul>	<ul style="list-style-type: none"> <li>• How does music study help people see a broader viewpoint?</li> <li>• How does music study promote the understanding of relationships between fine arts and other disciplines?</li> <li>• What historical and cultural factors influence a musician's style?</li> <li>• Why do people have diverse responses to music?</li> <li>• How is the music of various cultures similar and different?</li> <li>• How does music affect knowledge and understanding of history, people, and environments?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate ideas with music.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.58</b> Students demonstrate an understanding of the relationship between faith and culture as it is found in the arts, sciences, and technology.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Music and fine arts</li> <li>• Music and other disciplines</li> <li>• Music, culture, and history</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare and contrast the use of terms common to the various fine arts</li> <li>• identify and describe relationships between the study of music and theatre, dance, opera, and visual art</li> <li>• apply music principles to curricular areas (e.g., math: fractions and note values; science: the human hearing process and causes of hearing loss)</li> <li>• perform world songs, speech chants, poems, and rhymes in English and other languages</li> <li>• perform body percussion, hand clap games, jump rope rhymes, circle games, marches, and folk dances from a variety of world cultures</li> <li>• dramatize childhood stories and literature (e.g., Mother Goose, multicultural fables, and fairy tales)</li> <li>• compare and contrast how elements of music are used throughout the world</li> <li>• identify various uses of music within culture (e.g., lullaby, patriotic songs, work songs, religious hymns)</li> <li>• identify the role of musicians within a social structure (e.g., cantor, orchestral conductor, master drummer)</li> <li>• model appropriate audience behavior according to cultural etiquette</li> </ul>

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## Singing Grades Six through Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>Participation involves engaged listening and focused performance skills.</li> <li>Unique elements characterize different vocal styles and interpretations.</li> <li>Music and musical styles enhance communication of information, ideas, and feelings.</li> </ul>	<ul style="list-style-type: none"> <li>How does working together benefit the production of music?</li> <li>How does engaged listening improve the sound of the ensemble?</li> <li>What challenges are presented by the maturing voice?</li> <li>How do the elements of music distinguish distinctive vocal styles?</li> <li>How does changing one or more musical elements make the listener respond differently?</li> <li>How are ideas and emotions expressed in a song?</li> <li>How does the singer communicate information, ideas, and feelings?</li> <li>How does the same song evoke different reactions from different listeners?</li> <li>How does mastery of basic elements impact development of style?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.28</b> Students understand and communicate in a second language.</p>	<ul style="list-style-type: none"> <li>Vocal pedagogy</li> <li>Speech, chant, and song repertoire</li> <li>Solfège syllables</li> <li>Rhythm</li> <li>Meter</li> <li>Vocal harmony</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>participate in vocal warm-up exercises (e.g., breathing, vowels, tone placement, body alignment, diction)</li> <li>produce sound using head voice and chest voice</li> <li>sing with appropriate timbre, unified vowels, diction, and body alignment in groups, small ensembles, and independently</li> <li>respond to increasingly complex conductor cues indicating changes in meter, volume, tempo, and expression simultaneously</li> <li>speak, chant, and sing expressively and accurately</li> <li>sing, individually and in groups, a variety of musical styles, tempi, rhythms, and tonal centers</li> <li>perform a varied repertoire (e.g., American folk songs, world folk songs, popular songs, songs from musical theater, art songs, poetry)</li> <li>sing hymns and responses for liturgies</li> <li>demonstrate leadership in liturgies (e.g., music planner, cantor, choral ensemble/choir singer)</li> <li>sing multi-part choral literature</li> <li>match and perform pitches</li> <li>sight-sing unison or two-part music</li> <li>perform polyrhythmic patterns</li> <li>demonstrate standard counting or syllables</li> <li>perform simple ostinati in varied metric patterns</li> <li>model basic conducting patterns</li> <li>conduct metric patterns of duple and triple meter</li> <li>perform partner songs, canons, rounds, and vocal ostinati</li> <li>perform in multi-part harmony</li> </ul>

## Instruments

### Grades Six through Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>Performing on instruments enriches and extends experiences and understandings.</li> <li>Musicians change and combine elements of music to produce an effect.</li> <li>Music and musical styles enhance communication of information, ideas, and feelings.</li> <li>Music portrays and transmits culture.</li> </ul>	<ul style="list-style-type: none"> <li>How does performing on instruments enrich and extend experiences and understandings?</li> <li>What influences musicians when they choose to perform on select instruments?</li> <li>How does working together benefit the production of instrumental ensemble music?</li> <li>How do musicians change the instrumentation and dynamics to serve the music?</li> <li>How does the change and combination of elements of music lead to a desired effect?</li> <li>How are forms of music similar and different?</li> <li>How does mastery of basic elements impact development of style?</li> <li>How does performing instrumental music enhance the communication of information, ideas, and feelings?</li> <li>What factors influence a musician's style?</li> <li>How is the music of various cultures similar and different?</li> <li>In what ways does multicultural music impact our knowledge and understanding of history, people, and environments?</li> </ul>	
<p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view</p>	<ul style="list-style-type: none"> <li>Instrumental pedagogy</li> <li>Speech, chant, body percussion, and pitched and non-pitched percussion repertoire</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>demonstrate competence in setting up, playing, caring for, and putting away instruments</li> <li>model body placement, breath control, and bowing/stick control relating to use of pitched and non-pitched instruments</li> <li>perform in ensembles expressively and accurately, blending timbres, dynamic levels, phrasing and interpretation while responding correctly to teacher/student conducting cues</li> <li>perform with an extensive range of dynamics, phrasing, expression, and interpretation</li> <li>analyze ways instruments of various families create sound, ways size of instruments affects pitch, and ways different playing techniques affect sound</li> <li>analyze and arrange various families of instruments for varied repertoire</li> <li>perform graded repertoire expressively (e.g., speech, chant, body percussion, bordun, rhythmic ostinati, tremolos, glissandi) while following teacher/student conductor</li> <li>perform on instruments, in a group/individually, a variety of musical style, rhythms, and tonal centers (e.g., recorder, hand bells, strings, brass, keyboard)</li> <li>perform on a wide assortment of standard, ethnic, and homemade instruments (e.g., xylophones, drums, recorders, PVC pipe, tuned glasses)</li> <li>perform using body percussion and/or instruments in a liturgical setting</li> </ul>

	<ul style="list-style-type: none"> <li>• Meter and rhythmic imitation</li>   <li>• Melodic and harmonic imitation</li> </ul>	<ul style="list-style-type: none"> <li>• play ostinato patterns</li> <li>• perform complex rhythms</li> <li>• apply conducting patterns in duple and triple meter</li>   <li>• echo-sing melodic patterns using pitches with text, letter names, and solfege syllables</li> <li>• play melodic ostinati, canons, and rounds</li> <li>• perform complex pitches</li> <li>• sight-read music for a variety of instruments using scales and rhythms</li> <li>• perform two- to four-part canons/rounds</li> <li>• perform simple melodies by ear on a melodic instrument</li> <li>• perform simple accompaniments by ear on a harmonic instrument</li> </ul>
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## Improvising and Composing Grades Six through Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Creating and composing music involves analytical and divergent thinking.</li> <li>• Purpose and audience influence the creation of music.</li> <li>• Musicians manipulate, develop, and combine unique compositional elements to create an effect.</li> <li>• Independent musical improvisation occurs as a result of ongoing melodic and harmonic exploration and practice.</li> <li>• Creating music requires ethical awareness, responsibility, and collaboration.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the musician determine the most appropriate musical form?</li> <li>• How does constructive feedback and self-reflection help in refining music?</li> <li>• How do purpose and audience influence choices in music?</li> <li>• How do life experiences trigger a response to compose?</li> <li>• How do musicians manipulate, develop, and combine unique compositional elements to create an effect?</li> <li>• How can listening to and watching others generate new ideas?</li> <li>• How does working together benefit the production of music?</li> <li>• How does the musician improvise through exploration of melody?</li> <li>• How does the musician improvise through exploration of harmony?</li> <li>• How does an evaluation process impact the musician's work?</li> <li>• How does risk taking lead to development of personal style?</li> <li>• What role do ethics play in selecting ideas for creating musical works?</li> <li>• How does the musician use language and humor responsibly?</li> <li>• What is the difference between imitating given material and creating new material?</li> <li>• How is plagiarism related to responsible choices in music production?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.22</b> Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p>	<ul style="list-style-type: none"> <li>• Exploring and improvising</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• invent "question" and "answer" phrases of a determined length</li> <li>• improvise both rhythmic and melodic "question" and "answer" phrases</li> <li>• improvise rhythmic and melodic ostinato patterns</li> <li>• create improvisation based on familiar melodies using movement, rhythmic variation, and melodic and/or harmonic embellishment</li> <li>• improvise melodic embellishments and simple rhythmic and melodic variations on given pentatonic melodies and melodies in major keys</li> <li>• improvise and explore ways musical elements create unity and variety</li> <li>• create music to accompany literature/poetry, liturgical readings, folklore, and dramatizations</li> <li>• improvise complex rhythmic, melodic, and harmonic accompaniments</li> <li>• improvise short melodies using varied styles, meters, and tonalities</li> </ul>

	<ul style="list-style-type: none"> <li>• Composing and arranging</li> </ul>	<ul style="list-style-type: none"> <li>• compose rhythmic/melodic ostinati</li> <li>• compose short songs and instrumental pieces within given musical guidelines (e.g., unison, two-part and three-part harmony)</li> <li>• use a variety of traditional and nontraditional sound sources when composing and arranging (e.g., body percussion, invented instruments)</li> <li>• arrange simple original pieces for voices or instruments using a variety of forms (canon, round, binary, ternary, and rondo form)</li> <li>• compose within given musical guidelines exploring how musical elements create unity and variety, tension and release</li> <li>• compose music to accompany literature/poetry, liturgical readings, folklore, and dramatizations</li> <li>• use technology to collect and organize ideas and compose musical pieces (e.g., finale)</li> <li>• arrange simple pieces for voices or instruments other than those for which the pieces were written</li> <li>• use technology to collect and organize ideas and compose musical pieces (e.g., finale)</li> </ul>
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**Reading and Notating Music**  
**Grades Six through Eight**

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Musicians apply standard notation symbols.</li> <li>• Many musicians communicate through a common written language.</li> <li>• Musicians create varied forms.</li> </ul>	<ul style="list-style-type: none"> <li>• How do musicians apply standard notation symbols?</li> <li>• How do musicians combine standard notation symbols?</li> <li>• How do musicians communicate through a common written language?</li> <li>• Why is music sometimes called the “universal language”?</li> <li>• What might be the limitations of a written musical language?</li> <li>• How do musicians use symbols and elements to create form and express ideas, moods, and/or feelings?</li> <li>• How are forms of music similar and different?</li> <li>• How does working together benefit the production of music?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b>            Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 1.3</b>            Students make sense of the various things they observe.</p> <p><b>Academic Expectation 2.22</b>            Students create works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b>            Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p>	<ul style="list-style-type: none"> <li>• Reading and notating music</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate musical elements through movement and graphic and standard notation</li> <li>• recognize, read, notate, and correctly perform music using graphic and standard notation</li> <li>• use systems describing how music is similar or different (e.g., call and response, canon, fugue, theme and variation, sonata, twelve-bar blues, jazz)</li> <li>• recognize duple, triple, compound, and mixed meters</li> <li>• apply and organize rhythm (simple syncopation, dotted quarter note, dotted half note, eighth rest, sixteenth notes, sixteenth rest, triplets )</li> <li>• use a system to read standard notation in bass and treble clef (e.g., pentatonic, major, minor, ethnic scales, blues, jazz, whole tone scales)</li> <li>• recognize melodic intervals (step, skip, leap, repeat)</li> <li>• perform I IV V chordal progressions</li> <li>• illustrate multi-part harmonization</li> <li>• apply ff, f, mf, mp, pp, crescendo, and decrescendo</li> <li>• apply tempo markings (e.g., presto, scherzo, allegro, moderato, cantabile, dolce, adagio, largo)</li> <li>• perform articulation markings (e.g., legato, staccato, marcato, accent)</li> <li>• perform expression markings (e.g., animato, cantabile, dolce)</li> <li>• practice reading and notating with technology (e.g., Music Ace Maestro, finale)</li> <li>• sight-read music for a variety of instruments</li> </ul>

## Listening, Analyzing, Describing, and Evaluating Music and Music Performances Grades Six through Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Unique elements characterize different musical forms.</li> <li>• Music enhances communication of information, ideas, and feelings.</li> <li>• Musical performances portray and transmit culture.</li> <li>• Evaluating a variety of musical performances promotes deeper understanding of the universality of musical expression.</li> </ul>	<ul style="list-style-type: none"> <li>• How are unique elements characteristic of different musical forms?</li> <li>• How are forms of music similar and different?</li> <li>• How can music increase the effectiveness of communication?</li> <li>• How are feelings and attitudes reflected in music?</li> <li>• How do artists choose and combine art forms to communicate?</li> <li>• How are consumer choices influenced by music?</li> <li>• How does the musician know if a selection communicates intended ideas or feelings?</li> <li>• How are new ideas generated by listening to and watching others?</li> <li>• Why do people have diverse responses to music?</li> <li>• What are appropriate audience responses to an art form or presentation?</li> <li>• How does consideration of function influence the creation of a musical selection?</li> <li>• How do purpose and audience influence choices in music?</li> <li>• In what way is an evaluation process most meaningful?</li> <li>• How do reflection and evaluation promote personal growth in the arts?</li> <li>• How does constructive feedback and self-reflection help in refining music?</li> <li>• How can listening to and watching others generate new ideas?</li> <li>• How does collaboration with others contribute to the production of musical works?</li> <li>• How does personal experience influence appreciation of music?</li> <li>• What are the criteria for judging how effectively a musical work communicates?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.16</b> Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <p><b>Academic Expectation 2.23</b> Students analyze works of art and make presentations to convey a point of view.</p> <p><b>Academic Expectation 2.24</b> Students have knowledge of major works of art, music, and literature and appreciate creativity and the contributions of the arts and humanities.</p>	<ul style="list-style-type: none"> <li>• Listening, analyzing, and describing music and music performances</li> <li>• Evaluating music and music performances</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• respond through movement to musical elements and styles</li> <li>• describe musical styles (e.g., ethnic, band, orchestral, jazz, folk)</li> <li>• use appropriate music terminology to explain meter, rhythm, dynamics, tempi, articulation, tonality, chords, harmonization, and musical performances</li> <li>• identify music forms (e.g., call and response, canon, fugue, theme and variation, sonata, twelve-bar blues, jazz)</li> <li>• classify instrumentation and human voices (e.g., soprano, alto, tenor, bass)</li> <li>• analyze and demonstrate similarities/differences between musical instrumentation, elements, and style through written, verbal, and artistic expression</li> <li>• apply rubrics to assess peers and self</li> </ul>

<p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.3</b> Students identify and analyze systems and the ways the components work together or affect each other.</p> <p><b>Academic Expectation 2.34</b> Students perform physical movement skills effectively in a variety of settings.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>		<ul style="list-style-type: none"> <li>• use musical terminology, movement, or art to constructively critique performances and compositions</li> <li>• evaluate the effectiveness of sets, music, costumes, lighting, and sound in conveying the intended emotion and message</li> </ul>
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## Understanding Relationships between Music, Fine Arts, and Other Academic Disciplines Grades Six through Eight

Essential Understandings	Guided Questions	
<ul style="list-style-type: none"> <li>• Music forms an integral part of the human experience.</li> <li>• Musical study can clarify and illuminate myriad relationships between fine arts and other academic disciplines.</li> <li>• Music is shaped by and influences history and culture.</li> <li>• Musical evolution enriches and deepens understanding of history and culture.</li> </ul>	<ul style="list-style-type: none"> <li>• How do events, cultures, people, and environments affect development of musical styles?</li> <li>• How does music study help people see a broader viewpoint?</li> <li>• How does music study promote the understanding of relationships between fine arts and other disciplines?</li> <li>• What historical and cultural factors influence a musician's style?</li> <li>• Why do people have diverse responses to music?</li> <li>• How does the use of technology impact a musician's style?</li> <li>• How does music affect knowledge and understanding of history, people, and environments?</li> <li>• Why are there different styles in music?</li> <li>• How does music contribute to an appreciation of and respect for different people and environments?</li> <li>• How does music influence culture and events over time?</li> </ul>	
Academic Expectations	Content Guidelines	Performance Standards
<p><b>Academic Expectation 1.14</b> Students make sense of ideas and communicate ideas with music.</p> <p><b>Academic Expectation 1.15</b> Students make sense of and communicate ideas with movement.</p> <p><b>Academic Expectation 2.25</b> In the products they make and the performances they present, students show that they understand how time, place, and society influence the arts and humanities such as languages, literature, and history.</p> <p><b>Academic Expectation 2.26</b> Through the arts and humanities, students recognize that although people are different, they share some common experiences and attitudes.</p> <p><b>Academic Expectation 2.58</b> Students demonstrate an understanding of the relationship between faith and culture as it is found in the arts, sciences, and technology.</p> <p><b>Academic Expectation 4.5</b> Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.</p>	<ul style="list-style-type: none"> <li>• Music and fine arts</li> <li>• Music and other disciplines</li> <li>• Music, culture, and history</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• compare and contrast the use of terms common to the various fine arts</li> <li>• identify and describe relationships between the study of music and theatre, dance, opera, and visual art</li> <li>• apply music principles to curricular areas (e.g., math: fractions and note values; science: the human hearing process and causes of hearing loss)</li> <li>• perform world songs, speech chants, poems, and rhymes in English and other languages</li> <li>• perform complex movement repertoire (e.g., body percussion, hand clap games, jump rope rhymes, circle games, marches, swing dance, jazz steps, ethnic dances, folk dances from a variety of world cultures)</li> <li>• dramatize stories and literature (e.g., plays, Shakespeare, Scripture)</li> <li>• compare and contrast how elements of music are used throughout the world</li> <li>• identify various uses of music within culture (e.g., lullaby, patriotic songs, work song, religious hymns)</li> <li>• identify the role of musicians within a social structure (e.g., cantor, orchestral conductor, master drummer)</li> <li>• analyze the relationships between historical and social events and music</li> <li>• model appropriate audience behavior according to cultural etiquette</li> </ul>

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# **Physical Education Curriculum Framework**

# PHYSICAL EDUCATION CURRICULUM FRAMEWORK

## Archdiocese of Louisville

### **Philosophy/Rationale**

In the Archdiocese of Louisville, we believe and understand that each person is uniquely created in God's image. Students are called to use their God-given gifts to maintain a healthy mind and body.

Physical education has undergone a transformation in both rigor and focus in recent years. It is recognized as an essential component of a student's overall educational experience. Physical education serves as a foundation for lifelong healthy living by including fitness, nutrition, social behavior and stress management expectations within its curriculum framework.

We recognize that each school devotes time each week to physical education. However, the amount of time varies by school. For that reason, the Archdiocese of Louisville Physical Education Curriculum Framework is designed to outline the healthy living knowledge and skills that are developmentally appropriate.

### **Curriculum Framework**

In 1999, the *Archdiocese of Louisville Physical Education/ Exercise Science Curriculum Guide* was introduced. This curriculum guide replaced the former physical education curriculum guide from 1986. In 2009, this guide was revised and renamed the *Archdiocese of Louisville Physical Education Curriculum Guide*.

SHAPE America published the *National Standards and Grade-Level Outcomes for K-12 Physical Education* in 2013. The document outlines what a students should know and be able to do as a result of a highly effective physical education program. The Archdiocese of Louisville adapted that document when revising the Archdiocese of Louisville Physical Education Curriculum Framework in 2017.

# Content Standards in Physical Education

## Society of Health and Physical Educators - SHAPE America

The five Physical Education Standards outline what can be expected from a physically literate individual.

**STANDARD 1:** The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.

**STANDARD 2:** The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.

**STANDARD 3:** The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

**STANDARD 4:** The physically literate individual exhibits responsible personal and social behavior that respects self and others.

**STANDARD 5:** The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

***Grade-Level Outcomes for K-12 Physical Education*** is used under license from SHAPE America © 2013.

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## Motor Development – Pre-Kindergarten

### Essential Understandings

- Strong motor skills enhance brain development and learning.

#### Content Guidelines

#### Performance Standards

Gross Motor Development

Students will:

- develop large muscle control and coordination
- develop strength, balance, flexibility, and stamina
- develop ability to move in space with coordination
- throw and catch a ball or other object
- kick a ball (stationary and rolling)
- stand on one foot for 5-10 seconds
- hop on one foot
- ascend and descend stairs using alternating feet

Fine Motor Development

- develop small muscle control and coordination
- develop and use eye-hand coordination when performing assorted tasks
- explore and use a variety of tools (e.g., pencil, spoon, crayon, paintbrush, scissors)
- hold pencil, crayon, and paintbrush properly when using them on a variety of surfaces
- hold scissors correctly and use scissors effectively to cut paper (lines and curves)
- trace accurately with a pencil
- draw recognizable shapes, objects, and people

**STANDARD 1: Kindergarten through Grade Two**  
***The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<p><b>S1.E1 Locomotor</b></p> <p><i>Hopping, galloping, running, skipping</i></p>	S1.E1.K Performs locomotor skills (hopping, galloping, running, sliding, skipping) while maintaining balance.	S1.E1.1 Hops, gallops, jogs, and slides.	S1.E1.2 Skips, gallops, and jogs, recognizing the difference between jogging and running.
<p><b>S1.E2 Locomotor</b></p> <p><i>Jogging, running</i></p>	S1.E2.K Runs in a developmentally appropriate manner.	S1.E2.1 Runs in a developmentally appropriate manner.	<p>S1.E2.2a Runs in a developmentally appropriate manner.</p> <p>S1.E2.2b Travels showing differentiation between jogging and sprinting.</p>
<p><b>S1.E3 Locomotor</b></p> <p><i>Jumping and landing, horizontal plane</i></p>	S1.E3.K Performs jumping and landing actions with balance on a horizontal plane.	S1.E3.1 Demonstrates the critical elements for jumping and landing in a horizontal plane using two-foot take-offs and landings.	S1.E3.2 Demonstrates the critical elements for jumping and landing in a horizontal plane using a variety of one- and two-foot take-offs and landings.
<p><b>S1.E4 Locomotor</b></p> <p><i>Jumping and landing, vertical plane</i></p>	S1.E3.K Performs jumping and landing actions with balance on a vertical plane.	S1.E4.1 Demonstrates the critical elements for jumping and landing in a vertical plane.	S1.E4.2 Demonstrates the critical elements for jumping and landing in a vertical plane.
<p><b>S1.E5 Locomotor</b></p> <p><i>Dance</i></p>	S1.E5.K Performs locomotor skills in response to teacher-led creative dance.	S1.E5.1 Combines locomotor and nonlocomotor skills in a teacher-designed dance.	S1.E5.2 Performs a teacher- and/or student-designed rhythmic activity.

<b>STANDARD 1: Kindergarten through Grade Two</b> <i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S1.E6 Locomotor</b>  <i>Combinations</i>	S1.E6.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S1.E6.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S1.E6.2 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>
<b>S1.E7 Nonlocomotor * (stability)</b>  <i>Balance</i>	S1.E7.Ka Maintains momentary stillness on different bases of support.  S1.E7.Kb Forms wide, narrow, curled, and twisted body shapes.	S1.E7.1 Maintains stillness on different bases of support with different body shapes.	S1.E7.2a Balances on different bases of support, combining levels and shapes.  S1.E7.2b Balances in an inverted position* with stillness and supportive base.
<b>S1.E8 Nonlocomotor (stability)</b>  <i>Weight transfer</i>	S1.E8.K Transfers weight from one body part to another.	S1.E8.1 Transfers weight from one body part to another.	S1.E8.2 Transfers weight from feet to different body parts/bases of support for balance.
<b>S1.E9 Nonlocomotor (stability)</b>  <i>Weight transfer, rolling</i>	S1.E9.K Rolls sideways in a narrow body shape.	S1.E9.1 Rolls with either a narrow or curled body shape (e.g., log roll, forward roll).	S1.E9.2 Rolls in different directions with either a narrow or curled body shape (e.g., log roll, forward roll, backward roll).
* <i>Teachers must use developmentally appropriate practice tasks for individual learners when presenting transfers of weight from feet to other body parts.</i>			

<b>STANDARD 1: Kindergarten through Grade Two</b>			
<b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S1.E10 Nonlocomotor (stability)</b>  <i>Curling and stretching, twisting and bending</i>	S1.E10.K Contrasts the actions of curling and stretching.	S1.E10.1 Demonstrates twisting, curling, bending, and stretching actions.	S1.E10.2 Differentiates among twisting, curling, bending, and stretching actions.
<b>S1.E11 Nonlocomotor (stability)</b>  <i>Combinations</i>	S1.E11.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 2.</i>	S1.E11.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 2.</i>	S1.E11.2 Combines balances and transfers into a sequence.
<b>S1.E12 Nonlocomotor (stability)</b>  <i>Balance and weight transfers</i>	S1.E12.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S1.E12.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S1.E12.2 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>
<b>S1.E13 Manipulative</b>  <i>Underhand throw</i>	S1.E13.K Throws underhand with opposite foot forward.	S1.E13.1 Throws underhand demonstrating a developmentally appropriate manner.	S1.E13.2 Throws underhand demonstrating a developmentally appropriate manner.
<b>S1.E14 Manipulative</b>  <i>Overhand throw</i>	S1.E14.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 2.</i>	S1.E14.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 2.</i>	S1.E14.2 Throws overhand in a developmentally appropriate manner.
<b>S1.E15 Manipulative</b>  <i>Passing with hands</i>	S1.E15.K Throws to a target with reasonable accuracy.	S1.E15.1 Throws to a target with reasonable accuracy.	S1.E15.2 Throws to a target or partner with reasonable accuracy.

<b>STANDARD 1: Kindergarten through Grade Two</b> <i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S1.E16 Manipulative</b>  <i>Catching</i>	S1.E16.Ka Drops a ball and catches it before it bounces twice.  S1.E16.Kb Catches a large ball tossed by a skilled thrower.	S1.E16.1a Catches a soft object from a self-toss before it bounces.  S1.E16.1b Catches various sizes of balls, self-tossed or tossed by a skilled thrower.	S1.E16.2 Catches a self-tossed or well-thrown large ball with hands, not trapping or cradling against the body.
<b>S1.E17 Manipulative</b>  <i>Dribbling and/or ball control with hands</i>	S1.E17.K Dribbles a ball with one hand, attempting the second contact.	S1.E17.1 Dribbles continuously in self-space using the preferred hand.	S1.E17.2a Dribbles in self-space with preferred hand.  S1.E17.2b Dribbles using the preferred hand while walking in general space.
<b>S1.E18 Manipulative</b>  <i>Dribbling/ball control with feet</i>	S1.E18.K Taps a ball using the inside of the foot, sending it forward.	S1.E18.1 Dribbles a ball using the inside of the foot while moving in general space.	S1.E18.2 Dribbles with the feet in general space with control of ball and body.
<b>S1.E19 Manipulative</b>  <i>Passing and receiving with feet</i>	S1.E19.K Receives and traps a ball before returning the pass.	S1.E19.1 Receives and traps a ball before returning the pass.	S1.E19.2 Passes and receives a ball with the insides of the feet to a stationary partner, "giving" on reception before returning the pass.
<b>S1.E20 Manipulative</b>  <i>Dribbling in combination</i>	S1.E20.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E20.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E20.2 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>

<b>STANDARD 1: Kindergarten through Grade Two</b> <i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S1.E21 Manipulative</b>  <i>Kicking</i>	S1.E21.K Kicks a stationary ball from a stationary position.	S1.E21.1 Approaches a stationary ball and kicks it forward.	S1.E21.2 Uses a continuous running approach and kicks a moving ball.
<b>S1.E22 Manipulative</b>  <i>Volley, underhand</i>	S1.E22.K Volleys a lightweight object, sending it upward.	S1.E22.1 Volleys an object with an open palm, sending it upward.	S1.E22.2 Volleys an object upward with consecutive hits.
<b>S1.E23 Manipulative</b>  <i>Volley, overhead</i>	S1.E23.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E23.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E23.2 Volleys a lightweight, developmentally appropriate object (balloon, beach ball) using a two-hand overhead pattern, sending it upward to a target.
<b>S1.E24 Manipulative</b>  <i>Striking, short-handled implement</i>	S1.E24.K Strikes a lightweight object with a paddle or short-handled racket.	S1.E24.1 Strikes a ball with a short-handled implement, sending it upward.	S1.E24.2 Strikes an object upward with a short-handled implement, using consecutive hits.
<b>S1.E25 Manipulative</b>  <i>Striking, long-handled implement</i>	S1.E25.K Strikes an object off a tee or cone (e.g., balloon and pool noodle) using correct grip and side orientation/proper body orientation.	S1.E25.1 Strikes an object off a tee or cone (e.g., balloon and pool noodle) using correct grip and side orientation/proper body orientation.	S1.E25.2 Strikes a soft or lightweight ball off a tee or cone with a bat, using correct grip and side orientation/proper body orientation.
<b>S1.E26 Manipulative</b>  <i>In combination with locomotor</i>	S1.E26.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E26.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>	S1.E26.2 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 4.</i>

<b>STANDARD 1: Kindergarten through Grade Two</b> <b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S1.E27</b> <b>Manipulative</b>  <i>Jumping rope</i>	S1.E27.Ka Executes a single jump with a self-turned rope.  S1.E27.Kb Jumps a long rope with teacher-assisted spinning (e.g., helicopter).	S1.E27.1a Jumps forward consecutively using a self-turned rope.  S1.E27.1b Jumps a long rope consecutively with teacher-assisted turning.	S1.E27.2a Jumps a self-turned rope consecutively forward and backward.  S1.E27.2b Jumps a long rope consecutively with student turners.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* We are all called to use our gifts and talents in a variety of ways.</li> <li>* We are each blessed with varying strengths and abilities.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Competence in movement skills enhances active lifestyles.</li> </ul>		<ul style="list-style-type: none"> <li>* How are basic motor skills linked to perform simple movement sequences?</li> <li>* How are basic motor skills used in games, sports, and activities?</li> </ul>	

<b>STANDARD 2: Kindergarten through Grade Two</b>			
<b><i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i></b>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S2.E1</b> <b>Movement concepts</b>  <i>Space</i>	S2.E1.Ka Differentiates between movement in self-space and general space.  S2.E1.Kb Moves in personal space to a rhythm.	S2.E1.1 Moves in self-space and general space in response to designated beats or rhythms.	S2.E1.2 Combines locomotor skills in general space to a rhythm.
<b>S2.E2</b> <b>Movement concepts</b>  <i>Pathways, shapes, levels</i>	S2.E2.K Travels in three different pathways (e.g., forward, backward, sideways).	S2.E2.1a Travels demonstrating low, middle, and high levels.  S2.E2.1b Travels demonstrating a variety of relationships with objects (e.g., over, under, around, through).	S2.E2.2 Combines shapes, levels, and pathways into simple travel sequences. (2)
<b>S2.E3</b> <b>Movement concepts</b>  <i>Speed, direction, force</i>	S2.E3.K Travels in general space with different speeds.	S2.E3.1a Differentiates between fast and slow speeds.  S2.E3.1b Differentiates between strong and light force.	S2.E3.2 Varies time and force with gradual increases and decreases.
<b>S2.E4</b> <b>Movement concepts</b>  <i>Alignment and muscular tension</i>	S2.E4.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S2.E4.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S2.E4.2 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>
<b>S2.E5</b> <b>Movement concepts</b>  <i>Strategies and tactics</i>	S2.E5.Ka Applies simple strategies and tactics in chasing activities.  S2.E5.Kb Applies simple strategies and tactics in fleeing activities.	S2.E5.1a Applies simple strategies and tactics in chasing activities.  S2.E5.1b Applies simple strategies and tactics in fleeing activities.	S2.E5.2a Applies simple strategies and tactics in chasing activities.  S2.E5.2b Applies simple strategies and tactics in fleeing activities.

## Catholic Identity Connections

- \* The natural abilities we have been given by God are improved through practice.
- \* God has given us the ability to consider strategies that help us to improve our performance.

### Essential Understandings

- \* Understanding of movement concepts influences activity.
- \* Practice increases competency over time.

### Guided Questions

- \* How does an understanding of movement impact daily activity?
- \* Why are basic sport skills important?

**STANDARD 3: Kindergarten through Grade Two**

***The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.***

	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S3.E1 Physical activity knowledge</b>	S3.E1.K Identifies active-play opportunities outside physical education class (e.g., before and after school, at home, at the park, with friends, with the family).	S3.E1.1 Discusses the benefits of being active and exercising and/or playing (e.g., before and after school, at home, at the park, with friends, with the family).	S3.E1.2 Describes large-motor and/or manipulative physical activities for participation outside physical education class (e.g., before and after school, at home, at the park, with friends, with the family).
<b>S3.E2 Engages in physical activity</b>	S3.E2.K Participates actively in physical education class.	S3.E2.1 Engages actively in physical education class.	S3.E2.2 Engages actively in physical education class in response to instruction and practice.
<b>S3.E3 Fitness knowledge</b>	S3.E3.K Recognizes that when you move fast, your heart beats faster and you breathe faster. (3)	S3.E3.1 Identifies the heart as a muscle that grows stronger with exercise, play, and physical activity.	S3.E3.2a Uses own body as resistance for developing strength. (4)  S3.E3.2b Identifies physical activities that contribute to fitness.
<b>S3.E4 Fitness knowledge</b>	S3.E4.K <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S3.E4.1 <i>Developmentally appropriate/ emerging outcomes first appear in Grade 3.</i>	S3.E4.2 Recognizes the importance of warm-up and cool-down relative to physical activity.
<b>S3.E5 Assessment and program planning</b>	S1.E5.K Performs locomotor skills.	S1.E5.1 Combines locomotor and nonlocomoter skills.	S1.E5.2 Performs a teacher- and/or student-designed rhythmic activity with correct response to simple rhythms.
<b>S3.E6 Nutrition</b>	S3.E6.K Recognizes that food provides energy for physical activity.	S3.E6.1 Differentiates between healthy and unhealthy foods.	S3.E6.2 Recognizes the "good health balance" of good nutrition with physical activity.

## Catholic Identity Connections

- \* We are called to care for our bodies by making good choices.
- \* God has given us the wisdom to make choices that promote our physical well-being.

### Essential Understandings

- \* Physical fitness improves a sense of well-being.
- \* Healthy choices promote wellness.

### Guided Questions

- \* How does the body change during and after physical activity?
- \* Why is fitness important?
- \* How does physical activity help us to feel good about ourselves?
- \* How do food choices affect the body?

<b>STANDARD 4: Kindergarten through Grade Two</b>			
<b><i>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</i></b>			
	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S4.E1 Personal responsibility</b>	S4.E1.K Follows directions in group settings (e.g., safe behaviors, following rules, taking turns).	S4.E1.1 Accepts personal responsibility by using equipment and space appropriately.	S4.E1.2 Practices skills with minimal teacher prompting.
<b>S4.E2 Personal responsibility</b>	S4.E2.K Acknowledges responsibility for behavior.	S4.E2.1 Follows the rules and parameters of the learning environment.	S4.E2.2 Accepts responsibility for class protocols with behavior and performance actions.
<b>S4.E3 Accepting feedback</b>	S4.E3.K Follows instruction and directions.	S4.E3.1 Responds appropriately to general feedback from the teacher.	S4.E3.2 Accepts specific corrective feedback from the teacher.
<b>S4.E4 Working with others</b>	S4.E4.K Shares equipment and space with others.	S4.E4.1 Works independently with others in a variety of class environments (e.g., small and large groups).	S1.E4.2 Works independently with others in partner environments.
<b>S4.E5 Rules and etiquette</b>	S4.E5.K Recognizes the established protocol for class activities.	S4.E5.1 Exhibits the established protocols for class activities.	S4.E5.2 Recognizes the role of rules and etiquette in teacher-designed physical activities.
<b>S4.E6 Safety</b>	S4.E6.K Follows teacher directions for safe participation and proper use of equipment with minimal reminders.	S4.E6.1 Follows teacher directions for safe participation and proper use of equipment without teacher reminders.	S4.E6.2a Works independently and safely in physical education.  S4.E6.2b Works safely with physical education equipment.

## Catholic Identity Connections

- \* We are each called to show respect for ourselves and others.
- \* It is essential that we work cooperatively when engaged in group activities.
- \* We show our care for others when we follow the rules of safety.

### Essential Understandings

- \* Respect for self and others is an important component of sportsmanship.
- \* Safe practices protect ourselves and others from being hurt.

### Guided Questions

- \* How can people work and play together successfully?
- \* Why is good sportsmanship important?
- \* Why is safety important in a physical education class?

**STANDARD 5: Kindergarten through Grade Two**  
***The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.***

	<b>Kindergarten</b>	<b>Grade One</b>	<b>Grade Two</b>
<b>S5.E1 Health</b>	S5.E1.K Recognizes that physical activity is important for good health.	S5.E1.1 Identifies physical activity as a component of good health.	S5.E1.2 Recognizes the value of "good health" balance.
<b>S5.E2 Challenge</b>	S5.E2.K Acknowledges that some physical activities are challenging/difficult.	S5.E2.1 Recognizes the importance of challenge in physical activities.	S5.E2.2 Participates willingly in physical activity that presents a challenge.
<b>S5.E3 Self-expression and enjoyment</b>	S5.E3.Ka Identifies physical activities that are enjoyable. (7)  S5.E3.Kb Discusses personal reasons (e.g., the "why") for enjoying physical activities.	S5.E3.1 Identifies physical activities that provide self-expression.	S4.E3.2 Accepts and implements specific corrective feedback from the teacher.
<b>S5.E4 Social interaction</b>	S5.E4.K Engages in positive social interactions with others in physical activity.	S5.E4.1 Engages in positive social interactions with others in physical activity.	S5.E4.2 Engages in positive social interactions with others in physical activity.

**Catholic Identity Connections**

- \* Our health, nutrition, and physical activity choices demonstrate our appreciation for the body God has given us.
- \* We each have a responsibility to treat others kindly and with consideration.

<b>Essential Understandings</b>	<b>Guided Questions</b>
<ul style="list-style-type: none"> <li>* Healthy choices promote wellness.</li> <li>* Physical activity can lead to enjoyment and a sense of well-being.</li> </ul>	<ul style="list-style-type: none"> <li>* What is wellness?</li> <li>* Why is physical activity important to being healthy?</li> <li>* How do healthy behaviors increase wellness?</li> <li>* Why are certain activities enjoyable to one person and not to another?</li> </ul>

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<b>STANDARD 1: Grade Three through Five</b>			
<b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S1.E1 Locomotor</b>  <i>Hopping, galloping, running, skipping, leaping</i>	S1.E1.3 Recognizes the difference between jogging and running.	S1.E1.4 Uses various locomotor skills.	S1.E1.5a Demonstrates patterns of locomotor skills in dynamic practice tasks.  S1.E1.5b Combines locomotor and manipulative skills in a variety of practice tasks/games environments.  S1.E1.5c Combines traveling with manipulative skills for execution to a target (e.g., scoring in soccer, hockey, and basketball).
<b>S1.E2 Locomotor</b>  <i>Jogging, running</i>	S1.E2.3 Uses appropriate pacing for a variety of running distances.	S1.E2.4 Uses appropriate pacing for a variety of running distances.	S1.E2.5 Uses appropriate pacing for a variety of running distances.
<b>S1.E3 Locomotor</b>  <i>Jumping and landing, horizontal plane</i>	S1.E3.3 Jumps and lands in the horizontal plane in a developmentally appropriate manner.	S1.E3.4 Uses spring-and-step take-offs and landings.	S1.E3.5 Combines jumping and landing patterns with locomotor and manipulative skills.
<b>S1.E4 Locomotor</b>  <i>Jumping and landing, vertical plane</i>	S1.E4.3 Jumps and lands in the vertical plane in a developmentally appropriate manner.	S1.E4.4 Uses spring-and-step take-offs and landings.	S1.E4.5 Combines jumping and landing patterns with locomotor and manipulative skills.

**STANDARD 1: Grade Three through Five**  
***The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S1.E5</b> <b>Locomotor</b>  <i>Dance</i>	S1.E5.3 Performs teacher-selected and developmentally appropriate dance steps and movement patterns.	S1.E5.4 Combines locomotor movement patterns and dance steps to create and perform an original dance.	S1.E5.5 Combines locomotor skills in cultural as well as creative dances (self and group) with correct rhythm and pattern.
<b>S1.E6</b> <b>Locomotor</b>  <i>Combinations</i>	S1.E6.3 Performs a sequence of locomotor skills, transitioning from one skill to another smoothly and without hesitation.	S1.E6.4 Combines traveling with manipulative skills of dribbling, throwing, catching, and striking in teacher- and/or lead-up practice tasks.	S1.E6.5 Combines traveling with manipulative skills of dribbling, throwing, catching, and striking in teacher- and/or lead-up practice tasks in a developmentally appropriate manner.
<b>S1.E7</b> <b>Nonlocomotor *</b> <b>(stability)</b>  <i>Balance</i>	S1.E7.3 Balances on different bases of support, demonstrating muscular tension and extensions of free body parts.	S1.E7.4 Balances on different bases of support on apparatus, demonstrating levels and shapes.	S1.E7.5 Balances on different bases of support on apparatus, demonstrating levels and shapes.
<b>S1.E8</b> <b>Nonlocomotor</b> <b>(stability)</b>  <i>Weight transfer</i>	S1.E8.3 Transfers weight from feet to hands for momentary weight support.	S1.E8.4 Transfers weight from feet to hands, varying speed and using large extensions (e.g., mule kick, handstand, cartwheel).	S1.E8.5 Transfers weight from feet to hands, varying speed and using large extensions (e.g., mule kick, handstand, cartwheel).
<b>S1.E9</b> <b>Nonlocomotor</b> <b>(stability)</b>  <i>Weight transfer, rolling</i>	S1.E9.3 Rolls in different directions with either a narrow or curled body shape (e.g., log roll, forward roll, backward roll).	S1.E9.4 Rolls in different directions with either a narrow or curled body shape (e.g., log roll, forward roll, backward roll, cartwheel).	S1.E9.5 Rolls in different directions with either a narrow or curled body shape (e.g., log roll, forward roll, backward roll, cartwheel, roundoff).
<p><i>* Teachers must use developmentally appropriate practice tasks for individual learners when presenting transfers from feet to other body parts.</i></p>			

**STANDARD 1: Grade Three through Five**

***The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<p><b>S1.E10 Nonlocomotor (stability)</b></p> <p><i>Curling and stretching, twisting and bending</i></p>	S1.E10.3 Moves into and out of balances with curling, twisting, and stretching actions.	S1.E10.4 Moves into and out of balances on apparatus with curling, twisting, and stretching actions.	S1.E10.5 Performs curling, twisting, and stretching actions with correct application.
<p><b>S1.E11 Nonlocomotor (stability)</b></p> <p><i>Combinations</i></p>	S1.E11.3 Combines locomotor skills and movement concepts (levels, shapes, extensions, pathways, force, time, flow).	S1.E11.4 Combines locomotor skills and movement concepts with a partner (levels, shapes, extensions, pathways, force, time, flow).	S1.E11.5 Combines locomotor skills and movement concepts with a group (levels, shapes, extensions, pathways, force, time, flow).
<p><b>S1.E12 Nonlocomotor (stability)</b></p> <p><i>Balance and weight transfers</i></p>	S1.E12.3 Combines balance and weight transfers with movement concepts to create and perform a dance.	S1.E12.4 Combines traveling with balance and weight transfers to create a gymnastics sequence with and without equipment or apparatus.	S1.E12.5 Combines actions, balances, and weight transfers to create a gymnastics sequence with a partner on equipment or apparatus.
<p><b>S1.E13 Manipulative</b></p> <p><i>Underhand throw</i></p>	S1.E13.3 Throws underhand to a partner or target with reasonable accuracy.	S1.E13.4 Throws underhand to a partner or target with reasonable accuracy.	S1.E13.5a Throws underhand with different sizes and types of objects.  S1.E13.5b Throws underhand to a target with accuracy.
<p><b>S1.E14 Manipulative</b></p> <p><i>Overhand throw</i></p>	S1.E14.3 Throws overhand for distance and force in a developmentally appropriate manner.	S1.E14.4 Throws overhand to a partner or at a target with accuracy at a reasonable distance.	S1.E14.5a Throws overhand with different sizes and types of objects.  S1.E14.5b Throws overhand to a target with accuracy.

**STANDARD 1: Grade Three through Five**  
***The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<p><b>S1.E15</b>  <b>Manipulative</b></p> <p><i>Passing with hands</i></p>	S1.E15.3 Throws to a partner with reasonable accuracy.	S1.E15.4 Throws to a moving partner with reasonable accuracy.	S1.E15.5 Throws with accuracy, both partners moving.
<p><b>S1.E16</b>  <b>Manipulative</b></p> <p><i>Catching</i></p>	S1.E16.3 Catches a gently tossed small-sized ball from a partner.	S1.E16.4 Catches a thrown ball above the head, at chest or waist level, and below the waist.	<p>S1.E16.5a Catches a batted ball above the head, at chest or waist level, and along the ground.</p> <p>S1.E16.5b Catches with accuracy, both partners moving.</p>
<p><b>S1.E17</b>  <b>Manipulative</b></p> <p><i>Dribbling and/or ball control with hands</i></p>	S1.E17.3 Dribbles in self-space with both the preferred and the nonpreferred hand.	<p>S1.E17.4a Dribbles in self-space with both the preferred and the nonpreferred hand.</p> <p>S1.E17.4b Dribbles in general space with control of ball and body while increasing and decreasing speed.</p>	S1.E17.5 Combines hand dribbling with other skills (e.g., around a stationary object, with a defender) at different levels.
<p><b>S1.E18</b>  <b>Manipulative</b></p> <p><i>Dribbling/ball control with feet</i></p>	S1.E18.3 Dribbles with the feet in general space at slow to moderate jogging speed with control of ball and body.	S1.E18.4 Dribbles with the feet in general space with control of ball and body while increasing and decreasing speed and changing direction.	S1.E18.5 Combines foot dribbling with other skills (e.g., around a stationary object, with a defender) at different levels.

<b>STANDARD 1: Grade Three through Five</b>			
<b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<p><b>S1.E19</b> <b>Manipulative</b></p> <p><i>Passing and receiving with feet</i></p>	<p>S1.E19.3 Passes and receives a ball with the insides of the feet to a stationary partner, "giving" on reception before returning the pass.</p>	<p>S1.E19.4a Passes and receives a ball with the insides of the feet to a moving partner.</p> <p>S1.E19.4b Passes and receives a ball with the outsides and insides of the feet to a stationary partner, "giving" on reception before returning the pass.</p>	<p>S1.E19.5a Passes with the feet as both partners travel.</p> <p>S1.E19.5b Receives a pass with the foot as both partners travel.</p>
<p><b>S1.E20</b> <b>Manipulative</b></p> <p><i>Dribbling in combination</i></p>	<p>S1.E20.3 Dribbles with hands or feet in combination with other skills (e.g., passing, receiving, shooting).</p>	<p>S1.E20.4 Dribbles with hands or feet in combination with other skills (e.g., passing, receiving, shooting).</p>	<p>S1.E20.5 Dribbles with hands or feet in a variety of sport related activities.</p>
<p><b>S1.E21</b> <b>Manipulative</b></p> <p><i>Kicking</i></p>	<p>S1.E21.3a Uses a continuous running approach and intentionally performs a kick along the ground and a kick in the air.</p> <p>S1.E21.3b Uses a continuous running approach and kicks a stationary ball for accuracy.</p>	<p>S1.E21.4 Kicks along the ground and in the air and punts.</p>	<p>S1.E21.5 Demonstrates mature patterns in kicking and punting in sport-related activities.</p>
<p><b>S1.E22</b> <b>Manipulative</b></p> <p><i>Volley, underhand</i></p>	<p>S1.E22.3 Volleys an object with an underhand or sidearm striking pattern, sending it forward over a net, to the wall, or over a line to a partner.</p>	<p>S1.E22.4 Volleys underhand in a dynamic environment (e.g., two square, four square, handball).</p>	<p>S1.E22.5 Volleys underhand in a dynamic environment (e.g., volleyball, handball).</p>

<b>STANDARD 1: Grade Three through Five</b>			
<b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S1.E23</b> <b>Manipulative</b>  <i>Volley, overhead</i>	S1.E23.3 Volleys a ball with a two-hand overhead pattern, sending it upward.	S1.E23.4 Volleys a ball with a two-hand overhead pattern, sending it upward.	S1.E23.5 Volleys a ball using a two-hand overhead pattern, sending it upward to a target.
<b>S1.E24</b> <b>Manipulative</b>  <i>Striking, short-handled implement</i>	S1.E24.3 Strikes an object with a short-handled implement, sending it forward over a low net or to a wall.	S1.E24.4 Strikes an object with a short-handled implement, alternating hits with a partner over a low net or against a wall.	S1.E24.5 Strikes an object consecutively, with a partner, using a short-handled implement, over a net or against a wall, in either a competitive or cooperative game environment.
<b>S1.E25</b> <b>Manipulative</b>  <i>Striking, long-handled implement</i>	S1.E25.3 Strikes a ball with a long-handled implement, sending it forward, while using proper grip for the implement.	S1.E25.4 Strikes an object with a long-handled implement demonstrating proper grip, stance, body orientation, swing, plant, and follow-through.	S1.E25.5a Strikes a pitched ball with a bat.  S1.E25.5b Combines striking with a long-handled implement with receiving and traveling skills in a sport related activity.
<b>S1.E26</b> <b>Manipulative</b>  <i>In combination with locomotor</i>	S1.E26.3 Combines traveling with the manipulative skills of dribbling, throwing, catching, and striking.	S1.E26.4 Combines traveling with the manipulative skills of dribbling, throwing, catching, and striking.	S1.E26.5 Combines manipulative skills and traveling for execution to a target (e.g., scoring in soccer, hockey, and basketball).

<b>STANDARD 1: Grade Three through Five</b> <b><i>The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S1.E27</b> <b>Manipulative</b>  <i>Jumping rope</i>	S1.E27.3 Performs intermediate jump-rope skills (e.g., a variety of tricks, running in and out of long rope) for both long and short ropes.	S1.E27.4 Creates a jump-rope routine with either a short or long rope.	S1.E27.5 Creates a jump-rope routine with a partner, using either a short or long rope.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* We are all called to use our gifts and talents as a sign of our appreciation.</li> <li>* We are each blessed with varying strengths and abilities.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Competence in movement skills enhances active lifestyles.</li> <li>* Physical fitness improves well-being.</li> <li>* Practice increases competency.</li> </ul>		<ul style="list-style-type: none"> <li>* How are basic motor skills performed in creative and efficient ways?</li> <li>* How are basic motor skills linked to perform simple movement sequences?</li> <li>* How are the concepts of space, time, and energy used in movement?</li> <li>* How is physical fitness related to our sense of well-being?</li> <li>* Why is the practice of sport-related skills important?</li> </ul>	

<b>STANDARD 2: Grade Three through Five</b> <i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S2.E1</b> <b>Movement concepts</b>  <i>Space</i>	S2.E1.3 Combines locomotor skills in general space to a rhythm.	S2.E1.4a Applies the concept of open spaces to combination skills involving traveling (e.g., dribbling and moving).  S2.E1.4b Applies the concept of closing spaces in lead-up practice tasks.  S2.E1.4c Dribbles in general space with changes in direction and speed.	S2.E1.5 Combines spatial concepts with locomotor and nonlocomotor movements in small groups.
<b>S2.E2</b> <b>Movement concepts</b>  <i>Pathways, shapes, levels</i>	S2.E2.3 Combines movement concepts with skills.	S2.E2.4 Combines movement concepts with skills.	S2.E2.5 Combines movement concepts with skills with self-direction.
<b>S2.E3</b> <b>Movement concepts</b>  <i>Speed, direction, force</i>	S2.E3.3 Combines movement concepts (direction, levels, force, time) with skills.	S2.E3.4a Applies the movement concepts of speed, endurance, and pacing for running.  S2.E3.4b Applies the concepts of direction and force when striking an object with a short-handled implement, sending it toward a designated target.	S2.E3.5a Applies movement concepts to strategy in game situations.  S2.E3.5b Applies the concepts of direction and force to strike an object with a long-handled implement.  S2.E3.5c Analyzes movement situations and applies movement concepts (e.g., force, direction, speed, pathways, extensions).

<b>STANDARD 2: Grade Three through Five</b> <i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i>			
	Grade Three	Grade Four	Grade Five
<b>S2.E4</b> <b>Movement concepts</b>  <i>Alignment and muscular tension</i>	S2.E4.3 Employs the concept of alignment and muscular tension with balance.	S2.E4.4 Employs the concept of alignment and muscular tension with balance.	S2.E4.5 Employs the concept of alignment and muscular tension with balance.
<b>S2.E5</b> <b>Movement concepts</b>  <i>Strategies and tactics</i>	S2.E5.3a Applies simple strategies and tactics in chasing activities.  S2.E5.3b Applies simple strategies in fleeing activities.  S2.E5.3c Recognizes the types of skills needed for different games and sports situations.	S2.E5.4a Applies simple offensive strategies and tactics in chasing and fleeing activities.  S2.E5.4b Applies simple defensive strategies and tactics in chasing and fleeing activities.  S2.E5.4c Recognizes the types of skills needed for different games and sports situations.	S2.E5.5a Applies basic offensive and defensive strategies and tactics in invasion games.  S2.E5.5b Applies basic offensive and defensive strategies.  S2.E5.5c Recognizes the type of throw, volley, or striking action needed for different games and sports situations.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* God has given us the ability to apply our knowledge to our actions.</li> <li>* We each have a responsibility to make good use of our talents to our daily lives.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Actions can be changed based on reflection of best choices.</li> </ul>		<ul style="list-style-type: none"> <li>* Why are decisions an essential part of movement activities?</li> <li>* How do our choices impact our ability to collaborate with others for mutual enjoyment and learning?</li> </ul>	

<b>STANDARD 3: Grade Three through Five</b> <i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S3.E1</b> <b>Physical activity knowledge</b>	S3.E1.3 Identifies physical activity as a way to become healthier.	S3.E1.4 Analyzes physical activity outside physical education class for fitness benefits of activities.	S3.E1.5 Analyzes physical activity outside physical education class for fitness benefits of activities.
<b>S3.E2</b> <b>Engages in physical activity</b>	S3.E2.3 Engages actively in all of the activities of physical education.	S3.E2.4 Engages actively in all of the activities of physical education.	S3.E2.5 Engages actively in all of the activities of physical education.
<b>S3.E3</b> <b>Fitness knowledge</b>	S3.E3.3 Describes the concept of fitness and provides examples of physical activity to enhance fitness.	S3.E3.4 Identifies components of health-related fitness.	S3.E3.5 Differentiates between skill-related and health-related fitness.
<b>S3.E4</b> <b>Fitness knowledge</b>	S3.E4.3 Recognizes the importance of warm-up and cool-down relative to vigorous physical activity.	S3.E4.4 Identifies the need for warm-up and cool-down relative to various physical activities.	S3.E4.5 Identifies the need for warm-up and cool-down relative to various physical activities.
<b>S3.E5</b> <b>Assessment and program planning</b>	S3.E5.3 Demonstrates, with teacher direction, the fitness components.	S3.E5.4a Completes fitness assessments (pre and post).  S1.E5.4b Identifies areas of needed remediation from fitness assessments and, with teacher assistance, identifies strategies for progress in those areas.	S1.E5.5 Analyzes results of fitness assessment (pre and post), comparing results to fitness components for good health.

<p align="center"><b>STANDARD 3: Grade Three through Five</b></p> <p align="center"><i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i></p>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S3.E6 Nutrition</b>	S3.E6.3 Discusses the importance of hydration and hydration choices relative to physical activities.	S3.E6.4 Identifies foods that are beneficial for before and after physical activity.	S3.E6.5 Analyzes the impact of food choices relative to physical activity, youth sports, and personal health.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* We each have a responsibility to take care of our bodies through healthy choices and physical activity.</li> <li>* We have been given the wisdom to consider our actions and make adjustments.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Physical fitness improves well-being.</li> <li>* Physical fitness contributes to lifelong wellness.</li> </ul>		<ul style="list-style-type: none"> <li>* Why is it important to warm up and cool down in connection to physical activity?</li> <li>* How do specific activities relate to fitness?</li> <li>* How are personal fitness goals set?</li> <li>* How are strength, endurance, and flexibility increased?</li> </ul>	

<b>STANDARD 4: Grade Three through Five</b>			
<b><i>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S4.E1</b> <b>Personal responsibility</b>	S4.E1.3 Exhibits personal responsibility in teacher-directed activities.	S4.E1.4 Exhibits responsible behavior in independent group situations.	S4.E1.5 Engages in physical activity with responsible interpersonal behavior (e.g., peer to peer, student to teacher, student to referee).
<b>S4.E2</b> <b>Personal responsibility</b>	S4.E2.3 Accepts responsibility for class protocols with behavior and performance actions.	S4.E2.4 Reflects on personal social behavior in physical activity.	S4.E2.5a Participates with responsible personal behavior in a variety of physical activity contexts, environments, and facilities.  S4.E2.5b Exhibits respect for self with appropriate behavior while engaging in physical activity.
<b>S4.E3</b> <b>Accepting feedback</b>	S4.E3.3 Accepts and implements specific corrective feedback from the teacher.	S4.E3.4 Listens respectfully to corrective feedback from others (e.g., peers, adults).	S4.E3.5 Gives corrective feedback respectfully to peers.
<b>S4.E4</b> <b>Working with others</b>	S4.E4.3a Works cooperatively with others.  S4.E4.3b Praises others for their success.	S4.E4.4a Praises the performance of others both more skilled and less skilled.  S4.E4.4b Accepts players of all skill levels into the physical activity.	S1.E4.5 Accepts, recognizes, and actively involves others with both higher and lower skill abilities into physical activities and group projects.
<b>S4.E5</b> <b>Rules and etiquette</b>	S4.E5.3 Recognizes the role of rules and etiquette in physical activity with peers.	S4.E5.4 Exhibits etiquette and adherence to rules in a variety of physical activities.	S4.E5.5 Exhibits the etiquette involved in rules of various game activities.

<b>STANDARD 4: Grade Three through Five</b>			
<b><i>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S4.E6 Safety</b>	S4.E6.3 Works independently and safely in physical activity settings.	S4.E6.4 Works safely with peers and equipment in physical activity settings.	S4.E6.5 Applies safety principles with age-appropriate physical activities.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* Jesus provided us with examples of ways to work cooperatively during his life.</li> <li>* We must remember to show respect for ourselves and others at all times.</li> <li>* We demonstrate our care and concern for others when we follow the rules of safety.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Safe practices and responsible choices help to protect us.</li> <li>* Healthy relationships and a positive self-concept contribute to cooperative group involvement.</li> </ul>		<ul style="list-style-type: none"> <li>* How do rules and responsible decisions reduce the risk of injury?</li> <li>* Why are rules of safety important in physical education?</li> <li>* How does attitude affect cooperation, teamwork, and sportsmanship?</li> </ul>	

<b>STANDARD 5: Grade Three through Five</b>			
<b><i>The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.</i></b>			
	<b>Grade Three</b>	<b>Grade Four</b>	<b>Grade Five</b>
<b>S5.E1 Health</b>	S5.E1.3 Discusses the relationship between physical activity and good health.	S5.E1.4 Examines the health benefits of participating in physical activity.	S5.E1.5 Compares the health benefits of participating in selected physical activities.
<b>S5.E2 Challenge</b>	S5.E2.3 Discusses the challenge that comes from learning a new physical activity.	S5.E2.4 Rates the enjoyment of participating in challenging and mastered physical activities.	S5.E2.5 Expresses the enjoyment and/or challenge of participating in a favorite physical activity.
<b>S5.E3 Self-expression and enjoyment</b>	S5.E3.3 Reflects on the reasons for enjoying selected physical activities.	S5.E3.4 Ranks the enjoyment of participating in different physical activities.	S4.E3.5 Analyzes different physical activities for enjoyment and challenge, identifying reasons for a positive or negative response.
<b>S5.E4 Social interaction</b>	S5.E4.3 Describes the positive social interactions that come when engaged with others in physical activity.	S5.E4.4 Describes and compares the positive social interactions when engaged in partner, small-group, and large-group physical activities.	S5.E4.5 Describes the social benefits gained from participating in physical activity (e.g., recess, youth sport).
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* Because God made each of us unique, we vary in ability and enjoyment of different physical activities.</li> <li>* We gain many benefits from our positive interactions with others.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Healthy choices promote overall health and fitness.</li> <li>* Healthy relationships and a positive self-concept contribute to personal development.</li> <li>* Healthy living require knowledge of human structure and function.</li> <li>* Safe practices affect individuals, families, and communities.</li> </ul>		<ul style="list-style-type: none"> <li>* Why are physical activities important to a healthy life?</li> <li>* How do food choices and eating practices impact health and fitness?</li> <li>* What are strategies that help build a positive self-concept?</li> <li>* How do individuals differ in the way they grow and develop?</li> <li>* How are choices and behaviors related to health and safety?</li> </ul>	

**STANDARD 1: Grade Six through Eight**  
***Demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S1.M1</b> <b>Dance and rhythms</b>	S1.M1.6 Demonstrates correct rhythm and pattern for one of the following dance forms: folk, social, creative, line, or world dance.	S1.M1.7 Demonstrates correct rhythm and pattern for one of the following: folk, social, creative, line, and world dance.	S1.M1.8 Exhibits command of rhythm and timing by creating a movement sequence to music as an individual or in a group.
<b>S1.M2</b> <b>Games and sports</b> <b>Invasion and field games</b>  <i>Throwing</i>	S1.M2.6 Throws for distance or power appropriate to the practice task (e.g., distance = outfield to home plate; power = 2nd base to 1st base).	S1.M2.7 Throws for distance or power appropriate to the activity in a dynamic environment.	S1.M2.8 Throws for distance or power appropriate to the activity during game play.
<b>S1.M3</b> <b>Games and sports</b> <b>Invasion and field games</b>  <i>Catching</i>	S1.M3.6 Catches from a variety of trajectories using different objects in lead-up game play.	S1.M3.7 Catches from a variety of trajectories using different objects in game play.	S1.M3.8 Catches using an implement in a dynamic environment or modified game play.
<b>S1.M4</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Passing and receiving</i>	S1.M4.6 Passes and receives with hands in combination with locomotor patterns of running and change of direction and speed, with competency, in invasion games.	S1.M4.7 Passes and receives with feet in combination with locomotor patterns of running and change of direction and speed, with competency, in invasion games.	S1.M4.8 Passes and receives with an implement in combination with locomotor patterns of running and change of direction, speed, and/or level, with competency, in invasion games.

**STANDARD 1: Grade Six through Eight**  
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	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<p><b>S1.M5</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Passing and receiving</i></p>	S1.M5.6 Throws, while stationary, a leading pass to a moving receiver.	S1.M5.7 Throws, while moving, a leading pass to a moving receiver with consistency.	S1.M5.8 Throws a lead pass to a moving partner off a dribble or pass with consistency.
<p><b>S1.M6</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Offensive skills</i></p>	S1.M6.6 Performs pivots, fakes, and jab steps designed to create open space without defensive pressure during practice tasks.	S1.M6.7 Executes at least 1 of the following designed to create open space during game play: pivots, fakes, jab steps.	S1.M6.8 Executes at least 2 of the following to create open space during game play: pivots, fakes, jab steps, screens.
<p><b>S1.M7</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Offensive skills</i></p>	S1.M7.6 Performs the following offensive skills with defensive pressure: pivot, give and go, and fakes.	S1.M7.7 Performs the following offensive skills with defensive pressure: pivot, give and go, and fakes.	S1.M7.8 Executes the following offensive skills with defensive pressure: pivot, give and go, and fakes.
<p><b>S1.M8</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Dribbling and ball control</i></p>	S1.M8.6 Dribbles with dominant hand using a change of speed and direction in a variety of practice tasks.	S1.M8.7 Dribbles with dominant and nondominant hands using a change of speed and direction in a variety of practice tasks.	S1.M8.8 Dribbles with dominant and nondominant hands using a change of speed and direction in games play.
<p><b>S1.M9</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Dribbling/ball control</i></p>	S1.M9.6 Foot-dribbles or dribbles with an implement with control, changing speed and direction in a variety of practice tasks.	S1.M9.7 Foot-dribbles or dribbles with an implement combined with passing in a variety of practice tasks.	S1.M9.8 Foot-dribbles or dribbles with an implement with control, changing speed and direction during games play.

**STANDARD 1: Grade Six through Eight**  
***Demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<p><b>S1.M10</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Shooting on goal</i></p>	<p>S1.M10.6 Shoots on goal with power in a dynamic environment as appropriate to the activity.</p>	<p>S1.M10.7 Shoots on goal with power and accuracy in small-sided game play.</p>	<p>S1.M10.8 Shoots on goal with a long-handled implement for power and accuracy in invasion games such as hockey (floor, field, ice) or lacrosse.</p>
<p><b>S1.M11</b>  <b>Games and sports</b>  <b>Invasion games</b></p> <p><i>Defensive skills</i></p>	<p>S1.M11.6a Maintains defensive-ready position, with weight on balls of feet, arms extended, and eyes on midsection of offensive player.</p> <p>S1.M11.6b Slides in all directions while on defense without crossing feet.</p> <p>S1.M11.6c Drop-steps in the direction of the pass during player-to-player defense.</p>	<p>S1.M11.7a Maintains defensive-ready position, with weight on balls of feet, arms extended, and eyes on midsection of offensive player.</p> <p>S1.M11.7b Slides in all directions while on defense without crossing feet.</p> <p>S1.M11.7c Drop-steps in the direction of the pass during player-to-player defense.</p>	<p>S1.M11.8a Maintains defensive-ready position, with weight on balls of feet, arms extended, and eyes on midsection of offensive player.</p> <p>S1.M11.8b Slides in all directions while on defense without crossing feet.</p> <p>S1.M11.8c Drop-steps in the direction of the pass during player-to-player defense.</p>
<p><b>S1.M12</b>  <b>Games and sports</b>  <b>Net and wall games</b></p> <p><i>Serving</i></p>	<p>S1.M12.6 Performs a legal serve with control for net and wall games such as badminton, volleyball, or pickleball.</p>	<p>S1.M12.7 Executes consistently (at least 70 percent of the time) a legal serve to a predetermined target for net and wall games such as badminton, volleyball, or pickleball.</p>	<p>S1.M12.8 Executes consistently (at least 70 percent of the time) a legal serve for distance and accuracy for net and wall games such as badminton, volleyball, or pickleball.</p>
<p><b>S1.M13</b>  <b>Games and sports</b>  <b>Net and wall games</b></p> <p><i>Striking</i></p>	<p>S1.M13.6 Strikes with a mature overhand pattern in net or wall games such as volleyball, handball, badminton, or tennis.</p>	<p>S1.M13.7 Strikes with a mature overhand pattern in a dynamic environment for net or wall games such as volleyball, handball, badminton, or tennis.</p>	<p>S1.M13.8 Strikes with a mature overhand pattern in a net or wall game such as volleyball, handball, badminton, or tennis.</p>

**STANDARD 1: Grade Six through Eight**  
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	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S1.M14</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Forehand and backhand</i>	S1.M14.6 Demonstrates the mature form of the forehand and backhand strokes with a short-handled implement in net games such as paddle ball, pickleball, or short-handled racket tennis.	S1.M14.7 Demonstrates the mature form of forehand and backhand strokes with a long-handled implement in net games such as badminton or tennis.	S1.M14.8 Demonstrates the mature form of the forehand and backhand strokes with a short- or long-handled implement with power and accuracy in net games such as pickleball, tennis, badminton, or paddle ball.
<b>S1.M15</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Weight transfer</i>	S1.M15.6 Transfers weight with correct timing for the striking pattern.	S1.M15.7 Transfers weight with correct timing using low to high striking pattern with a short-handled implement on the forehand side.	S1.M15.8 Transfers weight with correct timing using low to high striking pattern with a long-handled implement on the forehand and backhand sides.
<b>S1.M16</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Volley</i>	S1.M16.6 Forehand-volleys with a mature form and control using a short-handled implement.	S1.M16.7 Forehand- and backhand-volleys with a mature form and control using a short-handled implement.	S1.M16.8 Forehand- and backhand-volleys with a mature form and control using a short-handled implement during game play.
<b>S1.M17</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Two-hand volley</i>	S1.M17.6 Two-hand-volleys with control during game play.	S1.M17.7 Two-hand-volleys with control during game play.	S1.M17.8 Two-hand-volleys with control during game play.
<b>S1.M18</b> <b>Games and sports</b> <b>Target games</b>  <i>Throwing</i>	S1.M18.6 Demonstrates a mature throwing pattern for a target game such as bowling, bocce, or corn hole.	S1.M18.7 Executes consistently (70 percent or more of the time) a mature throwing pattern for target games such as bowling, bocce, or corn hole.	S1.M18.8 Performs consistently (70 percent or more of the time) a mature throwing pattern, with accuracy and control, for target games such as bowling, bocce, or corn hole.

**STANDARD 1: Grade Six through Eight**  
***Demonstrates competency in a variety of motor skills and movement patterns.***

	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S1.M19</b> <b>Games and sports</b> <b>Target games</b>  <i>Striking</i>	S1.M19.6 Strikes, with an implement, a stationary object for accuracy, distance, and power in a target game.	S1.M19.7 Strikes, with an implement, a stationary object for accuracy, distance, and power in target games.	S1.M19.8 Strikes, with an implement, a stationary object for accuracy, distance, and power.
<b>S1.M20</b> <b>Games and sports</b> <b>Fielding and striking games</b>  <i>Throwing</i>	S1.M20.6 Throws a ball with force in a variety of practice tasks and game play.	S1.M20.7 Throws a ball with force in a variety of practice tasks and game play.	S1.M20.8 Throws a ball with force in a variety of practice tasks and game play.
<b>S1.M21</b> <b>Games and sports</b> <b>Fielding and striking games</b>  <i>Catching</i>	S1.M21.6 Catches from different trajectories using a variety of objects in varying practice tasks.	S1.M21.7 Catches from different trajectories using a variety of objects in game play.	S1.M21.8 Catches, using an implement, from different trajectories and speeds in a dynamic environment or game play.
<b>S1.M22</b> <b>Outdoor pursuits</b>  <i>Techniques</i>	S1.M22.6 Demonstrates correct technique for basic skills in 1 self-selected outdoor activity.	S1.M22.7 Demonstrates correct technique for a variety of skills in 1 self-selected outdoor activity.	S1.M22.8 Demonstrates correct technique for basic skills in at least 2 self-selected outdoor activities.

<b>STANDARD 1: Grade Six through Eight</b> <b><i>Demonstrates competency in a variety of motor skills and movement patterns.</i></b>			
	Grade Six	Grade Seven	Grade Eight
<b>S1.M23</b> <b>Individual-performance activities</b>  <i>Techniques</i>	S1.E24.6 Demonstrates correct technique for basic skills in 1 self-selected individual-performance activity.	S1.E24.7 Demonstrates correct technique for a variety of skills in 1 self-selected individual-performance activity.	S1.E24.8 Demonstrates correct technique for basic skills in at least 2 self-selected individual-performance activities.
Catholic Identity Connections			
<ul style="list-style-type: none"> <li>* We have each been blessed with gifts and talents, but our varying abilities make us unique.</li> <li>* We show our appreciation for our God-given strengths and abilities by using and improving them.</li> </ul>			
Essential Understandings		Guided Questions	
<ul style="list-style-type: none"> <li>* Motor skills and movement patterns can be combined to create complex movement sequences.</li> <li>* Practice increases competency over time.</li> </ul>		<ul style="list-style-type: none"> <li>* How are basic motor skills linked to perform more complex movement sequences?</li> <li>* How are the concepts of space, time, and energy used in movement?</li> <li>* Why is the practice of sport-related skills important?</li> <li>* How do knowledge and application of strategies enhance movement performances?</li> </ul>	

<b>STANDARD 2: Grade Six through Eight</b>			
<b><i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S2.M1</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Creating space with movement</i>	S2.M1.6 Creates open space by using locomotor movements (e.g., walking, running, and jumping and landing) in combination with movement concepts (e.g., varying pathways, change of speed, direction, or pace).	S2.M1.7 Reduces open space by using locomotor movements (e.g., walking, running, jumping and landing, changing size and shape of body) in combination with movement concepts (e.g., reducing the angle in the space, reducing distance between player and goal).	S2.M1.8 Opens and closes space during game play by combining locomotor movements with movement concepts.
<b>S2.M2</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Creating space with offensive tactics</i>	S2.M2.6 Executes at least 1 of the following offensive tactics to create open space: moves to open space without the ball; uses a variety of passes, pivots, and fakes; give and go.	S2.M2.7 Executes at least 2 of the following offensive tactics to create open space: uses a variety of passes, pivots, and fakes; give and go.	S2.M2.8 Executes at least 3 of the following offensive tactics to create open space: moves to open space on and off the ball; uses a variety of passes, fakes, and pathways; give and go.
<b>S2.M3</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Creating space using width and length</i>	S2.M3.6 Creates open space by using the width and length of the field or court on offense.	S2.M3.7 Creates open space by staying spread on offense, and cutting and passing quickly.	S2.M3.8 Creates open space by staying spread on offense, cutting and passing quickly, and using fakes off the ball.
<b>S2.M4</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Reducing space by changing size and shape</i>	S2.M4.6 Reduces open space on defense by making the body larger and reducing passing angles.	S2.M4.7 Reduces open space on defense by staying close to the opponent as he/she nears the goal.	S2.M4.8 Reduces open space on defense by staying on the goal side of the offensive player and reducing the distance to him/her (third-party perspective).

<b>STANDARD 2: Grade Six through Eight</b>			
<b><i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S2.M5</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Reducing space using denial</i>	S2.M5.6 Reduces open space by not allowing the catch (denial) or by allowing the catch but not the return pass.	S2.M5.7 Reduces open space by not allowing the catch (denial) or anticipating the speed of an object and person for the purpose of interception or deflection.	S2.M5.8 Reduces open space by not allowing the catch (denial) and anticipating the speed of the object and person for the purpose of interception or deflection.
<b>S2.M6</b> <b>Games and sports</b> <b>Invasion games</b>  <i>Transitions</i>	S2.M6.6 Transitions from offense to defense or defense to offense by recovering quickly.	S2.M6.7 Transitions from offense to defense or defense to offense by recovering quickly and communicating with teammates.	S2.M6.8 Transitions from offense to defense or defense to offense by recovering quickly, communicating with teammates, and capitalizing on an advantage.
<b>S2.M7</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Creating space through variation</i>	S2.M7.6 Creates open space in net or wall games with a short-handled implement by varying force and direction.	S2.M7.7 Creates open space in net or wall games with a long-handled implement by varying force and direction, and by moving opponent from side to side.	S2.M7.8 Creates open space in net or wall games with either a long- or short- handled implement by varying force or direction, or by moving opponent from side to side and/or forward and back.
<b>S2.M8</b> <b>Games and sports</b> <b>Net and wall games</b>  <i>Using tactics and shots</i>	S2.M8.6 Reduces offensive options for opponents by returning to mid-court position.	S2.M8.7 Selects offensive shot based on opponent's location (hit where opponent is not).	S2.M8.8 Varies placement, force, and timing of return to prevent anticipation by opponent.

<b>STANDARD 2: Grade Six through Eight</b>			
<b><i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S2.M9</b> <b>Games and sports</b> <b>Target games</b>  <i>Shot selection</i>	S2.M9.6 Selects appropriate shot and/or club based on location of the object in relation to the target.	S2.M9.7 Varies the speed and/or trajectory of the shot based on location of the object in relation to the target.	S2.M9.8 Varies the speed, force, and trajectory of the shot based on location of the object in relation to the target.
<b>S2.M10</b> <b>Games and sports</b> <b>Fielding and striking games</b>  <i>Offensive strategies</i>	S2.M10.6 Identifies open spaces and attempts to strike object into that space.	S2.M10.7 Uses a variety of shots (e.g., slap and run, bunt, line drive, high arc) to hit to open space.	S2.M10.8 Identifies sacrifice situations and attempts to advance a teammate.
<b>S2.M11</b> <b>Games and sports</b> <b>Fielding and striking games</b>  <i>Reducing space</i>	S2.M11.6 Identifies the correct defensive play based on the situation (e.g., number of outs).	S2.M11.7 Selects the correct defensive play based on the situation (e.g., number of outs).	S2.M11.8 Reduces open spaces in the field by working with teammates to maximize coverage.
<b>S2.M12</b> <b>Individual-performance activities, dance, and rhythms</b>  <i>Movement concepts</i>	S2.M12.6 Varies movement sequences during dance or gymnastics activities.	S2.M12.7 Identifies and applies movement concepts to various dance or movement activities.	S2.M12.8 Identifies and applies movement concepts to various dance or movement activities.

<b>STANDARD 2: Grade Six through Eight</b>			
<b><i>The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S2.M13</b> <b>Outdoor pursuits</b> <i>Movement concepts</i>	S2.M13.6 Makes appropriate decisions based on the weather, level of difficulty due to conditions, or ability to ensure the safety of self and others.	S2.M13.7 Analyzes the situation and makes adjustments to ensure the safety of self and others.	S2.M13.8 Implements safe protocols in self-selected outdoor activities.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* God has granted us the wisdom to consider the choices we are making and make adjustments when needed.</li> <li>* Physical activity can lead to a sense of well-being and the recognition of the importance of caring for our bodies.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Physical fitness improves well-being.</li> <li>* Practice increases competency over time.</li> </ul>		<ul style="list-style-type: none"> <li>* Why is it important to include the components of fitness in connection to physical activity?</li> <li>* Why is the practice of sport-related skills important?</li> <li>* How do knowledge and application of strategies enhance movement performance?</li> </ul>	

<b>STANDARD 3: Grade Six through Eight</b>			
<b><i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S3.M1 Physical activity knowledge</b>	S3.M1.6 Is able to identify three influences on physical activity (e.g., school, family, and peers; community and built environment).	S3.M1.7 Identifies barriers related to maintaining a physically active lifestyle and seeks solutions for eliminating those barriers.	S3.M1.8 Develops a plan to address one of the barriers to maintaining a physically active lifestyle.
<b>S3.M2 Engages in physical activity</b>	S3.M2.6 Participates in daily self-selected physical activity outside of physical education class.	S3.M2.7 Participates in daily self-selected physical activity outside of physical education class.	S3.M2.8 Participates in daily self-selected physical activity outside of physical education class.
<b>S3.M3 Engages in physical activity</b>	S3.M3.6 Participates in a variety of aerobic fitness activities.	S3.M3.7 Participates in a variety of strength and endurance fitness activities.	S3.M3.8 Participates in a variety of self-selected aerobic fitness activities outside of school.
<b>S3.M4 Engages in physical activity</b>	S3.M4.6 Participates in a variety of aerobic-fitness activities using technology.	S3.M4.7 Participates in a variety of strength and endurance fitness activities using technology.	S3.M4.8 Plans and implements a program of cross-training to include aerobic, strength and endurance, and flexibility training.
<b>S3.M5 Engages in physical activity</b>	S3.M5.6 Participates in a variety of lifelong recreational activities.	S3.M5.7 Participates in a variety of lifelong recreational activities.	S3.M5.8 Participates in a variety of lifelong recreational activities.
<b>S3.M6 Engages in physical activity</b>	S3.M6.6 Participates in moderate to vigorous aerobic physical activity.	S3.M6.7 Participates in moderate to vigorous muscle- and bone-strengthening physical activity.	S3.M6.8 Participates in moderate to vigorous aerobic and/or muscle- and bone-strengthening physical activity.

<b>STANDARD 3: Grade Six through Eight</b>			
<b><i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S3.M7 Fitness knowledge</b>	S3.M7.6 Identifies the components of skill-related fitness.	S3.M7.7 Distinguishes between health-related and skill-related fitness.	S3.M7.8 Compares and contrasts health-related fitness components.
<b>S3.M8 Fitness knowledge</b>	S3.M8.6 Sets and monitors a self-selected physical activity goal needed to advance current fitness level.	S3.M8.7 Sets and monitors a self-selected physical activity goal needed to advance current fitness level.	S3.M8.8 Sets and monitors a self-selected physical activity goal needed to advance current fitness level.
<b>S3.M9 Fitness knowledge</b>	S3.M9.6 Employs correct techniques and methods of stretching.	S3.M9.7 Describes and demonstrates the difference between dynamic and static stretches.	S3.M9.8 Employs a variety of appropriate static stretching techniques for all major muscle groups.
<b>S3.M10 Fitness knowledge</b>	S3.M10.6 Differentiates between aerobic and anaerobic capacity, and between muscular strength and endurance.	S3.M10.7 Describes the role of exercise and nutrition in weight management.	S3.M10.8 Describes the role of flexibility in injury prevention.
<b>S3.M11 Fitness knowledge</b>	S3.M11.6 Identifies each of the components of the overload principle (FITT formula: frequency, intensity, time, type) for different types of physical activity (aerobic, muscular fitness, and flexibility).	S3.M11.7 Describes overload principle (FITT formula) for different types of physical activity, the training principles on which the formula is based, and how the formula and principles affect fitness.	S3.M11.8 Uses the overload principle (FITT formula) in preparing a personal workout. (14)

<b>STANDARD 3: Grade Six through Eight</b>			
<b><i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S3.M12 Fitness knowledge</b>	S3.M12.6 Describes the role of warm-ups and cool-downs before and after physical activity.	S3.M12.7 Designs a warm-up and cool-down regimen for a self-selected physical activity.	S3.M12.8 Designs and implements a warm-up and cool-down regimen for a self-selected physical activity.
<b>S3.M13 Fitness knowledge</b>	S3.M13.6 Defines resting heart rate and describes its relationship to aerobic fitness.	S3.M13.7 Defines resting heart rate and describes its relationship to aerobic fitness.	S3.M13.8 Defines how resting heart rate and level of exertion can be used to adjust workout intensity during physical activity.
<b>S3.M14 Fitness knowledge</b>	S3.M14.6 Identifies major muscles used in selected physical activities.	S3.M14.7 Describes how muscles pull on bones to create movement in pairs by relaxing and contracting.	S3.M14.8 Explains how body systems interact with one another (e.g., blood transports nutrients from the digestive system, oxygen from the respiratory system) during physical activity.
<b>S3.M15 Assessment and program planning</b>	S3.M15.6 Designs and implements a program of remediation for an area of weakness based on the results of a health-related fitness assessment.	S3.M15.7 Designs and implements a program of remediation for areas of weakness based on the results of a health-related fitness assessment.	S3.M15.8 Designs and implements a program of remediation for areas of weakness based on the results of a health-related fitness assessment.
<b>S3.M16 Assessment and program planning</b>	S3.M16.6 Maintains a physical activity log for at least 2 weeks and reflects on activity levels as documented in the log.	S3.M16.7 Maintains a physical activity and nutrition log for at least 2 weeks and reflects on activity levels and nutrition as documented in the log.	S3.M16.8 Maintains a physical activity and nutrition log and designs and implements a program to improve levels of health-related fitness and nutrition.

<b>STANDARD 3: Grade Six through Eight</b>			
<b><i>The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S3.M17 Nutrition</b>	S3.M17.6 Identifies foods within each of the basic food groups and selects appropriate servings and portions for his or her age and physical activity levels.	S3.M17.7 Develops strategies for balancing healthy food, snacks, and water intake, along with daily physical activity.	S3.M17.8 Describes the relationship between poor nutrition and health risk factors.
<b>S3.M18 Stress management</b>	S3.M18.6 Practices strategies for dealing with stress, such as deep breathing, guided visualization, and aerobic exercise.	S3.M18.7 Practices strategies for dealing with stress, such as deep breathing, guided visualization, and aerobic exercise.	S3.M18.8 Practices strategies for dealing with stress, such as deep breathing, guided visualization, and aerobic exercise and demonstrates basic movements used in other stress-reducing activities.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* We are called to care for the body God has given us.</li> <li>* Engaging in physical activity with others promotes enjoyment and positive social interaction.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Healthy choices promote overall health and fitness.</li> <li>* Healthy relationships and a positive self-image contribute to personal development.</li> </ul>		<ul style="list-style-type: none"> <li>* How does a personal fitness plan promote an active lifestyle?</li> <li>* How can personal fitness levels be improved and maintained?</li> <li>* How can eating properly reduce health risks?</li> <li>* How can physical activity provide opportunities for enjoyment, challenge, self-expression, and social interactions?</li> <li>* What are healthy ways to manage and deal with stress and emotions?</li> <li>* How do rules and responsible decisions decrease the risk of injury?</li> </ul>	

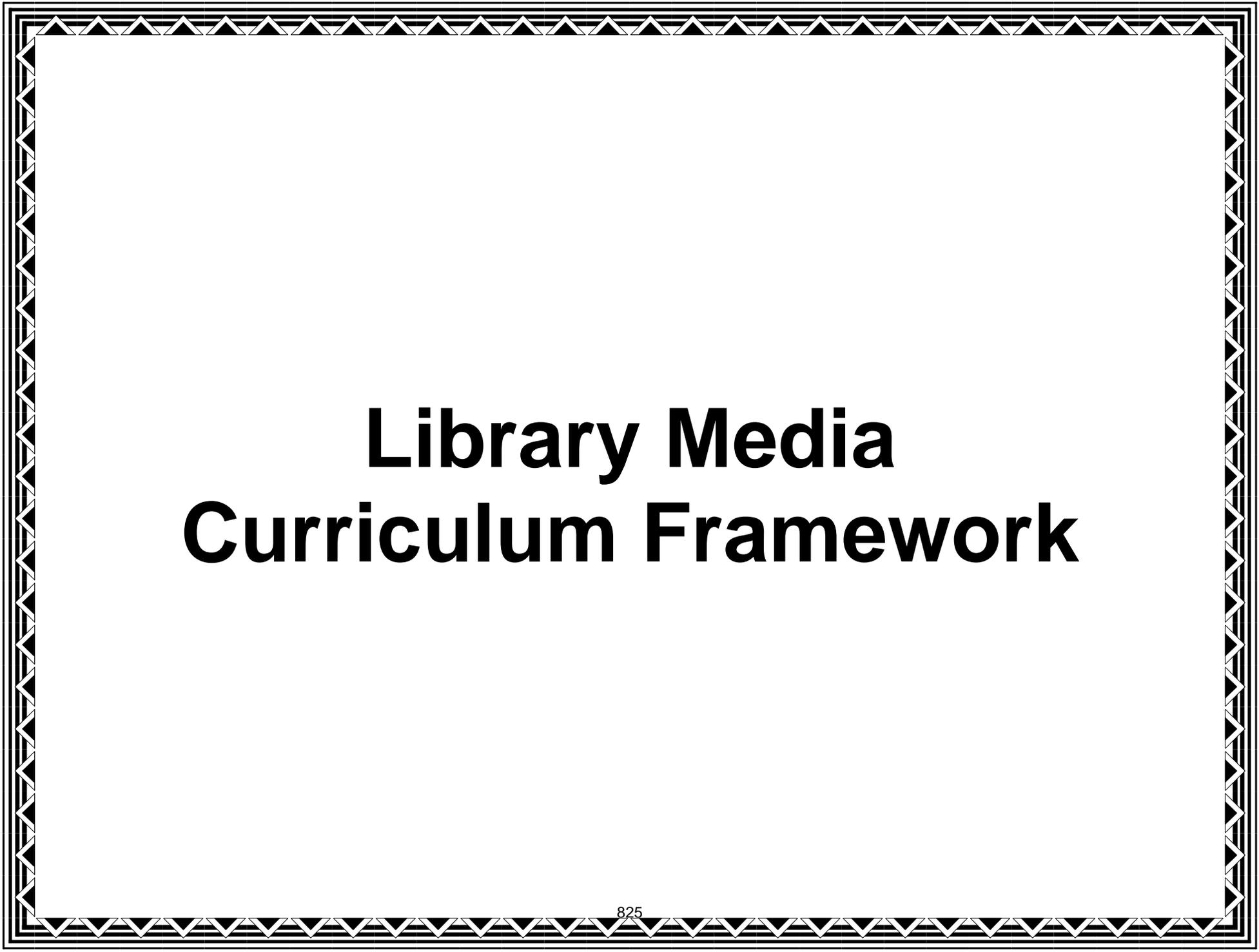
<b>STANDARD 4: Grade Six through Eight</b>			
<b><i>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S4.M1 Personal responsibility</b>	S4.M1.6 Exhibits personal responsibility by using appropriate etiquette, demonstrating respect for facilities, and exhibiting safe behaviors.	S4.M1.7 Exhibits responsible social behaviors by cooperating with classmates, demonstrating inclusive behaviors, and supporting classmates.	S4.M1.8 Accepts responsibility for improving one's own levels of physical activity and fitness.
<b>S4.M2 Personal responsibility</b>	S4.M2.6 Identifies and uses appropriate strategies to self-reinforce positive fitness behaviors, such as positive self-talk.	S4.M2.7 Demonstrates both intrinsic and extrinsic motivation by selecting opportunities to participate in physical activity outside of class.	S4.M2.8 Uses effective self-monitoring skills to incorporate opportunities for physical activity in and outside of school.
<b>S4.M3 Accepting feedback</b>	S4.M3.6 Demonstrates self-responsibility by implementing specific corrective feedback to improve performance.	S4.M3.7 Provides corrective feedback to a peer, using teacher-generated guidelines, and incorporating appropriate tone and other communication skills.	S4.M3.8 Provides encouragement and feedback to peers without prompting from the teacher.
<b>S4.M4 Working with others</b>	S4.M4.6 Accepts differences among classmates in physical development, maturation, and varying skill levels by providing encouragement and positive feedback.	S4.M4.7 Demonstrates cooperation skills by following rules and guidelines for resolving conflicts.	S1.M4.8 Responds appropriately to participants' ethical and unethical behavior during physical activity by using rules and guidelines for resolving conflicts.
<b>S4.M5 Working with others</b>	S4.M5.6 Cooperates with a small group of classmates during adventure activities, game play, or team-building activities.	S4.M5.7 Problem-solves with a small group of classmates during adventure activities, small-group initiatives, or game play.	S4.M5.8 Cooperates with multiple classmates on problem-solving initiatives including adventure activities, large-group initiatives, and game play.

<b>STANDARD 4: Grade Six through Eight</b>			
<b><i>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</i></b>			
	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S4.M6 Rules and etiquette</b>	S4.M6.6 Identifies the rules and etiquette for physical activities, games, and dance activities.	S4.M6.7 Demonstrates knowledge of rules and etiquette by self-officiating physical activities and games.	S4.M6.8 Applies rules and etiquette by acting as an official for modified physical activities and games .
<b>S4.M7 Safety</b>	S4.M7.6 Uses physical activity and fitness equipment appropriately and safely.	S4.M7.7 Independently uses physical activity and exercise equipment appropriately and safely.	S4.M7.8 Independently uses physical activity and fitness equipment appropriately, and identifies specific safety concerns associated with the activity.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* When we treat ourselves and others with respect, we are living a life modeled after Jesus' life.</li> <li>* Because God made each of us unique, we all excel and struggle in different ways.</li> <li>* Finding ways to bolster the self-image of others reflects our commitment to Christian living.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Healthy relationships and a positive self-concept contribute to personal development and positive involvement.</li> <li>* Self-management builds individual and group success.</li> </ul>		<ul style="list-style-type: none"> <li>* How does attitude affect cooperation, team work, and sportsmanship?</li> <li>* Why are strategies and skills essential to successful group work?</li> <li>* How is understanding and respect for differences among people important to successful group interaction?</li> <li>* Why are rules of safety important in a physical education class?</li> </ul>	

**STANDARD 5: Grade Six through Eight**  
***The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.***

	<b>Grade Six</b>	<b>Grade Seven</b>	<b>Grade Eight</b>
<b>S5.M1 Health</b>	S5.M1.6 Describes how being physically active leads to a healthy body.	S5.M1.7 Identifies different types of physical activities and describes how each exerts a positive effect on health.	S5.M1.8 Identifies the five components of health-related fitness (muscular strength, muscular endurance, flexibility, cardiorespiratory endurance, and body composition) and explains the connections between fitness and overall physical and mental health.
<b>S5.M2 Health</b>	S5.M2.6 Identifies components of physical activity that provide opportunities for reducing stress and for social interaction.	S5.M2.7 Identifies positive mental and emotional aspects of participating in a variety of physical activities.	S5.M2.8 Analyzes the benefits of being physically active.
<b>S5.M3 Challenge</b>	S5.M3.6 Recognizes individual challenges and copes in a positive way, such as extending effort, asking for help or feedback, and/or modifying the tasks.	S5.M3.7 Generates positive strategies such as offering suggestions or assistance, leading or following others, and providing possible solutions when faced with a group challenge.	S4.M3.8 Develops a plan of action and makes appropriate decisions based on a plan when faced with an individual challenge.
<b>S5.M4 Self-expression and enjoyment</b>	S5.M4.6 Describes how moving competently in a physical activity setting creates enjoyment.	S5.M4.7 Identifies why self-selected physical activities create enjoyment.	S5.M4.8 Discusses how enjoyment could be increased in self-selected physical activities.
<b>S5.M5 Self-expression and enjoyment</b>	S5.M5.6 Identifies how self-expression and physical activity are related.	S5.M5.7 Explains the relationship between self-expression and lifelong enjoyment through physical activity.	S4.M5.8 Identifies and participates in an enjoyable activity that prompts individual self-expression.

<b>STANDARD 5: Grade Six through Eight</b> <i>The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.</i>			
	Grade Six	Grade Seven	Grade Eight
<b>S5.M6</b> <b>Social interaction</b>	S5.M6.6 Demonstrates respect for self and others in activities and games by following the rules, encouraging others, and playing in the spirit of the game or activity.	S5.M6.7 Demonstrates the importance of social interaction by helping and encouraging others and providing support to classmates.	S5.M6.8 Demonstrates respect for self by asking for help and helping others in various physical activities.
<b>Catholic Identity Connections</b>			
<ul style="list-style-type: none"> <li>* We are invited to express ourselves and interact with others through physical activity.</li> <li>* With persistence, we can set and attain goals that lead to increased wellness and self-image.</li> </ul>			
<b>Essential Understandings</b>		<b>Guided Questions</b>	
<ul style="list-style-type: none"> <li>* Competence in movement skills enhances and encourages active lifestyles.</li> <li>* Safe practices and responsible choices protect the individual.</li> <li>* Physical fitness enhances lifelong wellness.</li> </ul>		<ul style="list-style-type: none"> <li>* How does increased competency influence enjoyment and participation?</li> <li>* How do rules and responsible decisions decrease the risk of injury?</li> <li>* How do specific activities utilize the various components of fitness?</li> <li>* How are personal fitness and wellness goals set, measured, and evaluated?</li> <li>* How are strength, endurance, and flexibility increased?</li> <li>* How does self-concept affect choices related to health?</li> <li>* Why is it important to include the components of fitness in connection to physical activity?</li> </ul>	



# **Library Media Curriculum Framework**

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## Standard 1: Inquire, think critically, and gain knowledge.

<b><i>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Forms simple questions, e.g., “Do bears eat?”</li> </ul>	<ul style="list-style-type: none"> <li>Forms simple open-ended questions, e.g., “What do bears eat?”</li> </ul>	<ul style="list-style-type: none"> <li>Forms simple open-ended questions and begins to explore ways to answer them, e.g., “Where can I find what bears eat?”</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Generate questions and practice ways to locate sources that provide needed information.</li> </ul>	<ul style="list-style-type: none"> <li>Generate questions and practice ways to locate and begin to evaluate sources that provide needed information.</li> </ul>	<ul style="list-style-type: none"> <li>Generate questions and practice different ways to locate and evaluate sources that provide needed information.</li> </ul>
<b>Grades 6,7,8</b>		
<ul style="list-style-type: none"> <li>Use critical-thinking process that involves asking questions, investigating the answers, and developing new understandings for personal or academic independent-learning activities.</li> </ul>		
<b><i>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Connect ideas to own interests.</li> </ul>	<ul style="list-style-type: none"> <li>Connect ideas to own interests.</li> <li>Shares what is known about a topic, problem, or question.</li> </ul>	<ul style="list-style-type: none"> <li>Connect ideas to own interests.</li> <li>Share what is known about a topic, problem, or question.</li> <li>Identify one or two keywords about a topic, problem, or question.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Connect ideas or topics to their own interests.</li> <li>Articulate what is known about a topic, problem, or question, e.g., factual information.</li> <li>Generate a list of keywords for an inquiry-based project with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>Connect ideas or topics to their own interests.</li> <li>Articulate what is known about a topic, problem, or question.</li> <li>Generate a list of keywords for an inquiry-based project with guidance.</li> <li>Identify and use appropriate sources to acquire background information.</li> </ul>	<ul style="list-style-type: none"> <li>Connect ideas or topics to their own interests.</li> <li>Articulate what is known about a topic, problem, or question.</li> <li>Generate a list of keywords for an inquiry-based project with guidance.</li> <li>Identify and use appropriate sources to acquire background information.</li> <li>Predict answers to inquiry questions based on background knowledge and beginning observations or experiences.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>State and support what is known about a topic, problem, or question and make connections to prior knowledge.</li> <li>Observe and analyze an experience, demonstration, or source that introduces a topic, problem, or question to gather background information.</li> <li>Review initial information needed to develop, clarify, revise, or refine the question.</li> <li>Compare new background information with prior knowledge to determine direction and focus of new learning.</li> </ul>		

## Standard 1: Inquire, think critically, and gain knowledge.

### *Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.*

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>Formulate simple questions related to listening activity. Ask “I wonder if…” questions about the topic, question, or problem.</li> </ul>	<ul style="list-style-type: none"> <li>Formulate simple open-ended questions related to listening activities. Ask “I wonder who/what …” questions about the topic, question, or problem.</li> </ul>	<ul style="list-style-type: none"> <li>Formulate open-ended questions related to listening activities. Ask “I wonder why/how…” questions about the topic, question, or problem.</li> </ul>
Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>Formulate questions about the topic, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>Formulate questions about the topic, with guidance.</li> <li>Assess questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.</li> <li>Revise the question or problem as needed to arrive at a manageable topic.</li> </ul>	<ul style="list-style-type: none"> <li>Formulate questions about the topic, with guidance.</li> <li>Assess questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.</li> <li>Revise the question or problem as needed to arrive at a manageable topic.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>Write questions independently based on key ideas or areas of focus.</li> <li>Determine what information is needed to support the investigation and answer the questions.</li> <li>Analyze what is already known, or what is observed or experienced to predict answers to inquiry questions. Refine questions depending on the type of information needed (for example, overview, big idea, specific detail, cause and effect, comparison).</li> </ul>		

### *Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.*

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>Understand the basic organizational structure of books including spine, spine label, title page, author, illustrator, and title.</li> <li>Distinguish between fiction and nonfiction books.</li> <li>Understand that the library has an organizational scheme.</li> <li>Understand fiction books are alphabetized by author’s last name.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the basic organizational structure of books including spine, spine label, title page, author, illustrator, title, and publisher.</li> <li>Distinguish between fiction and nonfiction books.</li> <li>Understand that the library has an organizational scheme.</li> <li>Understand that call numbers tell where the book is placed on the shelf.</li> <li>Select and use appropriate sources, including picture dictionaries, maps, and globes.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the basic organizational structure of books including spine, spine label, title page, author, illustrator, title, publisher, city of publication, copyright date, and dedication.</li> <li>Distinguish between fiction and nonfiction books.</li> <li>Understand that the library has an organizational scheme, e.g., fiction, nonfiction, reference, and other materials.</li> <li>Select and use appropriate sources, including picture dictionaries, beginning encyclopedias, magazines, maps, and globes, to answer questions.</li> <li>Identify guide words in dictionaries and encyclopedias and can locate words and topics.</li> </ul>

## Standard 1: Inquire, think critically, and gain knowledge.

### *Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions. (continued)*

Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>• Understand the library’s organizational scheme and the Dewey decimal classification system.</li> <li>• Use the organizational structure of a book (e.g., table of contents, index, chapter headings, preface, appendix, glossary, bibliography) to locate information to answer questions.</li> <li>• Know that biographical books are shelved alphabetically using the subject’s last name.</li> <li>• Use dictionary, encyclopedia, thesaurus and atlas to locate information.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the library’s organizational scheme and the Dewey decimal classification system.</li> <li>• Use the organizational structure of a book (e.g., table of contents, index, chapter headings, preface, appendix, glossary, bibliography) to locate information to answer questions.</li> <li>• Select and use appropriate sources, including specialized reference sources and databases, to answer questions.</li> <li>• Use multiple resources, including print, electronic, and human, to locate information.</li> <li>• Use text features and illustrations to decide which resources are appropriate.</li> <li>• Know that biographical books are shelved alphabetically using the subject’s last name.</li> <li>• Use dictionary, thesaurus, atlas, encyclopedia, and almanac to locate information.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the library’s organizational scheme and the Dewey decimal classification system.</li> <li>• Use the organizational structure of a book (e.g., table of contents, index, chapter headings, preface, appendix, glossary, bibliography) to locate information to answer questions.</li> <li>• Select and use appropriate sources, including specialized reference sources and databases, to answer questions.</li> <li>• Use multiple resources, including print, electronic, and human, to locate information.</li> <li>• Use text features and illustrations to decide which resources are best to use and why.</li> <li>• Know that biographical books are shelved alphabetically using the subject’s last name.</li> <li>• Use dictionary, thesaurus, atlas, encyclopedia, almanac, and specialized dictionaries and encyclopedias to locate information.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>• Recognize the organization and use of special sections in the library (e.g., reference, reserve books, paperbacks).</li> <li>• Locate appropriate nonfiction resources by using the library’s classification scheme.</li> <li>• Evaluate sources based on criteria such as copyright date, authority of author or publisher, comprehensiveness, readability, and alignment with research needs.</li> <li>• Select a variety of credible sources in different formats relevant to research needs.</li> </ul>		

**Standard 1: Inquire, think critically, and gain knowledge.**

***Indicator 1.1.5: Evaluate information found in related sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.***

<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Recognize and use facts that answer specific questions.</li> <li>Interpret information represented in pictures, illustrations, and simple charts.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize and use facts that answer specific questions.</li> <li>Interpret information represented in pictures, illustrations, and simple charts.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize and use facts that answer specific questions.</li> <li>Interpret information represented in pictures, illustrations, and simple charts.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Identify facts and details that support main ideas.</li> <li>Distinguish between fact and opinion.</li> <li>Interpret information taken from maps, graphs, charts, and other visuals.</li> <li>Select information to answer questions or solve a problem.</li> </ul>	<ul style="list-style-type: none"> <li>Identify facts and details that support main ideas.</li> <li>Distinguish between fact and opinion.</li> <li>Interpret information taken from maps, graphs, charts, and other visuals.</li> <li>Select information to answer questions or solve a problem.</li> <li>Skim/scan to locate information that is appropriate to age and ability level.</li> </ul>	<ul style="list-style-type: none"> <li>Skim/scan to locate information that is appropriate to age and ability level.</li> <li>Identify facts and details that support main ideas.</li> <li>Distinguish between fact and opinion.</li> <li>Interpret information taken from maps, graphs, charts, and other visuals.</li> <li>Select information to answer questions or solve a problem.</li> <li>Evaluate facts for accuracy.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Recognize that information has a social or cultural context based in currency, accuracy, authority, and point of view.</li> <li>Evaluate and select information based on usefulness, currency, accuracy, authority, and point of view.</li> </ul>		

## Standard 1: Inquire, think critically, and gain knowledge.

<b><i>Indicator 1.1.6: Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Draw or verbalize main ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Use simple note-taking strategies as demonstrated by the School Library Media Specialist.</li> <li>• Write, draw or verbalize the main idea and supporting details.</li> </ul>	<ul style="list-style-type: none"> <li>• Use simple note-taking strategies as demonstrated by the School Library Media Specialist.</li> <li>• Write, draw or verbalize the main idea and supporting details.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).</li> <li>• Paraphrase or summarize information in various formats.</li> <li>• Draw conclusions based on facts and premises.</li> </ul>	<ul style="list-style-type: none"> <li>• Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).</li> <li>• Paraphrase or summarize information in various formats.</li> <li>• Draw conclusions based on facts and premises.</li> </ul>	<ul style="list-style-type: none"> <li>• Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).</li> <li>• Paraphrase or summarize information in various formats.</li> <li>• Draw conclusions based on facts and premises.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Evaluate, paraphrase, and summarize information in various formats.</li> <li>• Use both facts and opinions responsibly by identifying and verifying them.</li> </ul>		
<b><i>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Retell key points with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Summarize or retell key points with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Summarize or retell key points.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Recognize when facts from two different sources conflict and seek additional sources to verify accuracy, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize when facts from two different sources conflict and seek additional sources to verify accuracy.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize when facts from two different sources conflict and seek additional sources to verify accuracy.</li> <li>• Recognize their own misconceptions when new information conflicts with previously held opinions.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Seek more than one point of view by using diverse sources.</li> <li>• Explain the effect of different perspectives (points of view) on the information.</li> </ul>		

## Standard 1: Inquire, think critically, and gain knowledge.

<b><i>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing inquiry.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
	<ul style="list-style-type: none"> <li>Recognize the purpose of the online catalog to locate materials.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize the purpose of the online catalog to locate materials.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Use online encyclopedias and magazine databases, with guidance.</li> <li>Search an online catalog to locate materials.</li> <li>Use software or online tools to record and organize information.</li> </ul>	<ul style="list-style-type: none"> <li>Use selected websites and periodical databases to find appropriate information.</li> <li>Search an online catalog to locate materials.</li> <li>Use software or online tools to record and organize information.</li> </ul>	<ul style="list-style-type: none"> <li>Use selected search engines to find appropriate information.</li> <li>Use selected websites and periodical databases to find appropriate information.</li> <li>Search an online catalog to locate materials.</li> <li>Use software or online tools to record and organize information.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Use technology resources such as online encyclopedias, online databases, and web subject directories, to locate information.</li> <li>Implement keyword search strategies.</li> <li>Select and use grade-level-appropriate electronic reference materials and teacher-selected websites to answer questions.</li> <li>Use a variety of search engines to do advanced searching.</li> </ul>		
<b><i>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Listen to others with respect.</li> <li>Share knowledge and ideas with others by discussion and listening.</li> </ul>	<ul style="list-style-type: none"> <li>Listen to others with respect.</li> <li>Share knowledge and ideas with others by discussion and listening.</li> </ul>	<ul style="list-style-type: none"> <li>Listen to others with respect.</li> <li>Share knowledge and ideas with others by discussion and listening.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Work in teams to produce original works or solve problems.</li> <li>Respect others' opinions through active listening and questioning.</li> </ul>	<ul style="list-style-type: none"> <li>Work in teams to produce original works or solve problems.</li> <li>Respect others' opinions through active listening and questioning.</li> </ul>	<ul style="list-style-type: none"> <li>Work in teams to produce original works or solve problems.</li> <li>Respect others' opinions through active listening and questioning.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Work in self-managed teams to understand concepts and to solve problems.</li> <li>Offer information and opinion at appropriate times in group discussions.</li> <li>Encourage team members to share ideas and opinions.</li> </ul>		

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

***Indicator 2.1.1: Continue an inquiry-based research process by applying critical-thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.***

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>• Answer the question, “What is this mostly about?”</li> </ul>	<ul style="list-style-type: none"> <li>• Answer the question, “What is this mostly about?”</li> <li>• Identify supporting details.</li> </ul>	<ul style="list-style-type: none"> <li>• Answer the question, “What is this mostly about?”</li> <li>• Identify supporting details.</li> <li>• Find facts to answer questions in more than one source with guidance.</li> <li>• Note similarities and differences in information from different sources.</li> </ul>
Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>• Use different clues (e.g., placement in text, signal words, focal point of illustration) to determine important ideas in illustrations and text.</li> <li>• Identify facts and details that support main ideas.</li> <li>• Find similar main ideas in more than one source.</li> </ul>	<ul style="list-style-type: none"> <li>• Use different clues (e.g., placement in text, signal words, focal point of illustration) to determine important ideas in illustrations and text.</li> <li>• Identify facts and details that support main ideas.</li> <li>• Restate with guidance and respond with detailed answers to factual questions.</li> <li>• Find similar main ideas in more than one source.</li> </ul>	<ul style="list-style-type: none"> <li>• Use different clues (e.g., placement in text, signal words, focal point of illustration) to determine important ideas in illustrations and text.</li> <li>• Identify facts and details that support main ideas.</li> <li>• Restate and respond with detailed answers to factual questions.</li> <li>• Find similar main ideas in more than one source.</li> <li>• Make inferences with guidance.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>• Assess the importance of ideas by comparing their treatment across texts.</li> <li>• Identify main ideas and find supporting examples, definitions, and details.</li> <li>• Analyze different points of view discovered in different sources.</li> <li>• Determine patterns and discrepancies by comparing and combining information available in different sources.</li> <li>• Interpret information and ideas by defining, classifying, and inferring from information in the text.</li> </ul>		

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

***Indicator 2.1.2: Organize knowledge so that it is useful.***

<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Demonstrate simple organizational skills such as sorting and categorizing.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate simple organizational skills such as sorting and categorizing.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate simple organizational skills such as sorting and categorizing.</li> <li>Organize information into different forms (charts, drawings).</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Organize notes and ideas to form responses to questions.</li> <li>Use common organizational patterns (chronological order, main idea with supporting ideas) to make sense of information, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>Organize notes and ideas to form responses to questions.</li> <li>Use common organizational patterns (chronological order, main idea with supporting ideas) to make sense of information, with guidance.</li> <li>Organize the information in a way that is appropriate for the assignment or question.</li> </ul>	<ul style="list-style-type: none"> <li>Organize notes and ideas to form responses to questions.</li> <li>Use common organizational patterns (chronological order, main idea with supporting ideas) to make sense of information.</li> <li>Organize the information in a way that is appropriate for the assignment or question.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Combine and categorize information by using an outline or semantic web to show connections among ideas.</li> <li>Use common organizational patterns (chronological order, cause and effect, compare/contrast) to organize information and draw conclusions.</li> </ul>		

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

***Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.***

<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Complete a graphic organizer using concepts that were learned during the inquiry experience, as a class, with guidance.</li> <li>• Compare new ideas with what was known at the beginning of the inquiry, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete a graphic organizer using concepts that were learned during the inquiry experience, with guidance.</li> <li>• Compare new ideas with what was known at the beginning of the inquiry, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete a graphic organizer using concepts that were learned during the inquiry experience.</li> <li>• Compare new ideas with what was known at the beginning of the inquiry.</li> <li>• Make inferences regarding the topic at the conclusion of a theme or research project, with guidance.</li> <li>• Draw a conclusion about the main idea, with guidance.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Review ideas held at beginning of inquiry and reflections captured during note-taking.</li> <li>• Match information found with questions and predictions.</li> <li>• Draw a conclusion about the main idea.</li> <li>• Identify connections to the curriculum and the real world.</li> </ul>	<ul style="list-style-type: none"> <li>• Review ideas held at beginning of inquiry and reflections captured during note-taking.</li> <li>• Match information found with questions and predictions.</li> <li>• Draw a conclusion about the main idea.</li> <li>• Identify connections to the curriculum and the real world.</li> </ul>	<ul style="list-style-type: none"> <li>• Review ideas held at beginning of inquiry and reflections captured during note-taking.</li> <li>• Match information found with questions and predictions.</li> <li>• Draw a conclusion about the main idea.</li> <li>• Identify connections to the curriculum and the real world.</li> <li>• Make inferences about the topic with guidance at the conclusion of the research project.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Review prior knowledge and reflect on how ideas changed with more information.</li> <li>• Compare information found to tentative thesis or hypothesis; revisit or revise hypothesis as appropriate.</li> <li>• Draw conclusions based on explicit and implied information.</li> <li>• Form opinions and judgments backed up by supporting evidence.</li> </ul>		

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

<b><i>Indicator 2.1.4: Use technology and other information tools to analyze and organize information.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Use word processing and drawing tools to create written product.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing and drawing tools to create written product.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing and drawing tools to create written product.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Use word processing, drawing, presentation, graphing, and other productivity tools to illustrate concepts and convey ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing, drawing, presentation, graphing, and other productivity tools to illustrate concepts and convey ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing, drawing, presentation, graphing, and other productivity tools to illustrate concepts and convey ideas.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Identify and apply common productivity tools and features such as menus and toolbars to plan, create, and edit word processing documents, spreadsheets, and presentations.</li> <li>Use interactive tools to participate as a group in analyzing and organizing information.</li> </ul>		
<b><i>Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Share information and ideas with others by discussion and listening.</li> <li>Work in groups to create and share simple information products (poster, diorama).</li> </ul>	<ul style="list-style-type: none"> <li>Share information and ideas with others by discussion and listening.</li> <li>Work in groups to create and share simple information products (poster, diorama).</li> </ul>	<ul style="list-style-type: none"> <li>Share information and ideas with others by discussion and listening.</li> <li>Work in groups to create, share and evaluate simple information products (poster, diorama).</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Express their own ideas appropriately and effectively while working in groups to identify and resolve information problems.</li> <li>Work in groups to create and evaluate pictures, images, and charts for word processed reports and electronic presentations.</li> </ul>	<ul style="list-style-type: none"> <li>Express their own ideas appropriately and effectively while working in groups to identify and resolve information problems.</li> <li>Work in groups to create and evaluate pictures, images, and charts for word processed reports and electronic presentations.</li> </ul>	<ul style="list-style-type: none"> <li>Express their own ideas appropriately and effectively while working in groups to identify and resolve information problems.</li> <li>Work in groups to create and evaluate pictures, images, and charts for word processed reports and electronic presentations.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Participate in problem-solving process with group.</li> <li>Work collaboratively in using technology to meet information needs.</li> <li>Paying attention to copyright provisions, work in groups to import and manipulate pictures, images, and charts in documents, spreadsheets, presentations, web pages, and other creative products and presentations that effectively communicate new knowledge.</li> <li>Work in groups to evaluate products and presentations.</li> </ul>		

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

<b><i>Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Incorporate writing and oral skills to develop a product or performance, with guidance.</li> <li>• Use pictures to communicate new information and ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporate writing and oral skills to develop a product or performance.</li> <li>• Use pictures to communicate new information and ideas.</li> <li>• Create a product with a beginning, middle and end.</li> <li>• Use basic grammar conventions.</li> <li>• Revise work with peer or teacher guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporate writing and oral skills to develop a product or performance.</li> <li>• Use pictures to communicate new information and ideas.</li> <li>• Create a product with a beginning, middle and end.</li> <li>• Use basic grammar conventions.</li> <li>• Revise work with peer or teacher guidance.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Follow steps of the writing/creation process: prewriting, drafting, revising, editing, and publishing.</li> <li>• Identify the audience and purpose before selecting a format for the product.</li> <li>• Experiment with text and visual media to create products.</li> <li>• Edit drafts based on feedback.</li> <li>• Check for correctness, completeness, and citation of sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow steps of the writing/creation process: prewriting, drafting, revising, editing, and publishing.</li> <li>• Identify the audience and purpose before selecting a format for the product.</li> <li>• Experiment with text and visual media to create products.</li> <li>• Edit drafts based on feedback.</li> <li>• Check for correctness, completeness, and citation of sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow steps of the writing/creation process: prewriting, drafting, revising, editing, and publishing.</li> <li>• Identify the audience and purpose before selecting a format for the product.</li> <li>• Experiment with text and visual media to create products.</li> <li>• Edit drafts based on feedback.</li> <li>• Check for correctness, completeness, and citation of sources.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Use prewriting to discover alternate ways to present conclusions.</li> <li>• Select presentation form based on audience and purpose.</li> <li>• Draft the presentation/product following an outline of ideas and add supporting details.</li> <li>• Create products that incorporate writing, visuals, and other forms of media to convey message and main points.</li> <li>• Assess and edit for grammar, visual impact, and appropriate use of media.</li> <li>• Cite all sources using correct bibliographic format.</li> </ul>		

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**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

<b><i>Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Present facts and simple answers to questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Present facts and simple answers to questions.</li> <li>• Use simple rubrics to assess work, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Present facts and simple answers to questions.</li> <li>• Use simple rubrics to assess work.</li> <li>• Reflect at the end on an inquiry experience about new ideas to wonder about and investigate.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Present information clearly so that main points are evident.</li> <li>• Use information appropriate to task and audience, with guidance.</li> <li>• Identify their own strengths and set goals for improvement.</li> <li>• Reflect at the end of an inquiry experience about what ideas would still be interesting to pursue.</li> </ul>	<ul style="list-style-type: none"> <li>• Present information clearly so that main points are evident.</li> <li>• Use information appropriate to task and audience, with guidance.</li> <li>• Identify their own strengths and set goals for improvement.</li> <li>• Reflect at the end of an inquiry experience about what ideas would still be interesting to pursue.</li> <li>• Identify and evaluate the important features for a good product, with guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Present information clearly so that main points are evident.</li> <li>• Use information appropriate to task and audience.</li> <li>• Identify their own strengths and set goals for improvement.</li> <li>• Reflect at the end of an inquiry experience about what ideas would still be interesting to pursue.</li> <li>• Identify and evaluate the important features for a good product.</li> </ul>
<b>Grade 6, 7, 8</b>		
<ul style="list-style-type: none"> <li>• Present conclusions and supporting facts in a variety of ways.</li> <li>• Present solutions to problems using modeled examples.</li> <li>• Identify skills that require practice and refinement, with guidance.</li> <li>• Follow plan of work but seek feedback for improving the process.</li> <li>• Reflect at the end of an inquiry process to identify additional areas of personal interest for pursuit in the future.</li> </ul>		

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

<b><i>Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Participate with class in dramatizations, recitations and discussions of stories, poems, and other forms of literature.</li> <li>• Show respect for the ideas of others.</li> <li>• Give positive feedback.</li> <li>• Respect rules and procedures as responsible library users.</li> <li>• Share favorite literature, both fiction and nonfiction.</li> <li>• Begin to create collaborative projects.</li> <li>• Share information and creative products with others, using diverse formats, both print and nonprint.</li> <li>• Demonstrate courtesy, good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Participate with class in dramatizations, recitations and discussions of stories, poems, and other forms of literature.</li> <li>• Show respect for the ideas of others.</li> <li>• Give positive feedback.</li> <li>• Respect rules and procedures as responsible library users.</li> <li>• Share favorite literature, both fiction and nonfiction.</li> <li>• Begin to create collaborative projects.</li> <li>• Share information and creative products with others, using diverse formats, both print and nonprint.</li> <li>• Demonstrate courtesy, good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Participate with class in dramatizations, recitations and discussions of stories, poems, and other forms of literature.</li> <li>• Show respect for the ideas of others.</li> <li>• Give positive feedback.</li> <li>• Respect rules and procedures as responsible library users.</li> <li>• Share favorite literature, both fiction and nonfiction.</li> <li>• Begin to create collaborative projects.</li> <li>• Share information and creative products with others, using diverse formats, both print and nonprint.</li> <li>• Demonstrate courtesy, good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

***Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.***  
***(continued)***

<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Show respect for and respond to ideas of others.</li> <li>• Accurately describe or restate ideas of others.</li> <li>• Acknowledge personal and group achievements.</li> <li>• Rely on feedback to improve product and process.</li> <li>• Respect the guidelines for responsible and ethical use of information resources.</li> <li>• Share favorite literature.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Develop a product with peers and share with others.</li> <li>• Develop projects with peers that can be shared electronically and can challenge other students to answer questions or give opinions adding to the content (e.g., shared book reviews, shared slide presentations).</li> <li>• Demonstrate courtesy good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Show respect for and respond to ideas of others.</li> <li>• Accurately describe or restate ideas of others.</li> <li>• Acknowledge personal and group achievements.</li> <li>• Rely on feedback to improve product and process.</li> <li>• Respect the guidelines for responsible and ethical use of information resources.</li> <li>• Share favorite literature.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Develop a product with peers and share with others.</li> <li>• Develop projects with peers that can be shared electronically and can challenge other students to answer questions or give opinions adding to the content (e.g., shared book reviews, shared slide presentations).</li> <li>• Demonstrate courtesy good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Show respect for and respond to ideas of others.</li> <li>• Accurately describe or restate ideas of others.</li> <li>• Acknowledge personal and group achievements.</li> <li>• Rely on feedback to improve product and process.</li> <li>• Respect the guidelines for responsible and ethical use of information resources.</li> <li>• Share favorite literature.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Develop a product with peers and share with others.</li> <li>• Develop projects with peers that can be shared electronically and can challenge other students to answer questions or give opinions adding to the content (e.g., shared book reviews, shared slide presentations).</li> <li>• Demonstrate courtesy good citizenship, and Christian caring in dealing with other people and materials.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Offer information and opinions at appropriate times in group discussions.</li> <li>• Encourage team members to share ideas and opinions.</li> <li>• Ask questions of others in a group to elicit their information and opinions.</li> <li>• Accurately describe or summarize ideas of others.</li> <li>• Practice responsible and ethical use of information resources, both in their own library and in other institutions.</li> <li>• Share reading experiences and favorite literature to build a relationship with others.</li> <li>• Use interactive tools to exchange data collected, collaborate to design products or solve problems, and learn curriculum.</li> </ul>		

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

<b><i>Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Choose and maintain a focus in a short piece of writing.</li> <li>Use a variety of ways (through art, music, movement, and oral and written language) to present information and main ideas; use oral and written language in a variety of formats (e.g., narrative text, poetry, podcasts).</li> </ul>	<ul style="list-style-type: none"> <li>Choose and maintain a focus in a short piece of writing.</li> <li>Use a variety of ways (through art, music, movement, and oral and written language) to present information and main ideas; use oral and written language in a variety of formats (e.g., narrative text, poetry, podcasts).</li> </ul>	<ul style="list-style-type: none"> <li>Choose and maintain a focus in a short piece of writing.</li> <li>Use a variety of ways (through art, music, movement, and oral and written language) to present information and main ideas; use oral and written language in a variety of formats (e.g., narrative text, poetry, podcasts).</li> <li>Add details from personal experience and research to support ideas.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Use significant details and relevant information to develop meaning.</li> <li>Present information coherently in oral, written, and visual sequence.</li> <li>Use clear and appropriate vocabulary to convey the intended message.</li> <li>Speak clearly to convey meaning.</li> </ul>	<ul style="list-style-type: none"> <li>Use significant details and relevant information to develop meaning.</li> <li>Present information coherently in oral, written, and visual sequence.</li> <li>Use clear and appropriate vocabulary to convey the intended message.</li> <li>Speak clearly to convey meaning.</li> </ul>	<ul style="list-style-type: none"> <li>Use significant details and relevant information to develop meaning.</li> <li>Present information coherently in oral, written, and visual sequence.</li> <li>Use clear and appropriate vocabulary to convey the intended message.</li> <li>Speak clearly to convey meaning.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Present conclusions so that main ideas are clearly stated and supported by evidence.</li> <li>Use relevant ideas and details to show insight into people, events, new knowledge, and personal background.</li> <li>Use dramatic, audio, and video presentation as appropriate for subject and audience.</li> <li>Adjust pacing, volume, and intonation appropriate to content and purpose.</li> </ul>		

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

<b><i>Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Use word processing and drawing tools to organize and communicate ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing and drawing tools to organize and communicate ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use word processing and drawing tools to organize and communicate ideas.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Use various technology tools to retrieve and organize information with guidance.</li> <li>Use a variety of media and formats to create and edit products that communicate syntheses of information and ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use various technology tools to retrieve and organize information with guidance.</li> <li>Use a variety of media and formats to create and edit products that communicate syntheses of information and ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use various technology tools to retrieve and organize information with guidance.</li> <li>Use a variety of media and formats to create and edit products that communicate syntheses of information and ideas.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Use appropriate media and formats to design and develop products that clearly and coherently display new understanding.</li> </ul>		
<b><i>Indicator 3.1.5: Connect learning to community issues.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Express personal connections to the topic or question.</li> </ul>	<ul style="list-style-type: none"> <li>Express personal connections to the topic or question.</li> <li>Identify how the topic or question relates to a real-world need.</li> </ul>	<ul style="list-style-type: none"> <li>Express personal connections to the topic or question.</li> <li>Identify how the topic or question relates to a real-world need.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Gather ideas and information from different points of view.</li> <li>Base opinions on information from multiple sources of authority.</li> <li>Examine the concept of freedom of speech and explain why it is important.</li> <li>Connect ideas and information to situations and people in the larger community.</li> </ul>	<ul style="list-style-type: none"> <li>Gather ideas and information from different points of view.</li> <li>Base opinions on information from multiple sources of authority.</li> <li>Examine the concept of freedom of speech and explain why it is important.</li> <li>Connect ideas and information to situations and people in the larger community.</li> </ul>	<ul style="list-style-type: none"> <li>Gather ideas and information from different points of view.</li> <li>Base opinions on information from multiple sources of authority.</li> <li>Examine the concept of freedom of speech and explain why it is important.</li> <li>Connect ideas and information to situations and people in the larger community.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Identify and address community and global issues.</li> <li>Use real-world examples to establish authenticity.</li> <li>Seek information from different sources to get balanced points of view.</li> <li>Articulate the importance of intellectual freedom to a democratic society.</li> </ul>		

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

<b><i>Indicator 3.1.6: Use information and technology ethically and responsibly.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Credit sources by citing author and title.</li> <li>• Distinguish between acceptable and unacceptable computer use.</li> <li>• Follow school guidelines related to the acceptable use of technology.</li> <li>• Use technology in appropriate ways outside school.</li> </ul>	<ul style="list-style-type: none"> <li>• Credit sources by citing author and title.</li> <li>• Distinguish between acceptable and unacceptable computer use.</li> <li>• Follow school guidelines related to the acceptable use of technology.</li> <li>• Use technology in appropriate ways outside school.</li> </ul>	<ul style="list-style-type: none"> <li>• Credit sources by citing author and title.</li> <li>• Distinguish between acceptable and unacceptable computer use.</li> <li>• Follow school guidelines related to the acceptable use of technology.</li> <li>• Use technology in appropriate ways outside school.</li> <li>• Rephrase rather than copy whole sentences with guidance.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Demonstrate understanding of plagiarism by paraphrasing information or noting direct quotes, with guidance.</li> <li>• Understand that authors and illustrators own their writings and art, and it is against the law to copy their work.</li> <li>• Credit all sources properly in simple citation.</li> <li>• Observe web safety procedures including safeguarding personal information.</li> <li>• Practice responsible use of technology and describe personal consequences of inappropriate use.</li> <li>• Respect privacy of others (e.g., e-mail, files, passwords, book checkout, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of plagiarism by paraphrasing information or noting direct quotes, with guidance.</li> <li>• Understand that authors and illustrators own their writings and art, and it is against the law to copy their work.</li> <li>• Credit all sources properly in simple citation.</li> <li>• Observe web safety procedures including safeguarding personal information.</li> <li>• Practice responsible use of technology and describe personal consequences of inappropriate use.</li> <li>• Respect privacy of others (e.g., e-mail, files, passwords, book checkout, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of plagiarism by paraphrasing information or noting direct quotes, with guidance.</li> <li>• Understand that authors and illustrators own their writings and art, and it is against the law to copy their work.</li> <li>• Credit all sources properly in simple citation.</li> <li>• Observe web safety procedures including safeguarding personal information.</li> <li>• Practice responsible use of technology and describe personal consequences of inappropriate use.</li> <li>• Respect privacy of others (e.g., e-mail, files, passwords, book checkout, etc.).</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Avoid plagiarism by rephrasing information in his/her own words.</li> <li>• Document quotations and cite sources using correct bibliographic format.</li> <li>• Abide by Acceptable Use Policy by accessing only appropriate information.</li> <li>• Use programs and websites responsibly and ethically.</li> </ul>		

## Standard 4: Pursue personal and aesthetic growth.

### *Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.*

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>• Request and choose materials related to personal interests.</li> <li>• Read, view, and listen to a variety of fiction and nonfiction for enjoyment and information.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> </ul>	<ul style="list-style-type: none"> <li>• Request and choose fiction and nonfiction materials related to personal interests.</li> <li>• Read, view, and listen to a variety of fiction and nonfiction for enjoyment and information.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> <li>• Set reading goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Request and choose fiction and nonfiction materials related to personal interests.</li> <li>• Read, view, and listen to a variety of fiction and nonfiction for enjoyment and information.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> <li>• Set reading goals.</li> <li>• Begin to recognize that different genres require different reading, listening, or viewing strategies.</li> </ul>
Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>• Read, listen to, and view a range of resources for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to explore personal interests.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> <li>• Set reading goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Read, listen to, and view a range of resources for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to explore personal interests.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> <li>• Set reading goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Read, listen to, and view a range of resources for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to explore personal interests.</li> <li>• Visit the public library to attend programs, seek help as needed, and check out materials to read.</li> <li>• Set reading goals.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>• Read, listen to, and view an increasingly wide range of genres and formats for recreation and information.</li> <li>• Independently locate and select information for personal, hobby, or vocational interests.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>		

**Standard 4: Pursue personal and aesthetic growth.**

***Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.***

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>• Read widely from multicultural texts in various genres to find out about self and the surrounding world.</li> <li>• Predict what will happen next in a story.</li> <li>• Draw conclusions about main idea of a story.</li> <li>• Identify author’s purpose and connect illustrations to a story.</li> <li>• Compare and contrast characters in two different stories or plots in two stories by the same author.</li> <li>• Retell a story using his/her own words and pictures.</li> </ul>	<ul style="list-style-type: none"> <li>• Read widely from multicultural texts in various genres to find out about self and the surrounding world.</li> <li>• Predict what will happen next in a story.</li> <li>• Draw conclusions about main idea of a story.</li> <li>• Identify author’s purpose and connect illustrations to a story.</li> <li>• Compare and contrast characters in two different stories or plots in two stories by the same author.</li> <li>• Retell a story using his/her own words and pictures.</li> <li>• Identify nursery rhyme characters and situations.</li> </ul>	<ul style="list-style-type: none"> <li>• Read widely from multicultural texts in various genres to find out about self and the surrounding world.</li> <li>• Predict what will happen next in a story.</li> <li>• Draw conclusions about main idea of a story.</li> <li>• Identify author’s purpose and connect illustrations to a story.</li> <li>• Compare and contrast characters in two different stories or plots in two stories by the same author.</li> <li>• Retell a story using his/her own words and pictures.</li> <li>• Describe how an illustrator’s style and use of elements and media represent and extend the meaning of the story or the narrative text.</li> <li>• Understand that the Caldecott Medal is awarded for illustrations and is familiar with Caldecott medal books.</li> </ul>

## Standard 4: Pursue personal and aesthetic growth.

<b><i>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading. (cont.)</i></b>		
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Use evidence from the text to discuss the author’s purpose.</li> <li>• Read widely to explore new ideas.</li> <li>• Predict and infer about events and characters.</li> <li>• Identify problems and solutions in a story.</li> <li>• Describe how an illustrator’s style and use of elements and media represent and extend the meaning of the story or the narrative text.</li> <li>• Connect story to previous reading.</li> <li>• Recognize features of various genres and use different reading strategies for understanding.</li> <li>• Demonstrate knowledge of favorite authors and genres.</li> <li>• Identify characters, setting and plot in stories or folk lore.</li> </ul>	<ul style="list-style-type: none"> <li>• Use evidence from the text to discuss the author’s purpose.</li> <li>• Read widely to explore new ideas.</li> <li>• Predict and infer about events and characters.</li> <li>• Identify problems and solutions in a story.</li> <li>• Describe how an illustrator’s style and use of elements and media represent and extend the meaning of the story or the narrative text.</li> <li>• Connect story to previous reading.</li> <li>• Recognize features of various genres and use different reading strategies for understanding.</li> <li>• Demonstrate knowledge of favorite authors and genres.</li> <li>• Recognize a biography, autobiography, and collective biography.</li> </ul>	<ul style="list-style-type: none"> <li>• Use evidence from the text to discuss the author’s purpose.</li> <li>• Read widely to explore new ideas.</li> <li>• Predict and infer about events and characters.</li> <li>• Identify problems and solutions in a story.</li> <li>• Describe how an illustrator’s style and use of elements and media represent and extend the meaning of the story or the narrative text.</li> <li>• Connect story to previous reading.</li> <li>• Recognize features of various genres and use different reading strategies for understanding.</li> <li>• Demonstrate knowledge of favorite authors and genres.</li> <li>• Understand the Newbery Medal is awarded for writing and is familiar with Newbery Medal books.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Read books that connect their own experiences.</li> <li>• Read with purpose to investigate new ideas beyond the required curriculum.</li> <li>• Read books from various genres.</li> <li>• Compare and contrast story elements in two literary works.</li> <li>• Demonstrate understanding that texts, both narrative and expository, are written by authors expressing their own ideas.</li> <li>• Recognize the author’s point of view; consider alternative perspectives.</li> </ul>		

## Standard 4: Pursue personal and aesthetic growth.

<b><i>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Express feelings about characters and events in a story.</li> <li>• Make connections between literature and their own experiences.</li> <li>• Write about or orally share reactions to imaginative stories and performances.</li> <li>• Retell stories using the correct sequence of events.</li> <li>• Identify plot, characters, times, and places in a story.</li> <li>• Discuss favorite books and authors.</li> <li>• Respond to the values presented in stories.</li> </ul>	<ul style="list-style-type: none"> <li>• Express feelings about characters and events in a story.</li> <li>• Make connections between literature and their own experiences.</li> <li>• Write about or orally share reactions to imaginative stories and performances.</li> <li>• Retell stories using the correct sequence of events.</li> <li>• Identify plot, characters, times, and places in a story.</li> <li>• Discuss favorite books and authors.</li> <li>• Respond to the values presented in stories.</li> </ul>	<ul style="list-style-type: none"> <li>• Express feelings about characters and events in a story.</li> <li>• Make connections between literature and their own experiences.</li> <li>• Write about or orally share reactions to imaginative stories and performances.</li> <li>• Retell stories using the correct sequence of events.</li> <li>• Identify plot, characters, times, and places in a story.</li> <li>• Discuss favorite books and authors.</li> <li>• Respond to the values presented in stories.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Connect his/her own feelings to emotions, characters, and events portrayed in a literary work.</li> <li>• Use personal experiences to stimulate responses to literature and art.</li> <li>• Restate and interpret ideas presented through creative formats.</li> <li>• Identify story elements in various fiction genres.</li> <li>• Use evidence from stories to discuss characters, setting, plot, time, and place.</li> <li>• Discuss theme of stories, using evidence to support opinions.</li> <li>• Participate in book talks and book discussion groups.</li> <li>• Respond to the values presented in stories.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect his/her own feelings to emotions, characters, and events portrayed in a literary work.</li> <li>• Use personal experiences to stimulate responses to literature and art.</li> <li>• Restate and interpret ideas presented through creative formats.</li> <li>• Identify story elements in various fiction genres.</li> <li>• Use evidence from stories to discuss characters, setting, plot, time, and place.</li> <li>• Discuss theme of stories, using evidence to support opinions.</li> <li>• Participate in book talks and book discussion groups.</li> <li>• Respond to the values presented in stories.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect his/her own feelings to emotions, characters, and events portrayed in a literary work.</li> <li>• Use personal experiences to stimulate responses to literature and art.</li> <li>• Restate and interpret ideas presented through creative formats.</li> <li>• Identify story elements in various fiction genres.</li> <li>• Use evidence from stories to discuss characters, setting, plot, time, and place.</li> <li>• Discuss theme of stories, using evidence to support opinions.</li> <li>• Participate in book talks and book discussion groups.</li> <li>• Respond to the values presented in stories.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Respond to the images and feelings evoked by a literary or artistic work.</li> <li>• Connect text to personal experiences.</li> <li>• Use illustrations, context, graphics, and layout to extract meaning from different formats.</li> <li>• Interpret literary elements (plot, setting, characters, time) from evidence presented in the text.</li> <li>• Draw conclusions about the theme from evidence in the text.</li> <li>• Recognize how characters change.</li> <li>• Share reading, listening, and viewing experiences in a variety of ways.</li> </ul>		

## Standard 4: Pursue personal and aesthetic growth.

### *Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.*

Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>• Select picture, fiction, and information books; try some books in other genres (poetry, fairy tales) routinely.</li> <li>• Select information in various formats and genres based on suggestions from teacher or School Library Media Specialist and on personal interests.</li> <li>• Select some books at the appropriate reading level, other books to be read aloud, and other more challenging books of particular interest for browsing and enjoyment.</li> <li>• Explain personal criteria for selecting a particular resource.</li> </ul>	<ul style="list-style-type: none"> <li>• Select picture, fiction, and information books; try some books in other genres (poetry, fairy tales, drama) routinely.</li> <li>• Select information in various formats and genres based on suggestions from teacher or School Library Media Specialist and on personal interests.</li> <li>• Select some books at the appropriate reading level, other books to be read aloud, and other more challenging books of particular interest for browsing and enjoyment.</li> <li>• Explain personal criteria for selecting a particular resource.</li> </ul>	<ul style="list-style-type: none"> <li>• Select picture, fiction, and information books; try some books in other genres (poetry, fairy tales, biography) routinely.</li> <li>• Select information in various formats and genres based on suggestions from teacher or School Library Media Specialist and on personal interests.</li> <li>• Select some books at the appropriate reading level, other books to be read aloud, and other more challenging books of particular interest for browsing and enjoyment.</li> <li>• Explain personal criteria for selecting a particular resource.</li> </ul>
Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>• Select books from favorite authors and genres; try new genres when suggested.</li> <li>• Select information in various formats based on a theme, topic, and connection to classroom learning or personal interest.</li> <li>• Select both “just right” books and challenging books, routinely.</li> <li>• Read the multiple works of a single author.</li> <li>• Explain why some authors and genres have become favorites.</li> <li>• Select appropriate print, nonprint, and electronic materials on an individual level.</li> </ul>	<ul style="list-style-type: none"> <li>• Select books from favorite authors and genres; try new genres when suggested (e.g., folktales, historical fiction, realistic fiction, and tall tales).</li> <li>• Select information in various formats based on a theme, topic, and connection to classroom learning or personal interest.</li> <li>• Select both “just right” books and challenging books, routinely.</li> <li>• Read the multiple works of a single author.</li> <li>• Explain why some authors and genres have become favorites.</li> <li>• Select appropriate print, nonprint, and electronic materials on an individual level.</li> </ul>	<ul style="list-style-type: none"> <li>• Select books from favorite authors and genres; try new genres when suggested (e.g., legend, myth, and autobiography).</li> <li>• Select information in various formats based on a theme, topic, and connection to classroom learning or personal interest.</li> <li>• Select both “just right” books and challenging books, routinely.</li> <li>• Read the multiple works of a single author.</li> <li>• Explain why some authors and genres have become favorites.</li> <li>• Select appropriate print, nonprint, and electronic materials on an individual level.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>• Read a variety of genres, including short stories, novels, poems, plays, drama, myths, films, and electronic magazines and books.</li> <li>• Describe the characteristics of different genres.</li> <li>• Explore new genres that fulfill interests and reading level (graphic novels, magazines, online magazines, e-books).</li> <li>• Select resources for classroom learning and for personal exploration.</li> <li>• Select resources on topics of interest at both a comfortable reading level and at higher levels of comprehension.</li> <li>• Select print, nonprint, and electronic materials based on personal interests and knowledge of authors.</li> <li>• Maintain personal reading lists.</li> </ul>		

## Standard 4: Pursue personal and aesthetic growth.

<i>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</i>		
Kindergarten	Grade 1	Grade 2
<ul style="list-style-type: none"> <li>• Prior to reading a book, gain background knowledge about the author or subject by discussing it with friend, teacher, or parent.</li> <li>• Demonstrate comprehension of stories read independently or shared aloud.</li> <li>• Develop criteria for deciding if a book matches interests and reading levels.</li> <li>• Find and read (or be read) books that match interests and comprehension levels.</li> </ul>	<ul style="list-style-type: none"> <li>• Prior to reading a book, gain background knowledge about the author or subject by discussing it with friend, teacher, or parent.</li> <li>• Demonstrate comprehension of stories read independently or shared aloud.</li> <li>• Develop criteria for deciding if a book matches interests and reading levels.</li> <li>• Find and read (or be read) books that match interests and comprehension levels.</li> </ul>	<ul style="list-style-type: none"> <li>• Prior to reading a book, gain background knowledge about the author or subject by discussing it with friend, teacher, or parent.</li> <li>• Demonstrate comprehension of stories read independently or shared aloud.</li> <li>• Develop criteria for deciding if a book matches interests and reading levels.</li> <li>• Find and read (or be read) books that match interests and comprehension levels.</li> </ul>
Grade 3	Grade 4	Grade 5
<ul style="list-style-type: none"> <li>• Use prior knowledge to understand and compare literature.</li> <li>• Understand literal meaning and identify the main points reflected in a work.</li> <li>• Compare the ideas in various types of resources to experiences in real life.</li> </ul>	<ul style="list-style-type: none"> <li>• Use prior knowledge to understand and compare literature.</li> <li>• Understand literal meaning and identify the main points reflected in a work.</li> <li>• Compare the ideas in various types of resources to experiences in real life.</li> </ul>	<ul style="list-style-type: none"> <li>• Use prior knowledge to understand and compare literature.</li> <li>• Understand literal meaning and identify the main points reflected in a work.</li> <li>• Compare the ideas in various types of resources to experiences in real life.</li> </ul>
Grade 6,7,8		
<ul style="list-style-type: none"> <li>• Demonstrate understanding of literal and implied meanings by explaining how new meanings fit with what is already known.</li> <li>• Connect ideas reflected in various resources to life experiences at home, in school, and with peers.</li> <li>• Keep logs or records of new and up-to-date ideas by reading online information, magazines, and other current sources.</li> <li>• Check ideas for accuracy by analyzing the authority of the source and validating the information through multiple resources.</li> </ul>		

## Standard 4: Pursue personal and aesthetic growth.

<b><i>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Draw pictures of main ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Take notes using graphic organizer provided by teacher or School Library Media Specialist with guidance.</li> <li>• Draw pictures of the main ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Take notes using graphic organizer provided by teacher or School Library Media Specialist.</li> <li>• Draw pictures of the main ideas.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Use simple graphic organizers and technology tools to capture the main ideas and their relationships to each other.</li> <li>• Use two-column approach to note taking to capture personal connections to information.</li> </ul>	<ul style="list-style-type: none"> <li>• Use simple graphic organizers and technology tools to capture the main ideas and their relationships to each other.</li> <li>• Use two-column approach to note taking to capture personal connections to information.</li> </ul>	<ul style="list-style-type: none"> <li>• Use simple graphic organizers and technology tools to capture the main ideas and their relationships to each other.</li> <li>• Use two-column approach to note taking to capture personal connections to information.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Develop visual pictures of the main ideas and design concept maps, webs, or graphics to capture the ideas.</li> <li>• Identify their own learning styles and organize ideas accordingly (e.g., linear, graphic)</li> <li>• Use different forms of note-taking to capture personal connections to information.</li> </ul>		
<b><i>Indicator 4.1.7: Use social networks and information tools to gather and share information.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>• Locate information for personal interests and school assignments in print, nonprint, electronic sources with guidance from the School Library Media Specialist.</li> </ul>	<ul style="list-style-type: none"> <li>• Locate information for personal interests and school assignments in print, nonprint, electronic sources with guidance from the School Library Media Specialist.</li> <li>• Experiment with online catalog and Web resources to locate information.</li> </ul>	<ul style="list-style-type: none"> <li>• Locate information for personal interests and school assignments in print, nonprint, electronic sources with guidance from the School Library Media Specialist.</li> <li>• Experiment with online catalog and Web resources to locate information.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>• Use basic strategies (author, title, subject) to locate information using the library's online catalog.</li> </ul>	<ul style="list-style-type: none"> <li>• Use basic strategies (author, title, subject) to locate information using the library's online catalog.</li> </ul>	<ul style="list-style-type: none"> <li>• Use basic strategies (author, title, subject) to locate information using the library's online catalog.</li> <li>• Use social networking tools to create and share information.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>• Use advanced strategies (Boolean searches) to locate information about personal interest topics in the library's online catalog.</li> <li>• Use technology tools and resources to collect, organize, and evaluate information that addresses issues or interests.</li> <li>• Apply technology productivity tools to meet personal needs.</li> <li>• Use social networking tools to responsibly and safely share information and ideas and to collaborate with others.</li> </ul>		

**Standard 4: Pursue personal and aesthetic growth.**

<b><i>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</i></b>		
<b>Kindergarten</b>	<b>Grade 1</b>	<b>Grade 2</b>
<ul style="list-style-type: none"> <li>Express feelings about a story through pictures and words.</li> <li>Use technology tools to create and present ideas.</li> <li>Express their own ideas through simple products in different formats.</li> </ul>	<ul style="list-style-type: none"> <li>Express feelings about a story through pictures and words.</li> <li>Use technology tools to create and present ideas.</li> <li>Express their own ideas through simple products in different formats.</li> </ul>	<ul style="list-style-type: none"> <li>Express feelings about a story through pictures and words.</li> <li>Use technology tools to create and present ideas.</li> <li>Express their own ideas through simple products in different formats.</li> </ul>
<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>
<ul style="list-style-type: none"> <li>Present creative products in a variety of formats.</li> <li>Use technology applications to create documents and visualizations of new learning.</li> <li>Use multimedia authoring tools for independent and collaborative publishing activities.</li> </ul>	<ul style="list-style-type: none"> <li>Present creative products in a variety of formats.</li> <li>Use technology applications to create documents and visualizations of new learning.</li> <li>Use multimedia authoring tools for independent and collaborative publishing activities.</li> </ul>	<ul style="list-style-type: none"> <li>Present creative products in a variety of formats.</li> <li>Use technology applications to create documents and visualizations of new learning.</li> <li>Use multimedia authoring tools for independent and collaborative publishing activities.</li> </ul>
<b>Grade 6,7,8</b>		
<ul style="list-style-type: none"> <li>Create original products based on responses to literature and other creative works of art.</li> <li>Experiment with various types of multimedia applications for artistic and personal expression.</li> </ul>		

# **Educational Technology**

## Archdiocese of Louisville Technology Curriculum 2016

### Archdiocese of Louisville Technology Curriculum K-8, 2016

The Archdiocese of Louisville strives to support schools in developing inquisitive, creative, resourceful thinkers; informed citizens; effective problem-solvers; groundbreaking pioneers; and visionary leaders. Pope Francis, in his encyclical *Laudato Si*, states, “If an artist cannot be stopped from using his or her creativity, neither should those who possess particular gifts for the advancement of science and technology be prevented from using their God-given talents for the service of others.”<sup>1</sup> Our purpose is to foster the excellence that flows from the ability to use today’s information, tools, and technologies effectively and a commitment to lifelong learning – all necessary to be active, creative, knowledgeable, and ethical participants in our global society.<sup>2</sup> We believe that students can no longer learn everything there is to know while in school or within their lifetimes. Their learning must focus on how to identify, retrieve, evaluate, and use information for a variety of purposes; communicate effectively using appropriate technologies and acceptable social guidelines; and become good digital citizens who practice safety and respect the privacy of others.<sup>3</sup> “The digital world can be an environment rich in humanity; a network not of wires but of people,” Pope Francis stated in his 2014 message to the 48<sup>th</sup> World Communications Day.<sup>4</sup> We further believe that all students can learn and that teachers must look for ways to incorporate technology into the learning environment to differentiate learning for students. Teachers must provide engaging and empowering learning experiences both in and out of school that prepare students to be active, creative, knowledgeable, and ethical Catholics in our global society. Technology is a powerful enabler of learning but teachers must not abdicate their role in facilitating learning. They must support their students’ engagement with technology resources for learning, connecting the curriculum with the technology, highlighting important subject matter, encouraging students to use full explanations and 21<sup>st</sup> century skills and encouraging students to be responsible for their own learning.<sup>5</sup> Teachers must provide meaningful feedback to students through assessments powered by technology. The technology that enables connected teaching is available now. We must introduce connected teaching into our archdiocesan schools as soon as possible so that students may experience opportunities to customize their learning. Teachers can model lifelong learning as they use more and more technology in their instruction. This curriculum based on the 2016 ISTE Standards for Students provides a springboard for teachers to implement technology tools that facilitate and support learning in ways that were not available before. It is incumbent on us to use the technology available to provide the best learning environment possible for all students so that they can take their places as developing inquisitive, creative, resourceful thinkers; informed citizens; effective problem-solvers; groundbreaking pioneers; and visionary leaders.

<sup>1</sup>Pope Francis. “Laudato Si’”. Vatican City, Italy: May 2015, p. 38.

<sup>2</sup>U.S. Department of Education, Office of Educational Technology. “Transforming American Education, Learning Powered by Technology”. Alexandria, VA: Education Publication Center, November 2010, p. 1.

<sup>3</sup>U.S. Department of Education, Office of Educational Technology. “Transforming American Education, Learning Powered by Technology”. Alexandria, VA: Education Publication Center, November 2010, p. 13.

<sup>4</sup>Pope Francis. “48<sup>th</sup> World Communications Day Letter”. Vatican City, Italy: January 2014, p.1.

<sup>5</sup>U.S. Department of Education, Office of Educational Technology. “Transforming American Education, Learning Powered by Technology”. Alexandria, VA: Education Publication Center, November 2010, p. 51.

**Archdiocese of Louisville  
Technology Curriculum 2016  
Kindergarten Through Grade Two**

<b>Empowered Learner</b>	
Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	will work with teachers to set learning goals using technology will reflect on the differences in using technology and not using technology
b. build networks and customize their learning environments in ways that support the learning process.	will build learning networks by sharing original stories. (2a, 2007)
c. use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	will be polite as they share with each other in group projects. (5b, 2007)
d. understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	<p>will:</p> <ul style="list-style-type: none"> <li>• turn the computer on and log in.</li> <li>• get online</li> <li>• take care of the technology equipment at school.</li> <li>• click, drag, use the mouse or touchscreen, and find specific keys on the keyboard.</li> <li>• name and save a document.</li> <li>• adjust the volume on their computer. (6a, 2007)</li> </ul> <p>will:</p> <ul style="list-style-type: none"> <li>• open a web browser and use a website.</li> <li>• change a picture or font style and color.</li> <li>• use a program such as Paint to create a work of art.</li> <li>• record their voices into a presentation. (6b, 2007)</li> </ul> <p>will:</p> <ul style="list-style-type: none"> <li>• adjust the volume on their computer.</li> <li>• plug headphones into the computer.</li> <li>• quit and restart a program that is not working.</li> <li>• refresh a website. (6c, 2007)</li> </ul> <p>will tell differences between computers, laptops, iPads, and software programs and apps. (6d, 2007)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Kindergarten Through Grade Two**

## Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Students:

ISTE	Archdiocesan Educational Objectives
<p>a. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p>	<p>will be polite as they share with each other in group projects.</p> <p>will:</p> <ul style="list-style-type: none"> <li>• identify appropriate online manners.</li> <li>• talk about cyber bullying.</li> <li>• work with their teachers and class on a social networking site such as Edmodo. (5b,5c, 2007)</li> </ul> <p>will receive permission from a parent or teacher before sharing any information online. (5a, 2007)</p>
<p>b. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p>	<p>will identify the types of information that should and should not be shared online. (5a, 2007)</p> <p>will use websites such as <a href="http://www.brainpopjr.com">www.brainpopjr.com</a>, Disney Surf Swell Island, and Net Smartz Kids and iSafe to learn about Internet safety. (5a, 2007)</p> <p>will notify an adult if they experience any inappropriate material online. (5a, 2007)</p> <p>will protect their passwords from others. (5a, 2007)</p> <p>will place appropriate pictures online. (5d, 2007)</p> <p>will work with others to promote being a good digital citizen. (5d, 2007)</p>
<p>c. demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p>	<p>will explain the differences between their work and the work of other people. (5a, 2007)</p>
<p>d. manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p>	<p>will receive permission from a parent or teacher before sharing any information online. 5a, 2007)</p> <p>will work together to use technology to make a presentation using a program such as PowerPoint or Prezi. (2d, 2016)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Kindergarten Through Grade Two**

## Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
<p>a. plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.</p>	<p>will create a report or presentation from information found using technology. (3a, 2007)</p> <p>will add information to a spreadsheet and be able to explain the data.</p> <p>will watch and evaluate videos on sites such as KET Encyclomedia.</p> <p>will locate information on the Internet using search engines such as Google, <a href="http://www.kidrex.org">www.kidrex.org</a>, and <a href="http://www.kidsclick.org">www.kidsclick.org</a> and bookmark specific websites. (3b, 2007)</p>
<p>b. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</p>	<p>will research topics, answer webquests, create digital stories, etc. (3c, 2007)</p> <p>will record their sources to cite when presenting their results. (3b, 2007)</p>
<p>c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</p>	<p>will understand not everything on the Internet is true. (3c, 2007)</p> <p>will gather multiple sources on one topic. (3c, 2007)</p> <p>will use spreadsheets, charts or graphs to analyze and present data. (3c, 2007)</p>
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
<p>d. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>	<p>will use technology to find multiple solutions to a problem.</p> <p>will use coding through websites such as <a href="http://www.code.org">www.code.org</a> .</p> <p>will use technology to participate in class discussions such as common Google Docs or Today's Meet. (4d, 2007)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Kindergarten Through Grade Two**

<b>Innovative Designer</b>	
Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.	<p>will apply information on a particular topic to develop and design something new. (1a, 2007)</p> <p>will identify problems in their world or topics studied in social studies or science. (4a, 2007)</p> <p>will use online resources to locate information on a problem. (4a, 2007)</p> <p>will use presentation tools to explain a problem and potential solutions.</p> <p>will construct models or create code to solve a problem.</p> <p>will use online interactive models or simulations. (4d, 2007)</p>
b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	will create project timelines. (4b, 2007)
c. develop, test and refine prototypes as part of a cyclical design process.	<p>will use presentation tools.</p> <p>will use online interactive models or simulations to investigate the consequences of alternative solutions. (4d, 2007)</p>
d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	<p>will use technology to find multiple solutions to a problem.</p> <p>will code through websites such as <a href="http://www.code.org">www.code.org</a> .</p> <p>will use technology to participate in class discussions. (4d, 2007)</p>

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Kindergarten Through Grade Two**

<b>Computational Thinker</b>	
Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Outcomes</b>
a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.	<p>will identify school, community, and world problems or topics studied in social studies or science.</p> <p>will use online resources to locate information on the problem. (4a, 2007)</p>
b. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.	<p>will use tools such as timelines and graphs to predict future consequences of historical or present events.(1d, 2007)</p> <p>will compile the information they gather into a written, graphic, and/or oral presentation that includes identification of their sources. (3d, 2007)</p> <p>will use spreadsheets, charts, or graphs to analyze and present data and to recommend a solution. (4c, 2007)</p>
c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	<p>will use presentation tools (Shadow Puppet Edu) to persuade others to implement a solution.</p> <p>will construct models or create code to solve a problem.</p> <p>will use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch Jr., Kodables) (4d, 2007)</p>
d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.	<p>will practice sequencing of events/steps of a process to determine the best solution. (4d, 2007)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Kindergarten Through Grade Two**

<b>Creative Communicator</b>	
Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	<p>will begin to distinguish between sources that present factual information and those that present opinions or untrue information. (3c, 2007)</p> <p>will open a web browser and use a website. will change a picture or font style and color. will write using word processing tools. will organize data using spreadsheets. will use a program such as Paint to create a work of art. will record their voices into a presentation. (6b, 2007)</p>
b. create original works or responsibly repurpose or remix digital resources into new creations.	<p>will apply information on a particular topic to develop and design something new giving credit to others' ideas. (1a, 2007)</p> <p>will use various digital tools and applications such as: voice and sound recording tools; word processing, publishing, and presentation tools; video recording and editing tools; image editing tools; graphics and 3D design tools; and coding software to create original works. (1b, 2007)</p>
c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	<p>will use interactive models or simulations to explore systems and issues that they study in science, math, and social studies. (1c, 2007)</p> <p>will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas. (for example Sock Puppet, Story Jumper, Puppet Pals) (2b, 2007)</p>
d. Publish or present content that customizes the message and medium for their intended audience.	<p>will use digital tools, applications and video communication tools to work collaboratively to tailor the message of their presentation to the audience (for example, parents, teachers, other students). (2a, 2007)</p> <p>will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas. (for example, Show Me and Voice Thread)(2b, 2007)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Grade Three through Grade Five**

<b>Global Collaborator</b>	
Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.	<p>will use digital tools and applications to work together to write, add graphics and share stories. (2a, 2007)</p> <p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (2c, 2007)</p>
b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	will use digital tools and applications interact with other students or experts. (2a, 2007)
c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.	<p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (for example: Kidblog, Word Press, Blogger, Today's Meet) (2d, 2007)</p> <p>will use applications such as brainstorming tools (for example Padlet, Popplet and NoteApp), graphic organizers, tables or timelines (for example ReadWriteThink's Timeline Student Interactive, Timetoast and Our Story, 3D Printing) to plan action steps that could solve problems. (4b, 2007)</p>
d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.	<p>will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)</p> <p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (for example: Kidblog, Word Press, Blogger, Today's Meet) (2c, 2007)</p> <p>will use presentation tools (Shadow Puppet Edu) to persuade others to implement a solution.</p> <p>will construct models or create code to solve a problem.</p> <p>will use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch, Kodables, Lego Robots, Squishy Circuits, MakeyMakey) (4d, 2007)</p>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Grade Three through Grade Five**

<b>Empowered Learner</b>	
Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	<p>will articulate what they would like to learn via a survey or conversation with their teacher</p> <p>will set personal learning goals and leverage technology to meet those goals across all classes</p> <p>will reflect on their own learning with technology tools and determine if the tools they chose for a task were the best choices</p>
b. build networks and customize their learning environments in ways that support the learning process.	will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)
c. use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	will seek feedback from teachers and other students to improve their work as they select tools to demonstrate their learning (e.g. choosing video recording over audio recording; choosing a publishing tool over a word processing tool, etc. through Google Classroom, shared Google documents, electronic comments, etc.)
d. understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	<p>will:</p> <ul style="list-style-type: none"> <li>● Handle computers and digital devices correctly and demonstrate the proper way to turn devices on and off.</li> <li>● Use mouse, touch screen, keyboard and/or audio input devices.</li> <li>● Select available printers and send files to print.</li> <li>● Use proper terminology for computer and digital device parts and operations.</li> <li>● Identify the functions of various parts of the computer.</li> <li>● Log on to and navigate to various locations on a school network and the Internet.</li> <li>● Open and save files in designated locations on the computer, network, online or external storage.</li> </ul>

**Archdiocese of Louisville  
Technology Curriculum 2016  
Grade Three through Grade Five**

	<p>Recognize that computers and digital devices are controlled by programming code. Create computer code using visual languages (like Blockly or Scratch). (6a, 2007)</p> <p>will:</p> <ul style="list-style-type: none"><li>● Use correct keyboarding technique to touch type 15 wpm (by the end of 5th grade) (for example online keyboarding sites like BBC Dance Mat Typing and Keybr)</li><li>● Use features of word processing and/or publishing software to type, edit, and format a document (for example manipulate font size and color of text, insert photos/clipart, use spell check, add bulleted and numbered text, cut, copy/paste text and graphics, use borders, shading and layout...)</li><li>● Use features of spreadsheet software (formulas, charts, graphs, cell formatting, cell merging, cell locking, cut/copy/past with single cells or ranges of cells, custom names for columns, rows and column groups...) to enter and organize data, calculate values, and generate graphs (for example using Microsoft Excel, Open Office, Google Sheets, Numbers [Mac]).</li><li>● Use features of presentation software or online tools to create presentations (for example Haiku Deck, Thinglink, PowToon, Animoto and Prezi)</li><li>● Use digital cameras, graphics software, and image or video editing software to create and modify images or videos (for example Microsoft office picture manager, Gimp, iPhoto, Windows live movie maker, iMovie)</li><li>● Use sound recording and editing software to capture and edit audio. (for example Audacity and Camtasia)</li></ul> <p>Use software and interactive websites to practice skills in other content areas (spelling, math, etc.) (for example the website <i>Interactive Sites for Education</i> <a href="http://interactivesites.weebly.com/">http://interactivesites.weebly.com/</a> has a matrix</p>
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Grade Three through Grade Five**

	<p>of many links across the curriculum)(6b, 2007)</p> <p>will solve common problems (like a frozen application). (6c, 2007)</p> <p>will compare and contrast any new devices or applications to those they have already used. (for example GCF LearnFree.org provides a nice overview of computer basics and applications.)(6d, 2007)</p>
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**Archdiocese of Louisville  
Technology Curriculum 2016  
Grade Three through Grade Five**

## Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.  
Students:

ISTE	Archdiocesan Educational Objectives
<p>a. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p>	<p>will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.(5b,5c, 2007)</p> <p>understand the public and permanent nature of online communication and posting. (5a, 2007)</p>
<p>b. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p>	<p>will identify the types of information that should and should not be shared online. (5a, 2007)</p> <p>will create safe usernames and passwords. (5a, 2007)</p> <p>will practice appropriate responses to inappropriate content or messages. (5a, 2007)</p> <p>will use digital tools to communicate rules and guidelines for safe and respectful online behavior (For example <i>Talking Safely Online</i> by Common Sense Education has downloadable student packets and lesson materials) (5d, 2007)</p> <p>will identify examples and possible consequences of cyberbullying and demonstrate appropriate responses. (For example <i>What's Cyberbullying?</i> by Common Sense Education has downloadable student packets and lesson materials) (5b, 2007)</p> <p>will recognize and commit to follow the provisions of the school's Acceptable Use Agreement. (5c, 2007)</p>
<p>c. demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p>	<p>will explain how copyright rules apply to online content; when and how students are allowed to use words and images they find online. (5a, 2007)</p>
<p>d. manage their personal data to</p>	<p>practice positive, legal and ethical online behaviors.(5a, 2007)</p>

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<p>maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p>	<p>protect their own privacy in the course of conducting research as well as adhering to copyright protections and respecting intellectual property. (2d, 2016)</p>
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## Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

ISTE	Archdiocesan Educational Objectives
<p>a. plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.</p>	<p>will determine what information they need to answer a research question, identify the sources where they might find that information, and select appropriate keywords or search terms to locate the information. (<i>Key to Keywords</i> by Common Sense Education provides downloadable lesson materials and student packets) (3a, 2007)</p> <p>will locate information from digital sources (including linked websites, online library databases, web search engines, and surveys). They will select and record relevant information from their sources by tagging or taking notes. Students will record their sources to cite when presenting their results. (<i>Whose Is It, Anyway?</i> and <i>How to Cite a Site</i> by Common Sense Education provides downloadable lesson materials and student packets) (Examples of kid safe search engines - Kids Click and Sweet Search) (Video, <i>App Smashing</i>, by Jon Corippo informs educators how to combine and blend apps for innovative student projects (Nov. 24, 2014) (3b, 2007)</p>
<p>b. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</p>	<p>will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes (see Kathy Schrock's Guide to Everything/Critical Evaluation - <i>Sites to Use for Demonstrating Critical Evaluation</i>). (for example <i>Rating Websites, Choosing a Search Site, Advertising Detectives and Right Sites</i> by Common Sense Education provides downloadable lesson materials. Also Kathy Schrock's handout <i>The 5W's of Web Site Evaluation and student handout-Critical Evaluation of a Website Elementary School Level</i>) (3c, 2007)</p> <p>will record their sources to cite when presenting their results. (3b, 2007)</p>
<p>c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful</p>	<p>will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes. (3c, 2007)</p> <p>will synthesize information to create new</p>

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connections or conclusions.	meaning for themselves and others. (3c, 2007)  will use online interviews, surveys or other digital tools to gather data. Then they will use spreadsheets, charts or graphs to analyze and present data and recommend solutions. (3c, 2007)
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
d. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.	will compile the information they gather into a written, graphic (for example Pic Collage, Label Box, Phonto, and Skitch), and/or oral presentation that includes identification of their sources. (4d, 2007)

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## Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
<p>a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.</p>	<p>will apply information on a particular topic to develop and design something new (for example, apply information on planets in the solar system to create a description of a newly discovered planet). (1a, 2007)</p> <p>will identify school, community and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science. (4a, 2007)</p> <p>will use online resources to locate information on the problem. (4a, 2007)</p> <p>will use presentation tools (Shadow Puppet Edu) to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch, Kodables, Lego Robots, Squishy Circuits, MakeyMakey) (4d, 2007)</p>
<p>b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>	<p>will use applications such as brainstorming tools (for example Padlet, Popplet and NoteApp), graphic organizers, tables or timelines (for example ReadWriteThink's Timeline Student Interactive, Timetoast and Our Story, 3D Printing) to plan action steps that could solve the problem. (4b, 2007)</p>
<p>c. develop, test and refine prototypes as part of a cyclical design process.</p>	<p>will construct models or create code to solve a problem in engineering design, programming or robotics. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch, Kodables, Lego Robots, Squishy Circuits, MakeyMakey) (4d, 2007)</p>
<p>d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.</p>	<p>will understand that real world problems may have multiple solutions, each that can be addressed in multiple ways. (4d, 2007)</p>

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## Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Outcomes</b>
<p>a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.</p>	<p>will identify school, community, and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science. They will use online resources to locate information on the problem. (Sweet Search, a search engine for students has many links for e-waste problems regarding schools and local and global communities.) (4a, 2007)</p>
<p>b. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.</p>	<p>will use tools such as timelines and graphs to predict future consequences of historical or present events (such as changes in climate or changes caused by new technology). (for example: Dipity, myHistro, Read Write Think Interactive Timeline, TimeToast.) (1d, 2007)</p> <p>will compile the information they gather into a written, graphic (for example Pic Collage, Label Box, Phonto, and Skitch), and/or oral presentation that includes identification of their sources. (3d, 2007)</p> <p>will use online interviews, surveys (for example Flisti, Mentimeter, Google Forms and Docs and Survey Monkey) or other digital tools to gather data. Then they will use spreadsheets, charts, or graphs to analyze and present data and to recommend a solution. (4c, 2007)</p>
<p>c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</p>	<p>will use presentation tools (Shadow Puppet Edu) to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch, Kodables, Lego Robots, Squishy Circuits, MakeyMakey) (4d, 2007)</p>
<p>d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.</p>	<p>will practice sequencing of events/steps of a process to determine the best “automated solution.” (4d, 2007)</p> <p>will write code that produces algorithms as step-by-step directions (e.g. Code.org; Scratch Jr.)</p>

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<b>Creative Communicator</b>	
Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes (see Kathy Schrock’s Guide to Everything/ <i>Critical Evaluation - Sites to Use for Demonstrating Critical Evaluation</i> ). (for example <i>Rating Websites, Choosing a Search Site, Advertising Detectives and Right Sites</i> by Common Sense Education provides downloadable lesson materials. Also Kathy Schrock’s handout <i>The 5W’s of Web Site Evaluation</i> and student handout- <i>Critical Evaluation of a Website Elementary School Level</i> ) (3c, 2007)
b. create original works or responsibly repurpose or remix digital resources into new creations.	<p>will apply information on a particular topic to develop and design something new (for example, apply information on planets in the solar system to create a description of a newly discovered planet). (1a, 2007)</p> <p>will use various digital tools and applications such as: voice and sound recording tools; word processing, publishing, and presentation tools; video recording and editing tools; image editing tools; graphics and 3D design tools; and coding software to create original works such as: podcasts, interactive presentations, posters, brochures, videos, animations, games, or fabricated objects. (for example: <i>Little Bird</i> Easy to use for reports, journals, creative writing, podcasts, commercials, history timelines, science experiments, drawing, ebooks, independent learning, collaborative learning ) (1b, 2007)</p>
c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	will use interactive models or simulations to explore systems and issues that they study in science, math, and social studies (such as the functions of body organs, the operation of electrical circuits, or the experiences of runaway slaves in the Underground Railroad). Example: <u>Mission US: Flight to Freedom</u> (1c, 2007)

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	<p>will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas. (for example Haiku Deck, Sock Puppet, Story Jumper, Puppet Pals) (2b, 2007)</p>
<p>d. Publish or present content that customizes the message and medium for their intended audience.</p>	<p>will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)</p> <p>will use various digital media (including live or recorded video or audio; published documents, and multimedia presentations) to communicate information and ideas. (for example Haiku Deck, Sock Puppet, Story Jumper, Puppet Pals) (2b, 2007)</p>

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## Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
<p>a. use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.</p>	<p>will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)</p> <p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (for example: Kidblog, Word Press, Blogger, Today's Meet) (2c, 2007)</p>
<p>b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</p>	<p>will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)</p>
<p>c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</p>	<p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (for example: Kidblog, Word Press, Blogger, Today's Meet) (2d, 2007)</p> <p>will use applications such as brainstorming tools (for example Padlet, Popplet and NoteApp), graphic organizers, tables or timelines (for example ReadWriteThink's Timeline Student Interactive, Timetoast and Our Story, 3D Printing) to plan action steps that could solve the problem. (4b, 2007)</p>
<p>d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>	<p>will use digital tools and applications (such as Google Apps, Edmodo, online wikis or blogs) or video communication tools (like Skype or Facetime) to work collaboratively and interact with other students or experts. (2a, 2007)</p> <p>will use digital communication tools (such as blogs or Skype) to connect with students from other cultures. (for example: Kidblog, Word Press, Blogger, Today's Meet) (2c, 2007)</p> <p>will use presentation tools (Shadow Puppet Edu) to persuade others to implement the solution. For engineering design, programming or robotics, they may construct models or</p>

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	create code to solve a problem. Students may also use online interactive models or simulations to investigate the consequences of alternative solutions. (Scratch, Kodables, Lego Robots, Squishy Circuits, MakeyMakey) (4d, 2007)
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<b>Empowered Learner</b>	
Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
e. articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	<p>will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.(5b,5c, 2007)</p> <p>will set personal learning goals and leverage technology to meet those goals across the curriculum</p> <p>will identify areas of personal interest that will guide their own learning. With the help of an educator, students will learn how to set learning goals, how to develop strategies to achieve those goals, and how to reflect on the learning process to improve outcomes. (1a, 2016)</p>
f. build networks and customize their learning environments in ways that support the learning process.	will identify and build online networks of experts within school policy and customize their environments in ways that their learning , with the supervision and support of an educator, can grow to personal learning networks. (1b, 2016)
g. use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	<p>will solicit feedback from an educator using technology to inform the student of the success of their practice and how to improve their practice through demonstrating their learning in a variety of ways.</p> <p>will collaborate with peers and seek feedback from peers to improve both their learning and their use of technology</p>
h. understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	<p>will identify and use basic components of digital input and output devices including but not limited to personal computers, tablets, still/digital/video cameras. (6a, 2007)</p> <p>will choose appropriate software and online applications for the designed task and be able to locate, launch, and exit applications including web sites using different browsers. (6b, 2007)</p>

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	<p>will apply strategies for identifying and solving routine frozen screens, identify warning signs of a compromised device, and perform undo/redo and boot and reboot functions. (6c, 2007)</p> <p>will operate and navigate new and different operating systems, platforms, and media devices based on prior knowledge. (6d, 2007)</p>
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## Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Students:

ISTE	Archdiocesan Educational Objectives
<p>e. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.</p>	<p>will use technology as a positive representation of themselves by creating a positive online presence and digital footprint utilizing digital portfolios.(5b,5c, 2007)</p> <p>understand the public and permanent nature of online communication and posting. (5a, 2007)</p>
<p>f. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p>	<p>will identify the types of information that should and should not be shared online. (5a, 2007)</p> <p>create safe usernames and passwords. (5a, 2007)</p> <p>practice appropriate responses to inappropriate content or messages. (5a, 2007)</p> <p>will recognize and commit to follow the provisions of the school's Acceptable Use Agreement inside and outside school. (5c, 2007)</p> <p>will identify examples and possible consequences of cyberbullying and demonstrate appropriate responses. (5b, 2007)</p>
<p>g. demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p>	<p>explain how copyright rules apply to online content; when and how students are allowed to use words and images they find online. (5a, 2007)</p>
<p>h. manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.</p>	<p>practice positive, legal and ethical online behaviors.(5a, 2007)</p> <p>protect their own privacy in the course of conducting research as well as adhering to copyright protections and respecting intellectual property. (2d, 2016)</p>

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<b>Knowledge Constructor</b>	
Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:	
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
e. plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	<p>will determine what information they need to answer a research question, identify sources when they might find that information and select appropriate keywords or search terms to locate the information. (3a, 2007)</p> <p>will locate information from digital sources including linked web sites, online library databases, web search engines and surveys.(3b, 2007)</p> <p>will select and record relevant information from their sources by tagging or taking notes. (3b, 2007)</p> <p>will record their sources to cite when presenting their results. (3b, 2007)</p> <p>will use online problem solving programs and simulations to demonstrate mastery of concepts and thinking skills (Lure of the Labyrinth, Villainy, Inc., and Mission US)</p>
f. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.	<p>will select and record relevant information from their sources by tagging or taking notes. (3b, 2007)</p> <p>will record their sources to cite when presenting their results. (3b, 2007)</p> <p>will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes. (3c, 2007)</p>
g. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.	<p>will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes. (3c, 2007)</p> <p>will synthesize information to create new meaning for themselves and others. (3c, 2007)</p> <p>will use online interviews, surveys or other</p>

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	digital tools to gather data. They will then use spreadsheets, charts or graphs to analyze and present data and recommend solutions. (3c, 2007)
<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
h. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.	<p>will use presentation tools to persuade others to implement a solution based on an engineering design, programming or robotics. (4d, 2007)</p> <p>will construct models or create code to solve a problem. (3D-modelling, Tynker coding, Hour of Code)(4d, 2007)</p> <p>use online interactive models or simulations to investigate the consequences of alternative solutions. (Lure of the Labyrinth, Villainy, Inc., Mission US) (4d, 2007)</p>

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**Innovative Designer**

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
e. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.	will identify school, community and world problems related to technology (e.g. disposal of e-waste) or topics studied in social studies or science. (4a, 2007)  will use online resources to locate information on the problem. (4a, 2007)
f. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	will choose appropriate technologies to brainstorm ideas to create and/or design something new e. g. create a new business that provides a product or service using word processing, infographics, mind mapping, or a graphic organizer. (1a, 4b,2007)
g. develop, test and refine prototypes as part of a cyclical design process.	will with the supervision and advice of an educator, practice a process to develop, test and refine prototypes for engineering designs, programming and robotics that models the recursive nature of problem solving. (4d, 2007)
h. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	will understand that real world problems may have multiple solutions, each that can be addressed in multiple ways. (4d, 2007)

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## Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Outcomes</b>
e. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.	will identify school, community, and world problems related to technology or topics studied in social studies or science.
f. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.	<p>will use timelines and graphs to forecast and predict possible outcomes (e.g. forecast possible sales using spreadsheet, graph, infographic or survey). (1d, 2007)</p> <p>will compile information they gather into a written, graphic, and/or oral presentation that includes identification of their sources. (3d, 2007)</p> <p>will use online interviews, surveys or other digital tools to gather data. (4c, 2007)</p> <p>will use spreadsheets, charts, or graphs to analyze and present data to recommend a solution. (4c, 2007)</p>
g. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	<p>will use presentation tools to persuade others to implement the solution determined by using engineering design, programming, robotics, constructing a model, or creating code to solve a problem. (4d, 2007)</p> <p>will use online interactive models or simulations to investigate the consequences of alternative solutions. (4d, 2007)</p>
h. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.	will practice sequencing of events/steps of a process to determine the best “automated solution.” (4d, 2007)

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## Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
<p>e. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</p>	<p>will distinguish between sources that present factual information and those that present opinions or even deliberate hoaxes. (3c, 2007)</p> <p>will choose appropriate technologies to address desired objectives in the creation and communication of ideas and products</p>
<p>f. create original works or responsibly repurpose or remix digital resources into new creations.</p>	<p>will choose appropriate technologies to brainstorm ideas to create and/or design something new. (1a, 2007)</p> <p>will use various digital tools to create a recording or actual product (e.g. create and infomercial, public service announcement, video, voice or sound recording, 3-D object, or code). (1b, 2007)</p>
<p>g. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</p>	<p>will design models and use simulations to explore systems (e.g. create a business model incorporating marketing , finance, sales, production; publication design software to design business cards, letterhead and brochures). (1c, 2007)</p> <p>will use learning networks and various digital media tools (e.g. live or recorded music, audio, published documents, multimedia presentations, blogs, personal web sites and online portfolios) to communicate information and ideas. (2b, 2007)</p>

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**Global Collaborator**

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:

<b>ISTE</b>	<b>Archdiocesan Educational Objectives</b>
e. use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.	<p>will use digital tools, applications and other virtual field trip resources to work collaboratively and interact with other students around the world to encourage extending the learning in a curricular area as well as becoming familiar with cultural norms other than their own. (2a, 2007)</p> <p>will use digital communication tools for both synchronous and asynchronous communication with students from other cultures. (2c, 2007)</p>
f. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	will use tools, applications and other virtual field trip resources to work collaboratively and interact with experts around the world to encourage extending the learning in a curricular area as well as become familiar with cultural norms other than their own. (2a, 2007)
g. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.	<p>will work with other members of a group using digital tools, applications and cloud computing to create a joint product or develop a solution to a problem. (2d, 2007)</p> <p>will use applications such as brainstorming tools, graphic organizers, tables or timelines to plan action steps that could solve a problem. (4b, 2007)</p>
h. explore local and global issues and use collaborative technologies to work with others to investigate solutions.	will use digital communication tools to connect with students from other cultures in order to solve predetermined problems and investigate solutions. (2c, 2007)

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# Assessment

# PHILOSOPHY OF ASSESSMENT

Assessment provides the opportunity to demonstrate success in accomplishing the mission of the Archdiocese of Louisville to educate and form the whole person – mind, body, and spirit. Assessment is an integral part of the mission of Catholic education offered in the Archdiocese of Louisville as defined by the learning standards contained in the Archdiocese of Louisville Curriculum Guide. It is designed to be a comprehensive, multi-faceted analysis of each student's progress. Quality assessment is one part of a holistic system of learning and includes a varied and balanced combination of practices.

The purpose of assessment is to:

- guide instruction for the teaching process
- measure growth and development in learning for the individual student
- provide reliable and valid evidence of continuous student progress
- communicate meaningful information to students, parents, teachers, and other assessment users.

To fulfill our responsibility to our constituencies, catechetical and academic outcomes are assessed and this information is shared with various groups, including but not necessarily limited to:

- students and their parents/guardians
- the parish community
- the Archdiocese of Louisville
- the broader community.

As a leader in both catechesis and academics, it is the responsibility of the Archdiocese of Louisville to provide both a sound catechetical experience and an excellent educational program. This dual mission of faith formation and academic excellence requires an integrated system of standards; multiple forms of evaluation and assessment measures; and a clear and concise method of reporting to all those to whom we are accountable. It is through this process that we affirm that we are who we say we are and we do what we say we will do.

# FORMATIVE AND SUMMATIVE ASSESSMENT

Quality assessment includes a balance of both formative and summative assessment. In order to promote growth and learning, students should be assessed frequently and through multiple measures. When appropriate, students should be given the opportunity to demonstrate understanding in ways that take into account the individual readiness, learning styles, and interests.

**Formative assessment** is an evaluation of progress conducted throughout the teaching and learning process. Formative assessment is about improvement, **not** accountability.

Formative assessment is most effective when it is student-driven. It helps students understand their own strengths and weaknesses and enables them to determine their paths to success. Formative assessment provides students with timely feedback so that they can improve the quality of their work. It allows students to gauge progress toward personal and academic goals.

Formative assessment also provides teachers and parents with valuable information about student progress. It aids in the identification of student needs and informs instructional practices based on those needs, while enlisting parental support for student learning.

**Summative assessment** takes place after instruction to determine if the anticipated learning has occurred. It is evaluative in nature and is employed as an accountability measure.

Summative assessment encourages students to meet academic standards and validates their readiness to proceed. It enables teachers to evaluate the effectiveness of their instruction. It also provides information to appropriate individuals to determine levels of achievement for placement, evaluate student mastery, and support grading.

# HOLISTIC ASSESSMENT SYSTEM

In a responsive classroom, differentiation of instruction allows teachers to address the readiness, learning styles, and interests of the individual student. A holistic assessment system is based upon these needs of the learner and offers a variety of assessments. Assessments include, but are not limited to, the following:

## **Performance Assessments**

This type of assessment is often referred to as “authentic” assessment. It is a process or product that is assessed through observation and judgment – the teacher looks at the student’s work or performance and makes a judgment based on its quality. Rubrics with clearly defined learning criteria should accompany performance assessments when appropriate and should be shared with students prior to the actual learning. Students may participate in the creation of the rubric, thus having a clear understanding of expectations.

Examples of performance assessments would include projects, reports, narrative descriptions, anecdotal records, student journals, student portfolios, performance events, and performance tasks.

## **Teacher Checklists**

This type of assessment is based on clearly defined criteria and measured by achievement toward those elements. This type of assessment is based on observation, but with less subjectivity than in performance assessments.

Examples would include teacher checklists to accompany projects, observations of behaviors and skills, reports of progress toward learning standards, observations of cooperative skills, and evaluation of research skills.

## **Criterion-Referenced Tests**

Criterion-referenced tests are used to determine a student’s mastery of specific information and skills from a well-defined content area. It is used to ascertain what students know and understand as a result of instruction. Progress is measured against clearly defined criteria or learning goals.

Examples of criterion-referenced tests would include subject-area inventories, achievement tests, commercial readiness tests, pre- and post-tests, end-of-chapter tests, end-of-unit tests, end-of-book tests, and year-end achievement tests.

## **Norm-Referenced Tests**

Norm-referenced tests compare a student’s mastery of specific information to that of a norming group - a large group of students who took the test under similar conditions in the past. Norm-referenced tests provide information about the extent to which the student’s performance was above or below that of the norming group. A nationally recognized assessment is used for comparison with national norms.

Examples of norm-referenced or standardized tests would include the Terra Nova Test and the High School Placement Test.

# GRADING

Assessment of a student's work should provide a rich array of information related to his or her progress and achievement. Quality assessment must provide an appropriate balance of assessments **for** student learning that informs and directs instructional practices (formative assessment) and assessments **of** student learning that are required for grading (summative assessment). Students must clearly understand the learning standards, the components that will be considered in the determination of the grade, and the criteria by which those components will be evaluated. In short, students must be able to identify and clearly articulate what it is they must know and do; the criteria that will be used to prove what they know and are able to do; and the measure of success.

When grading is based on clearly defined learning criteria, it provides teachers with the opportunity to communicate this high quality information in a form that can be clearly understood and effectively used by interested persons. It has direct implications and relevance to all.

Learning standards typically reflect a combination of progress, product, and process criteria.

- Progress criteria are incremental measures used to determine student movement toward an established goal. Because not all students are at the same point at the same time, progress criteria can be highly individualized. Examples of progress criteria might include pre-/post-assessments, student portfolios, and classroom observations.
- Product criteria measure what students know and are able to do at a specific point in time. Product criteria generally take place after instruction and demonstrate mastery of knowledge, skills, and concepts. Examples of product criteria might include reports or projects, exhibits of student work, major exams or compositions, classroom observations, and oral presentations.
- Process criteria reflect not only the final results of the learning but the steps the student took to get there. This information is reported separately from achievement and performance. Process criteria might include effort or work habits, quizzes, homework, class participation, and attendance.

Effective grading procedures are based on a combination of progress, product, and process criteria. By clearly articulating the indicators of each, teachers are able to evaluate and then report each criterion separately. Rubrics with clearly defined learning criteria should accompany assessment when appropriate and should be provided to the student prior to the actual learning. To maximize student learning, a variety of assessment methods and/or grading procedures must be used.

In addition, descriptive feedback is an essential component of the information provided to students. Effective feedback must provide students with a clear understanding of what they are doing well and the steps necessary for improvement and progress. Descriptive feedback is a powerful learning tool. It emphasizes achievement and movement toward mastery, rather than deficiencies. When teachers replace judgmental feedback with specific, descriptive, and immediate feedback, students benefit. To be effective, feedback must be meaningful and provided in a timely manner.

When feedback contains vague or general comments, students are left without a clear understanding of what they did to earn the comment. When accompanied by percentages and letter grades, the comments are often disregarded by both students and parents. This type of feedback does little to increase learning and in fact has a negative impact on student motivation to learn.

To be effective, feedback should be specific, descriptive, and objective in nature, offering the student insight into the work itself and a clear picture of next steps toward success. Students should be given the opportunity to use the feedback from the teacher as they continue to work on a task until they succeed. Students must have the opportunity to make adjustments to the work based on the teacher comments and then resubmit it for further feedback. When students are allowed to use this process, they understand their movement toward mastery and they begin to develop their skills of self-assessment. They are able to articulate what it is they have learned and the steps they must take to make further progress. They become meta-cognitive learners, able to reflect upon and make adjustments to their own learning.

In a differentiated classroom, the progress and achievement of the individual student must be taken into account. Students do not learn at the same rate and in the same way. Therefore, they should not be expected to demonstrate the learning at the same time and in the same way. By differentiating instruction and the methods and procedures for assessment, all students are afforded the opportunity for success. When students are provided with the scaffolding needed to meet the benchmarks and master the content, it is appropriate that the grading and reporting reflect that achievement.

# REPORTING

The Archdiocese of Louisville recognizes that parents are the primary educators of their children. Parents work together with teachers as partners in the educational process, exchanging information regarding the individual student's strengths and needs. This communication between home and school is essential to ensure the student's continued progress and success. In order to promote a deeper understanding of the individual student, and to be better prepared to work as partners in the teaching and learning process, teachers must use multiple tools, each with its own specific and well-defined purpose. The tools should provide reliable and valid evidence of student progress in a timely and user-friendly manner.

A comprehensive reporting system might include report cards, planned phone calls to parents, interim progress reports, Parent-Teacher-Student conferences, individual notes, evaluated projects and assignments, portfolios or exhibits of students' work, checklists, and rubrics. When selecting the specific tools to include, the following should be kept in mind:

- What information needs to be communicated?
- What method is most effective for communicating this information?
- To whom is the information directed? Who is the primary audience?
- How will this information be used?

When reporting on the student's understanding of subject matter and demonstration of skills, it is important to separate academic and non-academic (or work habit) components. For instance, the content area grade should include only information related to the academic learning or the movement toward mastery of the learning targets. Process skills (effort, behavior, work habits) are best reported separately, so as not to distort the intended information.

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# **Differentiated Instruction**

# DIFFERENTIATED INSTRUCTION

To achieve the goals that advance our vision, the Archdiocese of Louisville created the Archdiocese of Louisville Curriculum Framework which establishes high-quality standards for each grade level based on local, state, and national standards. To determine student progress toward these standards, many measures are utilized. These include, but are not limited to, nationally norm-referenced tests and criterion-referenced tests. However, because our Catholic theology calls us to educate the whole person – mind, body and spirit – individual student growth over time is also valued, measured, and reported.

It is effective differentiated instruction that connects both the standards-based curriculum and assessment with the knowledgeable instructional decisions based on individual need and growth over time.

We value:

- Catholic beliefs, traditions, and values
- the individuality and the potential of all learners
- best practices in all teaching/learning processes
- multiple approaches/differentiation in curriculum practices, programs, norms, and initiatives

In order to advance our vision, our goals include:

- making curriculum decisions based on Catholic beliefs, traditions, and values
- implementing multiple and effective curriculum practices, programs, norms, and initiatives to invite and engage all learners
- assisting schools with curriculum development and assessment plans that focus on student learning as the ultimate goal

Historically, the Archdiocese of Louisville has supported differentiated instruction through implementation of several on-going initiatives including the creation of the Archdiocese of Louisville Curriculum Framework, the implementation of the Intervention Protocol and the participation in the LoTi studies. Initiatives that support differentiated instruction include implementation of the strategies and concepts included in the K-12 Literacy Institutes for teachers and administrators, the use of School Improvement Plans, Instructional Improvement Plans, and the emphasis on differentiated instruction throughout the professional learning opportunities offered to our school staffs.

# Guiding Principles of Differentiated Instruction

Differentiated instruction is characterized by:

- high quality curriculum based on local, state, and national standards
- informed instructional decision-making through ongoing assessment of student differences in readiness, interests, and learning profiles
- differentiated learning experiences in response to the needs of individual learners emphasizing exploration and critical thinking
- a variety of flexible instructional configurations (individual, small group, whole group)
- positive classroom climate focused on equity of opportunity, love of learning, cooperation, and respect for others

Elements of curriculum that can be differentiated:

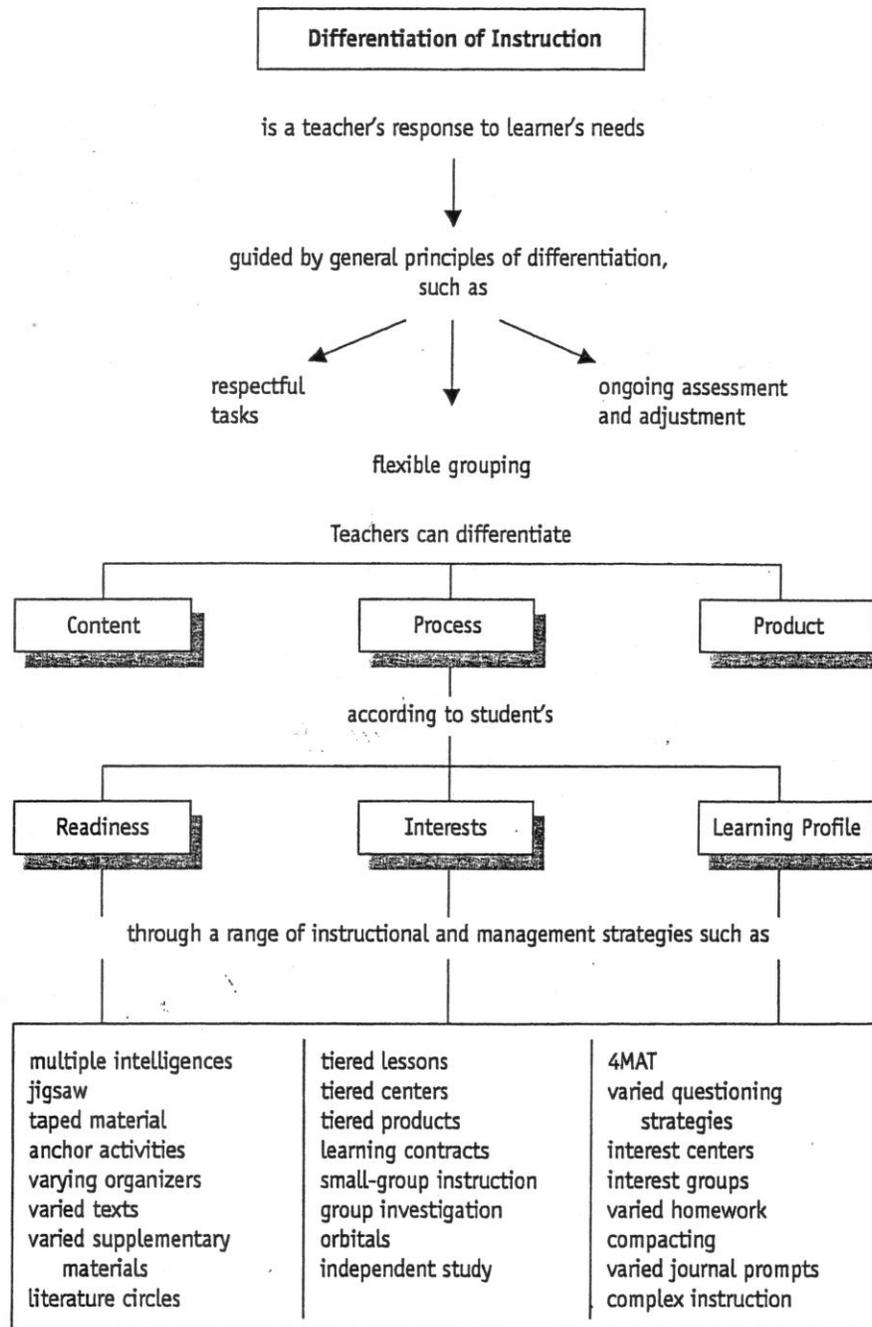
- Content — What students learn
- Process — How students learn content
- Products — How students show they have learned the content

Student characteristics for which teachers can differentiate:

- Readiness — Provide learning choices at different levels of difficulty
- Interest — Align key skills/material with topics/pursuits that intrigue students
- Learning Profile — Address learning styles, student talent, or intelligence profiles

The following flow chart includes the major concepts involved in differentiated instruction and illustrates the process for its implementation.

**Figure 1.1**  
**A Concept Map for Differentiating Instruction**



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# **Early Childhood Education**

## **Pre-Kindergarten (4)**

## **Early Childhood Education in the Archdiocese of Louisville**

Early childhood programs in the Archdiocese of Louisville are designed to provide a lively, imaginative, and stimulating learning environment. Children have the opportunity to learn through hands-on experiences that promote Catholic attitudes, traditions, and values, creativity, exploration, and problem-solving in an age-appropriate manner. Children establish a positive self-image and self-confidence. They learn to be a good friend and an eager participant. Children are welcomed into a community of faith where they experience God's love for them and foster their love for others.

The vast array of learning experiences focus on the spiritual, cognitive, social, emotional, language, and physical domains. These domains are connected and enhance the development of the whole child.

Early childhood programs throughout the archdiocese recognize that there is variability in the rate of learning from child to child and even from one domain to another in an individual child. Each child is a unique individual created by God. Focus is placed on the uniqueness and potential of each child. By getting to know the children, teachers are able to set realistic goals for each child that are challenging yet achievable.

Early childhood programs in The Archdiocese of Louisville recognize that children learn best when they are active and engaged and when the activity is meaningful and socially interactive. This is accomplished through a balance of child-guided and teacher-guided experiences. Children have the opportunity to select activities and also to participate in teacher-led small and large group experiences.

Play is a young child's natural way of learning. Early childhood programs provide opportunities for teachers to actively engage with and support children in their play. Intentional learning focused on particular concepts and skills is embedded in play experiences.

Kindergarten readiness means that the child enters kindergarten ready for success at that level. The child has the tools necessary to engage in learning experiences. The intentional gathering of multiple sources of evidence over time provides the kindergarten teacher with an understanding of the rising kindergarten child's strengths and needs. Examples of well-rounded assessment strategies include formal, developmentally appropriate readiness assessment (commercial or school-generated), as well as observation of the child in realistic Pre-K(4) settings and situations, family interviews, and student work samples. Analysis of the information guides decisions about teaching and learning.

## Approaches to Play and Learning – Pre-Kindergarten

### Essential Understandings

- Learning through play builds engagement and socialization.
- An active imagination leads to exploration and discovery.
- Developing attentiveness enhances learning experiences.
- Active engagement builds comfort and joy in learning.

#### Content Guidelines

#### Performance Standards

Discovery

Students will:

- show interest in discovery and learning
- demonstrate a sense of wonder
- engage in tactile experiences

Adaptability

- choose a variety of familiar activities
- show willingness to try new and challenging experiences
- demonstrate initiative
- accept changes in routines and adjust to new situations
- transition from one activity to another
- consider a variety of strategies when solving problems

Imagination and Exploration

- engage in pretend roles with real and make-believe objects
- approach tasks and experiences with creativity and imagination
- use new or inventive strategies to explore objects
- engage in increasingly complex play

Attentiveness and Persistence

- maintain attention and focus
- work at a task despite distractions
- persist at challenging activities
- demonstrate ability to complete a task
- maintain engagement during an experience

Response and Application

- recall past experiences and apply this information to new situations

## Social and Emotional Development – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Being able to form positive relationships with adults and peers leads to self-confidence.</li> <li>• Mindfulness of the feelings of others enhances interactions within the classroom community.</li> </ul>	<ul style="list-style-type: none"> <li>• Why is it important to treat others the way you would like to be treated?</li> <li>• How do your actions and words make others feel?</li> </ul>
Content Guidelines	Performance Standards
<p>Sense of Self</p> <p>Collaboration</p> <p>Feelings and Emotions</p> <p>Classroom Community</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate a positive sense of self-identity and self-awareness</li> <li>• express positive feelings about themselves and confidence in what they can do</li> <li>• display self-control</li> <li>• form relationships and interact positively with familiar adults</li> <li>• form relationships and interact positively with other children</li> <li>• demonstrate the social and emotional skills needed to successfully participate in groups</li> <li>• use politeness, sharing, and other positive social interaction skills</li> <li>• gain teacher’s attention in appropriate ways</li> <li>• wait patiently for a turn to do an activity</li> <li>• identify, manage, and express feelings</li> <li>• recognize and respond to the needs and feelings of others</li> <li>• accept correction in a positive manner</li> <li>• respect and care for classroom environment and materials</li> </ul>

## Motor Development – Pre-Kindergarten

### Essential Understandings

- Strong motor skills enhance brain development and learning.

#### Content Guidelines

#### Performance Standards

Gross Motor Development

Students will:

- develop large muscle control and coordination
- develop strength, balance, flexibility, and stamina
- develop ability to move in space with coordination
- throw and catch a ball or other object
- kick a ball (stationary and rolling)
- stand on one foot for 5-10 seconds
- hop on one foot
- ascend and descend stairs using alternating feet

Fine Motor Development

- develop small muscle control and coordination
- develop and use eye-hand coordination when performing assorted tasks
- explore and use a variety of tools (e.g., pencil, spoon, crayon, paintbrush, scissors)
- hold pencil, crayon, and paintbrush properly when using them on a variety of surfaces
- hold scissors correctly and use scissors effectively to cut paper (lines and curves)
- trace accurately with a pencil
- draw recognizable shapes, objects, and people



## Language and Literacy Development – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Listening is important to understanding of the message.</li> <li>• To communicate effectively, it is essential that the speaker is able to express ideas clearly.</li> <li>• Phonological and phonemic awareness are essential foundational skills for early reading.</li> <li>• The development of active listening skills and memory aid in comprehension.</li> <li>• The use of emergent writing skills is a means of communication.</li> <li>• Increased vocabulary promotes the ability to understand and communicate.</li> </ul>	<ul style="list-style-type: none"> <li>• What must we do to be good listeners?</li> <li>• How can we clearly communicate our ideas and knowledge to others?</li> <li>• Why is it important to speak clearly and audibly?</li> <li>• How can discriminating between sounds support pre-reading skills?</li> <li>• How can careful listening help us understand what we hear?</li> <li>• How can we convey information through the pictures that we draw?</li> <li>• How can we figure out what an unfamiliar word means?</li> </ul>

Content Guidelines	Performance Standards
<p>Listening Skills</p> <p>Communication Skills</p> <p>Phonological and Phonemic Awareness</p> <p>Alphabet Knowledge</p> <p>Comprehension</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• recognize the intent of non-verbal and verbal cues</li> <li>• listen to stories, directions, and conversations</li> <li>• follow directions that involve a two- or three-step sequence of actions</li> <li>• listen to and recognize similar and different sounds in words and rhymes</li> </ul> <ul style="list-style-type: none"> <li>• communicate needs, wants, or thoughts through non-verbal gestures and actions, facial expressions, and/or words</li> <li>• speak clearly enough to be understood</li> <li>• speak audibly and express thoughts, feelings, and ideas clearly</li> <li>• speak in appropriate tone</li> <li>• speak in five- to six-word sentences</li> <li>• use increasingly complex and varied vocabulary, language, and sentence structure</li> <li>• initiate, ask questions, and respond appropriately in conversation with peers and adults in one-on-one, small group, and large group interactions</li> <li>• ask and answer questions in order to seek help, get information, or clarify something</li> <li>• describe familiar people, places, things, and events</li> <li>• use most grammatical constructions well</li> <li>• use appropriate pronouns</li> <li>• recite simple finger plays and nursery rhymes</li> </ul> <ul style="list-style-type: none"> <li>• recognize words that rhyme in games, songs, and stories</li> <li>• match or produce words that rhyme</li> <li>• adds or substitutes individual sounds in simple, one-syllable words to make new words</li> <li>• identify initial sound that corresponds to a picture or object</li> </ul> <ul style="list-style-type: none"> <li>• demonstrate the ability to recite the alphabet by rote memory</li> <li>• recognize and name most uppercase and lowercase letters, especially those in own name</li> <li>• identify sounds typically associated with letters that are frequently used</li> <li>• understand the connection between letters and sounds</li> <li>• begin to associate sounds with letters</li> </ul> <ul style="list-style-type: none"> <li>• demonstrate understanding of stories and conversations</li> <li>• predict what will happen next in a story using pictures as a guide</li> <li>• recall information from a story</li> <li>• retell a simple story in sequence</li> <li>• identify characters and the role they play in a story</li> </ul>

Word Recognition Skills	<ul style="list-style-type: none"> <li>• recognize written first name</li> <li>• demonstrate awareness and beginning knowledge of environmental print (e.g., stop, on, restaurant or store logo)</li> </ul>
Reading Readiness	<ul style="list-style-type: none"> <li>• initiate stories and respond to stories told or read aloud</li> <li>• represent stories told or read aloud through during play</li> <li>• show beginning understanding of concepts about print</li> <li>• engage in “reading” (e.g., look at pictures in a book; pretend to read)</li> <li>• “ reread” a book that has been read by another</li> </ul>
Emergent Writing	<ul style="list-style-type: none"> <li>• understand that writing is a means of communication</li> <li>• use scribbles, shapes, pictures, letter-like symbols, or dictation to represent thoughts or ideas</li> <li>• begin to copy or write own name using an uppercase letter for only the first letter</li> </ul>
Background Knowledge and Vocabulary Skills	<ul style="list-style-type: none"> <li>• identify meaning of words in read-alouds, conversations, and descriptions of everyday items in the world around them</li> <li>• make use of new vocabulary in an appropriate manner</li> <li>• use strategies to figure out word meanings (e.g., look at pictures, ask someone, use context clues)</li> <li>• use previous experiences and acquired vocabulary to demonstrate a bigger understanding of the world around them and the world beyond them</li> </ul>
Book Knowledge and Appreciation	<ul style="list-style-type: none"> <li>• demonstrate interest in a range of texts</li> <li>• identify the function and location of a book’s front, back, top, bottom, and spine</li> <li>• demonstrate how to turn the pages of a book properly</li> <li>• know that books are read from front to back</li> <li>• point to where to begin reading</li> <li>• recognize that text flows from left to right and top to bottom</li> <li>• recognize that there are spaces between words</li> </ul>

## Mathematics and Logical Thinking – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Application of knowledge of numbers and quantities during play and activities reflects understanding.</li> <li>• Mathematical reasoning is used in everyday tasks.</li> <li>• Building upon the understanding of quantities leads to a stronger foundation for future mathematical learning.</li> </ul>	<ul style="list-style-type: none"> <li>• How can numbers be incorporated into this play activity?</li> <li>• How can we use mathematical concepts to help us solve problems?</li> <li>• How can we use numbers to simplify our lives?</li> </ul>
Content Guidelines	Performance Standards
<p>Number Concepts and Operations</p> <p>Patterns and Relationships</p> <p>Spatial Relationships/Geometry</p> <p>Measurement</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate increasing interest in numbers and counting</li> <li>• show understanding of numbers and quantities during play and other activities</li> <li>• count by rote to 20</li> <li>• demonstrate understanding of one-to-one correspondence between objects and numbers</li> <li>• state the number that follows a number from 1-9</li> <li>• recognize numerals 0-10</li> <li>• understand concepts of more, less, and same</li> <li>• demonstrate beginning ability to add and subtract numbers with manipulatives</li> <li>• recognize, duplicate, and continue simple patterns using sounds, objects, and attributes of objects</li> <li>• sort objects into groups by one or more characteristics</li> <li>• order or sequence several objects on the basis of one characteristic (e.g., height, weight)</li> <li>• identify and name common shapes</li> <li>• identify and use common shapes and position words during play</li> <li>• understand and use words for the order of objects (e.g., first, second)</li> <li>• understand and use position words (e.g., above, below, in front of)</li> <li>• demonstrate understanding of directional movement (e.g., left, right, up, down)</li> <li>• measure by height, length, and weight using nonstandard and/or standard units</li> <li>• make comparisons between at least two objects (e.g., longest, shorter, thickest)</li> </ul>

## Scientific Thinking and Problem-Solving – Pre-Kindergarten

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Using the five senses helps us to develop awareness of the world around us.</li> <li>• Learning the body parts and their functions helps to develop personal health habits.</li> <li>• The development of foundational scientific concepts helps develop critical thinking skills.</li> <li>• Self-help skills promote independence and lead to a safe environment.</li> </ul>	<ul style="list-style-type: none"> <li>• How do the five senses help us to learn more about our world?</li> <li>• How can practicing personal health habits keep us safe and healthy?</li> <li>• How can understanding specific scientific concepts help us understand the world around us?</li> <li>• Why is it important to care for ourselves?</li> </ul>
Content Guidelines	Performance Standards
<p>Observation</p> <p>Investigation</p> <p>Scientific Concepts</p> <p>Personal Health and Wellness</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use the five senses to observe and explore</li> <li>• name the five senses and their functions</li> <li>• explore the natural world by observing and making predictions</li> <li>• use the senses to investigate and describe properties of material objects (color, size, shape, texture, flexibility)</li> <li>• recognize and use a variety of tools for investigation of the environment</li> <li>• recognize and name body parts and their functions</li> <li>• understand weather and seasons</li> <li>• recognize and name the basic colors</li> <li>• participate in a variety of physical activities that enhance personal health and fitness</li> <li>• engage in active physical play indoors and outdoors</li> <li>• identify and practice personal health habits (e.g., washing hands, caring for teeth and eyes, covering coughs and sneezes, blowing nose) which affect self and others</li> <li>• demonstrate healthy eating habits by eating a variety of nutritious foods</li> </ul>

Self-Help Skills	<ul style="list-style-type: none"><li>• exhibit ability to be separated from parent for an extended period</li><li>• develop awareness of own needs and the ability to communicate those needs</li><li>• develop inter-dependence in caring for self and the environment</li><li>• demonstrate increasing independence with basic self-care skills</li><li>• care for self in the restroom</li><li>• use fork or spoon as appropriate for eating</li><li>• clean up after work/play period</li><li>• keep track of personal belongings</li><li>• fasten and unfasten own clothing without assistance (zipper, shoes, jacket)</li></ul>
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## Creativity and the Arts – Pre-K

Essential Understandings	Guided Questions
<ul style="list-style-type: none"> <li>• Art fosters creativity and is an avenue for personal expression.</li> <li>• Creativity and the arts promote the development of the whole child.</li> </ul>	<ul style="list-style-type: none"> <li>• How does this creation/experience make you feel?</li> <li>• What did you gain from this experience?</li> <li>• How does being exposed to the different art forms expand your awareness of the world around you?</li> </ul>
Content Guidelines	Performance Standards
<p>Creativity</p> <p>Appreciation</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• use a variety of media, materials, and tools for creative expression</li> <li>• demonstrate self-expression and creativity in a variety of forms and contexts, including play, visual arts, music, drama, and dance</li> <li>• show and talk about what they have made or done</li> <li>• show interest and respect for the creative work of self and others</li> <li>• demonstrate appreciation for different forms of artistic expression</li> <li>• share opinions and thoughts about art and creative expression in a respectful manner</li> </ul>