



ARCHDIOCESE
of MILWAUKEE

CURRICULUM *Guide* FOR PARENTS

GRADE 5

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Before you get started...

What is a Curriculum Guide?

Academic excellence is a hallmark of Catholic schools in the Archdiocese of Milwaukee. To assist schools in maintaining academic excellence, the archdiocese's Office for Schools has developed curriculum guides for grades 4K-8th that identify what we want our students to know and be able to do at the end of each grade based on national, state, and local standards. With these guides as a template, each individual school develops a plan to clearly articulate what is taught, how it is taught, and how student achievement is assessed for each grade. This process of "fine tuning" results in a school specific standards-based curriculum that guides teaching and learning.

Characteristics of a 5th Grader

- Can be critical of adults who appear to be insincere in their faith
- Begins to think about questions of ethics and morality in the context of love, loyalty, promises, etc.
- Can perform special roles in the liturgy and prayer services
- Is becoming open to learning about other cultures and may be more accepting of differences in others
- Has the capacity to be reflective and is more inclined than younger children to look inward
- Transitions into puberty with rapid physical and emotional changes
- Demonstrates marked differences between boys and girls and even among the same gender
- Becomes aware of past, present, and future community experiences
- Belongs to one or more groups because of commitments; e.g., sports, fun, service
- Belongs to peer groups who often develop their own codes of behavior
- Begins to make choices independent of adults
- Recognizes signs and symbols in games, sports, clothes, and professions
- Appreciates and develops personal talents and abilities
- Practices problem-solving
- Begins to be aware of different customs and rituals among people
- Values success in sports and is influenced by sports figures



CREED

- Understands the Nicene and Apostles Creeds as statements of Catholic belief
- Knows that God is the Creator, all-powerful, who made the world good
- Explains how environment is God's creation and is ours to respect
- Knows and expresses belief that Jesus is the Son of God, the Word Made Flesh, and our Redeemer
- Knows the meaning of the Ascension and that Jesus will come again to judge the living and the dead
- Knows that the Holy Spirit works as Sanctifier in the Church and in the lives of people
- Understands that the "Kingdom/Reign of God" is reflected in the good that happens in the world
- Identifies ways that the Church carries on the mission of Jesus under the leadership of the pope and the bishops
- Explains the Communion of Saints
- Explains that the Assumption celebrates Mary taken to heaven, body and soul
- Identifies past and present Christian role models; e.g., patron saints
- Knows after death comes judgment which leads to heaven, hell, or purgatory
- Knows an overview of the Bible, understanding that the Old Testament is fulfilled in the New Testament
- Is able to locate and read from the Bible the stories for this age group; e.g., both versions of The Creation Story (Gn 1-2)
- Knows that the human race has a common origin reflected in the Adam and Eve story

LITURGY AND SACRAMENTS

- Knows and explains the names, meanings, signs, gestures, and symbols of each of the seven sacraments
- Summarizes why the sacraments were given to the Church by Christ and how they impact our daily lives
- Articulates the meaning of the Sacraments of Initiation, Sacraments of Healing, and Sacraments at the Service of Communion
- Knows that Baptism forgives original and personal sin through the story of Nicodemus (Jn 3: 1-21) Knows that the baptized share in the priesthood of Christ
- Recognizes Christ's presence at Mass: in the assembly, the priest-presider, the proclamation of the Word, and especially in the consecrated bread and wine
- Continues to celebrate the Sacrament of Reconciliation after an examination of conscience
- Understands the healing power of Christ in the Sacrament of the Anointing of the Sick (Jas 5: 14-15)
- Understands the Sacrament of Holy Orders as the way Christ continues to preach and sanctify
- Identifies the three degrees of Holy Orders: bishop, priest (presbyter), deacon
- Understands that in the Sacrament of Matrimony, the family is seen as the "Domestic Church"
- Locates and understands Scripture passages related to the sacraments; e.g., Eucharist (Mt 26: 26-30; Mk 14: 22-26; Lk 22: 7-38; I Co 11: 23-26), Reconciliation (Jn 20: 19-23), Holy Matrimony (Mt 19: 5; Eph 5: 25, 31-33)

- Explains the purpose and use of items in a church
- Demonstrates knowledge of the liturgical calendar by explaining the seasons of the Church Year, their meanings and colors
- Recognizes the meaning and celebration of the Sacred Triduum and Easter as our central feast
- Understands that Christmas is the celebration of the Incarnation
- Understands the meaning and origin of Pentecost (Acts 2: 1-12)
- Identifies the Holy Days of Obligation and explains their meaning
- Participates in preparing a celebration for a particular season or feast

MORAL LIFE

- Understands that the presence of sin or evil in the world is “original sin” into which we are all born
- Recognizes attitudes and actions that are sinful or selfish
- Realizes that all choices have consequences and are to be made in light of Gospel values; e.g., Good Samaritan (Lk 10: 25-37)
- Acts out of the belief that mercy and justice are essential to Christian living
- Identifies the Corporal and Spiritual Works of Mercy being practiced within their community
- Identifies the Theological and Cardinal Virtues and recognizes people who demonstrate them
- Practices forgiving and being forgiven
- Begins to be aware of the need for ongoing conversion
- Knows stories of forgiveness in Bible; e.g., The Unforgiving Steward (Mt 18: 21-33); Lost Sheep (Lk 15: 1-7); Prodigal Son (Lk 15: 11-24)

CHRISTIAN PRAYER

- Understands the difference between the Mass, communal prayer, and private prayer
- Creates and participates in a prayer service involving Scriptures and prayers; e.g., the Our Father, Hail Mary, Apostles Creed, Act of Contrition, Glory Be, Rosary, Stations of the Cross
- Is introduced to meditation by experiences that engage thought, imagination, emotion, and desire
- Prays in harmony with the seasons of the Church Year
- Composes prayers of praise, thanksgiving, contrition, and petition (Prayers of the Faithful)
- Is introduced to spontaneous prayer
- Prays the Nicene Creed as a group
- Identifies when the Psalms are said or sung during Mass and can explain why
- Uses Scripture as a source of prayer/reflection
- Researches saints and relates their lives to one’s own life
- Prays to the saints asking for their intercession

FAMILY

- Recognizes that parents have the responsibility to care for their children

FRIENDSHIPS AND RELATIONSHIPS

- Analyzes relationships with boys and girls, and applies understanding of friendship to both genders
- Understands dating as a time to develop deeper friendships

HUMAN SEXUALITY

- Understands human sexual development and its sacredness
- Applies this knowledge in respect for the human body, and God's plan for us
- Understands life is sacred

MARRIAGE

- Understands that marriage is a sacred relationship between a man and a woman
- Recognizes the giftedness men and women bring to marriage

MORAL DECISION MAKING

- Shows decision-making and problem-solving skills
- Understands that the Church helps us to know and live by the truth, and that God helps us to choose what is true, good and beautiful
- Understands that the virtues allow us to do what's good, right, and loving in the areas of relationships and sexuality, and applies to own life

RESPECT FOR LIFE

- Knows and lives the belief that all life is sacred, and is to be respected
- Understands that sometimes people make bad choices that don't respect life
- Understands that the consequence of bad choices is sin

VIRTUES

- Can practice and give examples of Modesty, Respect, Honesty, Generosity, Prudence, Temperance, Justice, and Fortitude

LANGUAGE STANDARDS

- Identify relative conjunctions, correlative conjunctions, and interjections
- Recognize perfect verb tenses
- Recognize inappropriate changes in a verb tense
- Demonstrate command of standard English grammar and usage when writing
- Explain the functions of conjunctions, prepositions, and interjections
- Define when/how to form perfect verb tense
- Use verb tense to convey various times, sequences, states, or conditions
- Demonstrate command of standard English grammar and usage when speaking
- Use perfect verb tenses
- Use verb tenses to convey times, sequences, states, and conditions
- Correct inappropriate changes in verb tense
- Use correlative conjunctions
- Apply correct capitalization, punctuation, and spelling
- Use commas to separate items in a series
- Use a comma to separate introductory element from the sentence
- Use a comma to set off the words yes and no
- Use a comma to set off a tag questions from the sentence
- Know use of underlining and italics
- Use underlining, quotation marks, or italics to indicate titles
- Recall and apply spelling rules
- Identify and correct misspelled words
- Consult references as needed
- Recognize language conventions for reading, writing, listening, and speaking
- Recognize various sentence structures
- Apply language knowledge when reading, writing, and speaking
- Apply knowledge of language conventions when reading, writing, and listening
- Use knowledge of language conventions when speaking
- Expand, combine, and reduce sentences for meaning, interest, or style
- Identify and define Greek and Latin affixes and roots
- Identify common context clues
- Use common reference materials
- Use reference materials to find pronunciation

- Use reference materials to determine the meaning of key words
- Determine the meaning of words by examining a text
- Determine the meaning of words using Greek and Latin affixes and roots
- Choose from a range of vocabulary strategies to determine a word's meaning
- Define homograph
- Identify similes and metaphors
- Recognize idioms, adages, and proverbs
- Identify synonyms, antonyms, and homographs
- Interpret figurative language using similes and metaphors
- Explain the meanings of idioms, adages, and proverbs
- Utilize synonyms, antonyms, and homographs
- Acquire grade appropriate general and domain-specific academic words
- Know words that signal contrast, addition, and logical relationships
- Use grade appropriate general and domain-specific academic words
- Use vocabulary that signals contrast, addition, and other logical relationships
- Use general and domain-specific academic words and phrases
- Use words that signal contrast, addition, and other logical relationships

READING STANDARDS FOR FOUNDATIONAL SKILLS

- Explain explicitness of text by quoting accurately
- Draw inferences
- Explain how supporting details determine the main idea
- Determine two or more ideas
- Explain how multiple ideas are supported by key ideas
- Summarize the multiple ideas using key details
- Define relationships and interactions
- Explain the relationships or interactions between individuals, events, ideas, and concepts
- Use specific information to support the relationship between individuals, ideas, and concepts
- Identify and apply general academic words and phrases
- Identify and apply domain-specific words and phrases
- Determine the meaning of general academic phrases
- Determine the meaning of domain-specific phrases
- Determine the overall text structure
- Describe the overall text structure
- Compare/contrast the overall structure of events, ideas, concepts, or information
- Define influences

- Identify narrator's or speaker's point of view
- Describe narrator's or speaker's point of view
- Identify relevant events
- Infer the characteristics of the narrator or speaker
- Describe how the narrator's point of view influences descriptions
- Describe how the speaker's point of view influences how the events are described
- Obtain information from sources
- Recognize digital sources
- Identify problem solving steps
- Collect information/data
- Locate an answer or solve problem efficiently from various print and digital sources
- Organize information to answer efficiently
- Identify an author's particular points
- Identify which evidence and reasons support each point
- Explain how to use reasons to support points
- Explain how to use evidence to support points
- Identify information within several different texts on the same topic
- Integrate information from several different texts on the same topic
- Recall/understand key ideas and details
- Identify/understand craft and structure
- Recognize/understand integration of knowledge
- Comprehend key ideas and details
- Comprehend craft and structure
- Comprehend integration of knowledge

READING STANDARDS FOR INFORMATIONAL TEXT

- Explain explicitness of text by quoting accurately
- Draw inferences using textual information
- Determine the theme of a story, drama, and poem
- Summarize text
- Explain how characters respond to challenges
- Explain how the speaker reflects upon a topic
- Summarize key ideas and details
- Summarize how characters respond to challenges
- Summarize how the speaker reflects upon a topic
- Define terms: compare and contrast

- Identify the character, setting, and/or event
- Identify similarities of characters, settings, or events
- Identify differences between characters
- Compare characters, settings, and events
- Contrast characters, setting, and events
- Recognize examples of figurative language
- Recognize similes and metaphors
- Determine the meaning of words
- Determine the figurative meaning of words and phrases
- Explain how a series of chapters, scenes, and stanzas fit together
- Explain how chapters, scenes, and stanzas provide overall structure
- Define influences
- Identify narrator's or speaker's point of view
- Identify relevant events
- Infer the characteristics of the narrator or speaker
- Describe how the narrator's point of view influences descriptions
- Describe how the speaker's point of view influences descriptions
- Define analyze
- Identify multimedia and visual elements
- Recognize meaning, tone, and beauty
- Analyze how visual elements contribute to meaning, tone, and beauty
- Analyze how multimedia contributes to meaning, tone, and beauty
- Identify characteristics of a theme, topic, or genre
- Compare/contrast how stories of the same genre approach a similar theme or topic
- Identify/understand key ideas and details
- Identify/understand craft and structure
- Comprehend key ideas and details
- Comprehend craft and structure

SPEAKING AND LISTENING STANDARDS

- Identify key ideas from reading material
- Identify ways to listen effectively
- Describe discussion rules and roles
- Know how to pose questions and provide feedback
- Understand the importance of coming prepared to discussions
- Identify key ideas presented during discussion

- Relate information read to discussion topics
- Evaluate implementation of discussion rules and roles
- Formulate questions and responses based on discussion
- Explain topics using personal ideas, opinions, and reasoning
- Think critically about ideas posed
- Justify responses with evidence to support reasoning
- Engage in discussions by sharing knowledge
- Listen actively to discussions and presentations
- Follow agreed-upon rules during discussion
- Carry out assigned roles during discussions
- Pose and respond to specific questions to clarify understanding
- Connect comments to others' remarks
- Express ideas clearly
- Summarize a written text read aloud
- Summarize information presented in diverse media visually, quantitatively, and orally
- Identify speaker's points, claims, reasons, or evidence
- Summarize speaker's points
- Explain how a speaker's claim is supported
- Identify an opinion and facts
- Identify descriptive details
- Clearly pronounced and enunciate words at an understandable pace
- Sequence ideas logically
- Determine appropriate facts and details to support ideas or themes
- Determine when to add graphics, sound, or visual displays
- Add graphics, sound, and visual displays to enhance the main ideas or theme
- Use multimedia components in presentations
- Identify audience, task, and situation
- Identify characteristics of formal and informal speaking
- Distinguish between formal and informal speech
- Analyze situation to determine appropriate speech use
- Speak for a variety of contexts and tasks using formal English when appropriate

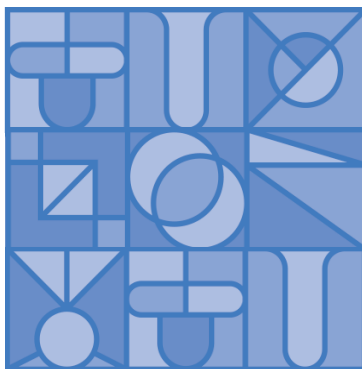
WRITING STANDARDS

- Explain and identify words, phrases, and clauses linking opinion and reasons
- Recognize organizational structures that provide logical grouping
- Explain writer's purpose

- Determine how to clearly introduce topic or text
- Formulate an opinion
- Provide logically ordered ideas and reasons that are supported by facts and details
- Establish links between opinions and reasons using words, phrases, and clauses
- Plan a concluding statement or section related to the opinion
- Write an opinion piece supported with reasons and information
- Opinion piece should include clear introduction
- Opinion piece should include statement of opinion
- Opinion piece should include strong organizational structure
- Opinion piece should include reasons supported by facts and details
- Opinion piece should include links between opinion and reasons
- Opinion piece should include a concluding statement or section
- Identify a topic
- Identify related information grouped logically
- Identify related information containing formatting, illustrations, and multimedia when aiding comprehension
- Identify topics developed with facts, definitions, concrete details, quotations, and examples
- Identify linked ideas within categories of information
- Use precise language and domain-specific vocabulary
- Identify concluding statement or section
- Develop a clearly written topic
- Develop related information grouped logically
- Develop related information containing formatting, illustrations, and multimedia
- Develop topics with facts, definitions, concrete details, quotations, and examples
- Develop linked ideas within categories
- Determine appropriate words and phrases that link ideas within and across categories
- Determine a concluding statement or section
- Create informative/explanatory texts that include clear topic
- Create informative/explanatory texts that include a general observation and focus
- Create informative/explanatory texts that include related information grouped logically
- Create informative/explanatory texts that include related information that contain formatting
- Create informative/explanatory texts that include related information that contain illustrations and multimedia
- Create informative/explanatory texts that include a topic developed with facts, definitions, concrete details, quotations, and examples
- Create informative/explanatory texts that include ideas linked in and across categories
- Create informative/explanatory texts that include precise language and domain-specific vocabulary
- Create informative/explanatory texts that include a concluding statement
- Describe the use of story elements in narratives

- Describe the characteristics of narratives
- Explain how the sequence of events affects the story's conclusion
- Recognize the transitional words
- Explain how transitional words, phrases, and clauses advance the sequence of events
- Describe narrative techniques (dialogue, description, and pacing)
- Establish a situation, narrator and/or characters
- Sequence events logically resulting in a conclusion
- Use a variety of transitions
- Use dialogue and description to develop experiences and events
- Use concrete words and phrases and/or sensory details to develop experiences or events
- Develop characters through dialogue, description, actions, and reactions
- Write a narrative that establishes a real or imagined situation, using effective technique, and clear event sequences
- Write a narrative that uses dialogue, descriptions, concrete words and phrases and/or sensory details
- Write a narrative that uses transitional words or phrases
- Write a narrative that provides a conclusion
- Analyze the reason for writing to decide the task, purpose, and audience
- Determine suitable idea development strategies
- Determine suitable organization
- Produce a writing piece with clear, cohesive idea development, and organization
- Recognize how to plan, revise, edit, rewrite, and try a new approach to writing
- Know how to edit for conventions
- Develop and strengthen writing by planning, revising, editing, rewriting, and trying a new approach
- Use keyboarding skills
- Use word processing to produce and publish writing
- Use the internet to communicate with others
- Evaluate the technology tools for producing and publishing writing
- Evaluate the technology for collaborating with others
- Use technology to develop, revise, edit, and publish writing
- Use technology to communicate and collaborate
- Use keyboarding skills to type one page
- Identify various research sources
- Identify the different aspects of a topic
- Discriminate between various research sources
- Compare/contrast information from various research sources
- Interpret information derived from various sources
- Conduct short research projects investigating different aspects
- Participate in short research and writing projects

- Conduct investigations on different topical aspects
- Question information to build topical knowledge
- Recall and gather relevant information from print and digital sources
- Identify source list
- Summarize information in notes and finished work
- Paraphrase information in notes and finished work
- Identify key ideas and details to support conclusions
- Cite textual evidence to analyze explicit text
- Draw evidence as support for research
- Analyze key ideas and details as evidence of understanding text
- Reflect on key ideas and details as evidence of understanding text
- Identify the various purposes for writing
- Identify and understand the various organizational structures
- Identify and understand different genres or purposes for writing
- Determine when to write for short or extended time frames
- Determine the appropriate organizational structure for specific audiences and purposes
- Write for various purposes and to various audiences for short or extended time frames
- Write for a range of discipline-specific tasks, purposes, and audiences



Fifth grade is a milestone and a pivot point for students. The classroom focus on arithmetic during the elementary grades will develop into a more formal study of algebra in middle school. To be ready for algebra, students must have an understanding of fractional arithmetic, in part because even simple equations cannot be solved without fractions. Because of this, whole-number arithmetic comes mostly to a close in 5th grade, while multiplying and dividing fractions becomes a major focus.

HELP YOUR CHILD LEARN AT HOME

Look for “word problems” in real life. Some 5th grade examples might include:

- Doing arithmetic with decimals, for example when balancing a checkbook.
- Multiplying with fractions – for example, if you used about $\frac{2}{3}$ of a $\frac{3}{4}$ -cup measure of vegetable stock, then how much stock did you use? About how much is left?
- Using the length, width, and depth of a garden plot to determine how many bags of garden soil to buy.

GEOMETRY

- Define the coordinate system
- Identify the x and y axis
- Locate the origin on the coordinate system
- Identify coordinates of a point on a coordinate system
- Recognize and describe the connection between the ordered pair and the x and y axis from the origin
- Graph points in the first quadrant
- Interpret coordinate values of points in real world context and mathematical problems
- Represent real world and mathematical problems by graphing points in the first quadrant
- Recognize that some two-dimensional shapes can be classified into more than one category based on their attributes
- Recognize if a two-dimensional shape is classified into a category, that it belongs to all subcategories of that category
- Recognize the hierarchy of two-dimensional shapes based on their attributes
- Analyze properties of two-dimensional figures in order to place into a hierarchy
- Classify two-dimensional figures into categories and/or subcategories based on their attributes

MEASUREMENT AND DATA

- Recognize units of measurement within the same system
- Divide and multiply to change units
- Convert units of measurement within the same system
- Solve multi-step, real world problems that involve converting units
- Identify benchmark fractions
- Make a line plot to display a data set of measurements in fractions of a unit
- Solve problems involving information presented in line plots which use fractions of a unit by adding, subtracting, multiplying, and dividing fractions
- Recognize that volume is the measurement of the space inside a solid three-dimensional figure
- Recognize a unit cube has 1 cubic unit of volume and is used to measure volume of three-dimensional shapes
- Recognize any solid figure packed without gaps or overlaps and filled with n unit cubes indicates the total cubic units or volume
- Measure volume by counting unit cubes, cubic cm, cubic in, cubic ft, and improvised units
- Identify a right rectangular prism
- Multiply the three dimensions in any order to calculate volume (Commutative and Associative properties)
- Know the “B” is the area of the base
- Recognize volume as additive
- Develop volume formula for a rectangle prism by comparing volume when filled with cubes to volume by multiplying the height by the area of the base, or when multiplying the edge lengths ($L \times W \times H$)
- Apply the following formulas to right rectangular prisms having whole number edge lengths in the context of real world mathematical problems: Volume = length \times width \times height Volume = area of base \times height
- Solve real world problems by decomposing a solid figure into two non-overlapping right rectangular prisms and adding their volumes
- Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes

NUMBER AND OPERATIONS IN BASE TEN

- Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.
- Translate between powers of 10 written as 10 raised to a whole number exponent, in expanded form, and standard notation
- Explain the patterns in the number of zeros of the product when multiplying a number by powers of 10
- Explain the relationship of the placement of the decimal point when a decimal is multiplied or divided by a power of 10
- Represent powers of 10 using whole number exponents
- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form

- Use $>$, $=$, and $<$ symbols to record the results of comparisons between decimals
- Use knowledge of base ten and place value to round decimals to any place
- Compare two decimals to the thousandths, based on the place value of each digit
- Use knowledge of base ten and place value to round decimals to any place
- Fluently multiply multi-digit whole numbers using the standard algorithm
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors
- Use strategies based on place value, the properties of operations, and/or relationship between multiplication and division to solve division problems
- Illustrate and explain division calculations by using equations, rectangular arrays, and/or area models
- Add, subtract, multiply, and divide decimals to hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction
- Relate the strategy to a written method and explain the reasoning used to solve decimal operation calculations

NUMBERS AND OPERATIONS: FRACTIONS

- Generate equivalent fractions to find the like denominator
- Solve addition and subtraction problems involving fractions (including mixed numbers) with like and unlike denominators using an equivalent fraction strategy
- Generate equivalent fractions to find like denominators
- Evaluate the reasonableness of an answer, using fractional number sense, by comparing it to a benchmark fraction
- Solve word problems involving addition and subtraction of fractions with unlike denominators referring to the same whole
- Interpret a fraction as division of the numerator by the denominator
- Interpret a remainder as a fractional part of the problem
- Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers
- Multiply fractions by whole numbers
- Multiply fractions by fractions
- Interpret the product of a fraction times a whole number as total number of parts of the whole
- Determine the sequence of operations that results in the total number of parts of the whole
- Interpret the product of a fraction times a fraction as the total number of parts of the whole
- Represent fraction products as rectangular areas
- Justify multiplying fractional side lengths to find the area is the same as tiling a rectangle with unit squares of the appropriate unit fraction side lengths
- Find area of a rectangle with fractional side lengths using different strategies

- Model the area of rectangles with fractional side lengths with unit squares to show the area of rectangles
- Know that scaling (resizing) involves multiplication
- Know that multiplying whole numbers and fractions results in products greater than or less than one depending upon the factors
- Compare 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
- Draw a conclusion multiplying that a fraction greater than one will result in a product greater than the given number
- Draw a conclusion that when you multiply a fraction by one, the resulting fraction is equivalent
- Draw a conclusion that when you multiply a fraction by a fraction, the product will be smaller than the given number
- Represent word problems involving multiplication of fractions and mixed numbers
- Solve real world problems involving multiplication of fractions and mixed numbers
- Know the relationship between multiplication and division
- Interpret division of a unit fraction by a whole number and justify your answer using the relationship between multiplication and division, by creating story problems, using visual models, and relationship to multiplications, etc.
- Interpret division of a whole number by a unit fraction and justify your answer using the relationship between multiplication and division, and by representing the quotient with a visual fraction model
- Solve real world problems involving division of unit fractions by whole numbers other than 0 and division of whole numbers by unit fractions using strategies such as visual fractions models and equations

OPERATIONS AND ALGEBRAIC THINKING

- Use order of operations including parenthesis, brackets, or braces
- Evaluate expressions using the order of operations (including using parenthesis, brackets, or braces)
- Interpret numerical expressions without evaluating them
- Write numerical expressions for given numbers with operation words
- Write operation words to describe a given numerical expression
- Generate two numerical patterns using two given rules
- Form ordered pairs consisting of corresponding terms for the two patterns
- Analyze and explain the relationships between corresponding terms in the two numerical patterns
- Graph generated ordered pairs on a coordinate plane

- Investigates and interprets interactions between individuals and groups.
- Assesses the role that human behavior and cultures play in the development of social interactions.
- Analyzes how decisions are made and interactions occur among individuals, households, and firms/businesses.
- Analyzes how an economy functions as a whole.
- Uses geographic tools and ways of thinking to analyze the world.
- Analyzes human movement and population patterns.
- Examines the impacts of global interconnections and relationships.
- Uses historical evidence for determining cause and effect.
- Analyzes, recognizes, and evaluates patterns of continuity and change over time in the context of historical events.
- Evaluates the historical context of a primary or secondary source.
- Identifies and analyzes democratic principles and ideals.
- Analyzes and evaluates the powers and processes of political and civic institutions.
- Examines and interprets rights, privileges, and responsibilities in society.

CATHOLIC SOCIAL TEACHINGS

Call to Family, Community, and Participation - "The person is not only sacred but also social. How we organize our society - in economics and politics, in law and policy - directly affects human dignity and the capacity of individuals to grow in community."

Rights and Responsibilities - "The Catholic tradition teaches that human dignity can be protected and a healthy community can be achieved only if human rights are protected and responsibilities are met."

Option for the Poor and Vulnerable- "A basic moral test is how our most vulnerable members are faring."

Solidarity - "We are one human family whatever our national, racial, ethnic, economic, and ideological differences. We are our brothers and sisters keepers, wherever they may be. Loving our neighbor has global dimensions in a shrinking world."

Care for God's Creation - "We are called to protect people and the planet, living our faith in relationship with all of God's creation."

The Dignity of Work and the Rights of Workers - "The economy must serve people, not the other way around."

Dear Parents:

A strong foundation in science, technology, engineering, and mathematics is essential for preparing our students to be well informed citizens as well as prepared for college and the work force. Our traditional science programs have focused on content, facts, and vocabulary, but have lacked the ability for students to engage in the actual application of scientific concepts. The Next Generation Science Standards (NGSS) have refocused K-12 science education to focus on the big ideas through an emphasis on firsthand experiences such as investigation, design, and modeling, to help make more meaningful connections to the concepts that will stay with our children for a lifetime.

The NGSS promote a new way of teaching and learning that allows students to experience science in a meaningful way. This is accomplished by integrating three dimensions of learning as well as technology and engineering principles:

- **Core Disciplinary Concepts:** This is the content that is being covered (ex. Biology).
- **Science and Engineering Practices:** This focuses on the process of how science is conducted in the real world, such as through planning and carrying out investigations.
- **Cross Cutting Concepts:** These are science ideas, like *cause and effect*, that permeate all the sciences.

Your child/children will experience instruction in the classroom that emphasizes scientific exploration and experimentation. Children will be engaged in questioning, exploring and discussing possible solutions, investigating science concepts, using argumentation, and being fully active in the learning process. This approach mirrors real-world science practices and engages students in a more meaningful way. Not only will our students be immersed in investigative experiences, but they will also be developing important critical-thinking skills that will cultivate the great thinkers and innovators of tomorrow.

PHYSICAL SCIENCE

- Develop a model to demonstrate that matter is made of particles too small to be seen
- Identify through an experiment that molecules are present
- Identify a change occurred from heating, cooling, and mixing of substances
- Measure a substance's weight before and after a change
- Conclude that a substance's weight remains the same after a change
- Recognize properties of substances
- Distinguish materials based on their properties
- Investigate to tell whether the mixing of two or more substances results in the new substances
- Identify the relationship between the strength of a force and its effect on an object
- Provide evidence that Earth's gravity pulls objects down

- Argue that the force exerted by Earth on an object is directed down
- Create a model to show the movement of energy from the sun, to plants, to animals
- Identify that animals use food for body repair, growth, motion, and to maintain body warmth

LIFE SCIENCE

- Explain the process of seed development
- Design an investigation to test which materials plants need for growth
- Provide evidence that plants acquire their materials for growth from water and air
- Describe how energy is transferred through an ecosystem
- Make a model showing the movement of matter through different cycles in nature

EARTH SCIENCE

- Conduct an investigation to explore the relationship between distance and brightness of an object. (not size)
- Conclude that objects further away from Earth appear smaller
- Observe patterns in the length of shadows and the time of day
- Observe patterns regarding the appearance of some stars in the night sky
- Identify the relationship between the position of Earth with respect to the sun and the amount of daylight
- Prepare a graphical representation of the relationship between the position of Earth with respect to the sun and the amount of daylight
- Explain the interconnectedness between two of the four major systems of Earth
- Diagram how two of the four major systems of Earth work together
- Identify the processes of each major system
- Identify the different places that water is found on Earth
- Compare the amount of saltwater to freshwater on Earth by creating a graph
- Obtain information about ways individual communities use science ideas to protect the Earth's resources and environment
- Combine information about the ways individual communities protect Earth's resources
- Communicate information about protecting Earth's resources and environment

SCIENCE AND ENGINEERING PRACTICES

- Obtain, evaluate, and communicate information
- Plan and carry out investigations
- Analyze and interpret data
- Use mathematics and computational thinking
- Develop and use models
- Engage in an argument based on evidence

CATHOLIC SOCIAL TEACHINGS

- Work collaboratively and respect my classmates' ideas, roles, and abilities
- Demonstrate stewardship inspired by Catholic values in the care of local and global environments

