



ARCHDIOCESE
of MILWAUKEE

Office for Schools

Curriculum Guide

Grade 1

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 1st Grader

- ✓ Experiences being special
- ✓ Recognizes that he/she belong to a family
- ✓ Appreciates and thanks God for the special gifts of the senses
- ✓ Recognizes that friends and family are special
- ✓ Helps others and is open to others helping them
- ✓ Experiences family rituals and activities
- ✓ Experiences forgiveness in daily life
- ✓ Recognizes that he/she belongs to the family of God
- ✓ Experiences going to church with family weekly
- ✓ Shows respect for others
- ✓ Begins awareness of social justice issues

Grade Level 1 Expectations

Credal Church

- Names God the Father, Son and Holy Spirit
- Recognizes that God creates people and the world out of love
- Begins to recognize that God sent us Jesus to show us how to love God
- Learns to identify Church as God's family
- Begins to recognize that the Holy Spirit is with us and helps us to love God
- Recognizes that every person has a guardian angel and angels are messengers of God
- Recognizes Mary as Jesus' mother and our mother
- Learns about saints
- Learns that we are saved as members of God's family
- Recognizes that God wants us to be happy with him in heaven
 - + Knows the Bible is the story of God's people
 - + Is familiar with the story of Christmas (Luke 2: 8-18)
 - + Is familiar with the story of Easter (John 20:1-20, Luke 24:13-35)
- Recognizes that God made all kinds of families*
- Recognizes and cares for the body as a gift from God*

Liturgy and Sacraments

- Recognizes sacraments as special signs of God's love
- Recognizes that Baptism welcomes us to God's family, the Church
- Recognizes that Eucharist is Christ's body and blood in the bread and wine
- Recognizes that in Reconciliation we say "I'm sorry" and Christ forgives
- Gathers with God's family at Mass to thank and praise God
- Begins to pray at Mass: Lord Have Mercy; Glory to God; Alleluia; Response: "And also with you"; Holy, Holy, Holy; Amen; Our Father; Lamb of God
- Recognizes important liturgical seasons such as Advent, Christmas, Lent, Easter, and celebrates some saint's feast days
- Recognizes Christian signs and symbols: water, candles, cross, fish, chi-rho, oil
 - + Knows the story of the Last Supper (Matthew 26:17-30, Luke 22:13-20, Mark 14:12-26)
 - + Knows the story of Christmas (Luke 2:8-18)
 - + Knows the story of Easter (John 20:1-20, Luke 24:13-35)

Characteristics of a First Grader

- Experiences being special
- Recognizes that he/she belong to a family
- Appreciates and thanks God for the special gifts of the senses
- Recognizes that friends and family are special
- Helps others and is open to others helping them
- Experiences family rituals and activities
- Experiences forgiveness in daily life
- Recognizes that he/she belongs to the family of God
- Experiences going to church with family weekly
- Shows respect for others
- Begins awareness of social justice issues

Moral Life

- Knows that Jesus gave us two great commandments: To Love God and to love our self and others
- Names how he/she loves God, self and others
- Shows care for others and creation
- Recognizes sin as choosing not to love God, self and others
- Tries to bring peace to one's self and others
- Demonstrates evidence of sharing with others
- Respects God's name as holy
- Recognizes that telling the truth is good and necessary
- Shows respect for people of all races, languages and abilities
- Recognizes saints as people who follow Jesus
 - + Knows the story of creation of the world and us (Genesis 1:1-31, 2-6a)
 - + Knows the story of the Good Samaritan (Luke 10:29-39)
 - + Knows the story of Jesus and Zacchaeus (Luke 19:1-10)
 - + Knows the story of Jesus blessing the children (Matthew 19:13-15, Mark 9:13-16, Luke: 18:15-17)
 - + Recognizes stories of Jesus loving and helping many people (Mark 8:22-25, Luke 17:11-19)
- Demonstrates care for family members*
- Knows that feelings can make one feel good or bad*
- Recognizes that the heart of the family life is married life *
- Knows that he/she can talk to someone when not feeling safe**
- Identifies "private and special" body parts and touches which can make a person feel uncomfortable**

Christian Prayer

- Prays and adores the Blessed Sacrament
- Recognizes that the church building is a house of prayer
- Experiences prayer as listening and talking to God
- Memorizes the Sign of the Cross

- Prays the Sign of the Cross
- Prays the Lord's Prayer
- Prays the Hail Mary
- Prays the Glory to the Father
- Expresses love of God and personal needs in spontaneous prayer
- Celebrates rituals and devotions such as the advent wreath, the Christmas crib, blessing with holy water
- Uses different gestures/postures for prayer
- Is introduced to traditional prayers and devotions such as the rosary and the Way of the Cross
- Reverences the Bible as God's special book
 - + Knows that the Lord's Prayer is part of Scripture (Luke 11:2-4, Matthew 6:9-13)

ENGLISH LANGUAGE ARTS

Language

- Recognize common, proper, and possessive nouns
- Recognize that nouns and verbs match in sentences
- Recognize personal, possessive, and indefinite pronouns
- Know past, present, and future verbs
- Identify adjectives
- Recognize conjunctions and determiners
- Know common prepositions
- Recognize sentence types: complete simple, compound, declarative, interrogative, imperative, and exclamatory sentences
- Demonstrate command of the conventions of standard English grammar and usage when writing to expand complete, simple compound, declarative, interrogative, imperative, and exclamatory sentences
- Demonstrate command of standard English grammar and usage when speaking
- Use common, proper, and possessive nouns in speaking
- Use singular and plural nouns with matching verbs in basic sentences
- Use personal, possessive, and indefinite pronouns
- Use verbs to convey a sense of past, present, and future
- Use frequently occurring adjectives, conjunctions, determiners, and prepositions
- Produce and expand complete, simple, compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts
- Apply correct capitalization, punctuation, and spelling
- Distinguish between dates and other word/number combinations
- Distinguish between names of people and other words
- Capitalize dates and names of people
- Differentiate between the use of periods, exclamation marks and questions marks
- Use end punctuation for sentences
- Use commas in dates and to separate single words in a series
- Know conventional spelling of common spelling patterns
- Use conventional spelling when writing words with common spelling patterns and frequently occurring irregularly spelled words
- Use phonemic awareness and spelling conventions to spell untaught words phonetically
- Understand that some words and phrases have multiple meanings
- Identify meaning of common grade appropriate prefixes and new words formed with them (e.g., happy/unhappy, tell/retell)
- Identify an array of strategies for determining meanings of unknown words and phrases
- Apply sentence level context clues to determine or clarify meaning of an unknown word or phrase
- Apply frequently occurring affixes as a clue to determine or clarify meaning of an unknown word or phrase
- Apply frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking) to determine or clarify meaning of an unknown word or phrase
- Choose and apply an array of strategies to determine the meaning or clarify unknown words
- Categorize pictures/words by multiple attributes
- Identify real-life connections between words and their uses
- Distinguish shades of meaning among similar verbs
- Distinguish adjectives differing in intensity by defining or choosing them
- Act out the meanings of similar verbs
- Acquire words and phrases through conversations, reading, being read to, and responding to texts
- Identify and use frequently occurring conjunctions to single, simple relationships
- Distinguish between words and phrases acquired through conversations, reading, being read to and responding to texts
- Demonstrate the ability to frequently use words and phrases, including conjunctions, acquired through conversations, reading, being read to, and responding to texts

Grade 1

Reading Foundational Skills

- Identify features of a sentence
- Use the distinguishing features of a sentence
- Recognize long vowel sounds
- Recognize short vowel sounds
- Recognize single syllable words phonemes
- Recognize consonant blends
- Distinguish between long and short vowels in single syllable words
- Isolate initial, medial and final sounds in single syllable words
- Produce single syllable words by blending sounds (phonemes)
- Product single syllable words by consonant blends
- Pronounce sounds initial in single syllable words
- Pronounce sounds medial in single syllable words
- Pronounce sounds final in single syllable words
- Segment spoken single syllable words into their complete sequence of individual sounds
- Know grade-level phonics and word analysis skills in decoding words
- Recognize common consonant diagraphs
- Know the sound produced by that consonant diagraph
- Decode regularly spelled one syllable words
- Know the rules for final –e and vowel teams that form long vowel sounds
- Know that words have syllables
- Identify that each syllable contains a vowel
- Identify the number of syllables in printed words
- Determine the syllable parts of a two syllable word
- Know basic patterns to break words into syllables
- Read two syllable words by using decoding and/or syllabication skills
- Recognize words with inflectional endings
- Recognize grade appropriate irregularly spelled words
- Distinguish between words with spelling patterns and irregularly spelled words
- Distinguish between inflectional endings and words that may contain those same letters as common
- Inflectional endings
- Read words with inflectional endings
- Read irregularly spelled sight words appropriate to grade level
- Identify and understand foundational reading skills
- Identify textual purpose with understanding
- Identify oral reading with accuracy, appropriate rate, and expression on successive readings
- Identify rereading as a strategy when confirming or self-correcting words
- Understand how context can help to confirm or self-correct word recognition
- Apply foundational reading skills
- Determine the purpose for reading on-level text
- Apply reading strategies for accuracy, rate, and expression
- Confirm or self-correct word recognition
- Confirm or self-correct word understanding
- Read on-level text fluently and accurately
- Read at the appropriate rate
- Read with expression

Reading Standards for Informational Text

- Identify key details in an informational text
- Ask questions about the key details in an informational text
- Answer questions about the key details in an informational text
- Identify the main topic of a text
- Identify the key details of a text
- Retell key details of a text

- Identify key details within an informational text
- Associate details with an individual, event or idea
- Describe the connection/relationship between the details within an informational text
- Describe the connection between 2 pieces of information
- Identify unknown words or words needing clarification
- Ask questions to determine meaning of words and phrases
- Describe the meaning of words and phrases
- Determine how to use different text features
- Identify key facts or information in a text
- Use various text features to locate key facts or information in a text
- Identify pictures, illustrations, and words
- Identify information from pictures, illustrations, and words
- Identify whether information is provided in pictures/illustrations and by the words
- Identify similarities and differences between information provided by pictures, illustrations, or words
- Identify details and illustrations in a text
- Identify key ideas in a text
- Know how to describe ideas
- Discern key ideas in a text
- Describe key ideas in a text, using references to illustrations and details
- Identify the reasons an author gives to support arguments or facts
- Discern details which support (serve as evidence) as compared to details which do not
- Identify comparable points between two texts on the same topic
- Identify basic similarities between two texts on the same topic
- Identify differences between two texts on the same topic
- Identify key ideas and details
- Identify craft and structure
- Comprehend key ideas, themes and details independently
- Comprehend craft and structure independently
- Demonstrate comprehension

Reading Literature

- Identify meanings and details within a text
- Ask questions about meanings and details within a text
- Answer questions about meanings and details in a text
- Identify meanings and details within a story
- Identify central message/lesson of the story
- Retell story, including key plot points, details, and ideas
- Apply understanding of a central message, meaning, or lesson
- Orally demonstrate understanding of a central message, meaning, or lesson
- Define character
- Define setting
- Define major events
- Define key details
- Identify characters using key details
- Identify setting using key details
- Identify major events using key details
- Describe characters using key details, discern which details are important
- Describe setting using key details, discern which details are important
- Describe major events using key details, discern which details are important
- Identify words in stories or poems
- Identify phrases in stories or poems
- Identify the various senses
- Identify feelings
- Recognize words and phrases that suggest feelings
- Recognize words and phrases that appeal to the senses

- Identify words and phrases in stories that suggest feelings
- Identify words and phrases in poems that suggest feelings
- Identify words and phrases in stories that appeal for the senses
- Identify words and phrases in poems that appeal to the senses

Speaking and Listening

- Identify key ideas from grade 1 topics and texts
- Identify agreed upon rules of discussion
- Recognize how others listen
- Recognize how others ask questions on topic
- Recognize how others move conversations along
- Determine comments and questions appropriate to the topic of discussion
- Determine if agreed upon discussion rules are being followed
- Participate in conversations about grade 1 topics and texts
- Follow agreed upon rules for discussion
- Listen while others are speaking
- Respond to comments to continue conversations with peers and adults
- Ask questions to better understand topic and texts
- Ask questions about key details from text read aloud
- Ask questions about key details from information presented orally
- Ask questions about key details through other media
- Formulate a question based on key details
- Answer questions about key details from a text read aloud
- Answer questions about key details from information presented orally
- Answer questions about key details through other media
- Identify questions and answers
- Recognize that asking and answering questions is a strategy for getting more information from a speaker
- Recognize that asking and answering questions is a strategy for clarifying something that is not understood
- Determine when additional information/clarification is needed
- Formulate questions and answers to gather additional information
- Formulate questions and answers to clarify what is not understood about what a speaker says
- Ask and answer questions about what a speaker says in order to gather additional information
- Ask and answer questions about what a speaker says in order to clarify something that is not understood
- Identify people, places, things, and events
- Identify ideas, details, and feelings
- Determine relevant details describing people, places, things, and events
- Orally perform a clear presentation that describes people, places, things, and events with relevant details
- Know ideas, thoughts, and feelings
- Understand clarify
- Determine which ideas, thoughts, and feelings need clarification
- Determine when to add drawings or displays to descriptions to clarify
- Add drawings/visual displays to clarify ideas, thoughts, and feelings
- Identify complete sentences in writing and when spoken
- Identify task and situation
- Differentiate when situation calls for speaking in complete sentences
- Speak in complete sentences when appropriate to task and situation

Writing

- Identify a topic or the name of a book about which to write
- Recognize and define opinion
- Recognize and define closure
- Formulate an opinion of a book or topic and provide a reason for that opinion

- Provide a sense of closure for an opinion piece
- Write an opinion piece that introduces the topic or book
- Write an opinion piece, stating an opinion
- Write an opinion piece, supplying a reason for the opinion
- Write an opinion piece, proving a sense of closure
- Identify an informative/explanatory text
- Select a topic for an informative/explanatory writing
- Determine supporting facts about a topic
- Determine an appropriate closure
- Write an informative/explanatory text, naming a topic
- Write an informative/explanatory text, supplying facts
- Write an informative/explanatory text, providing a sense of closure
- Choose an experience about which to write
- Identify two or more events of the experience and sequence appropriately
- Identify transitional words
- Identify details, transitions, and closure
- Choose relevant details that correspond to a chosen event
- Reflect on identified event
- Apply appropriate transitional words in order to signal change of events in narrative
- Create relevant and elaborated details to support events of narrative
- Write a narrative, recounting two or more events and including supporting details
- Write a narrative, recounting two or more events and including transitional words
- Write a narrative, recounting two or more events and including a sense of closure
- Recognize how to focus on a topic
- Recognize how to respond to questions and suggestions from peers
- Recognize how to add details to strengthen writing
- Develop writing by focusing on a topic
- Develop writing by responding to questions and suggestions from peers
- Develop writing by adding details to strengthen writing
- Use a variety of digital tool skills
- Select the appropriate digital tools for producing and publishing writing
- Use technology to product and publish writing individually and with peers
- Conduct shared research using various sources and tools
- Explore the format of a variety of texts
- Determine appropriate sources and tools to conduct shared research
- Distinguish the format of a variety of texts
- Participate in shared research and writing projects
- Write a research or investigative piece
- Identify experience
- Identify source
- Gather information from more than one source to answer a question
- Answer a question using information from experience
- Answer a question using information from provided multiple sources

MATH

In 1st grade, your child will build on last year’s work and gain important new skills. One of the most important outcomes for the year is to improve speed and accuracy adding with a sum of 20 or less and subtracting from a number 20 or less (e.g., $17 - 8$). Another important goal in 1st grade is adding with a sum of 100 or less; this will rely on understanding what the digits mean in a number such as 63 (namely, 63 is six tens and three ones). Working with multi-digit addition this year will set the stage for 2nd grade, when your child will be working with three-digit numbers and adding and subtracting with larger numbers.

HELP YOUR CHILD LEARN AT HOME

Look for “word problems” in real life. Some 1st grade examples might include:

- If you open a new carton of a dozen eggs, and you use four eggs to cook dinner, close the carton and ask your child how many eggs are left.
- While putting away toys into bins, count the number of toys in two bins and ask your child how many more are in one bin compared to the other.
- Play the “I’m thinking of a number” game. For example, “I’m thinking of a number that makes 11 when added to 8. What is my number?”

GEOMETRY

- Identify defining and non-defining attributes of shapes
- Compare and contrast defining and non-defining attributes of shapes
- Draw shapes to show defining attributes
- Build shapes to show defining attributes
- Know that shapes can be decomposed to create composite shapes
- Describe properties of original, decomposed and composite shapes
- Determine how the original and created composite shapes are alike and different
- Create composite shapes
- Compose new shapes from a composite shape
- Partition circles and squares into two and four equal shapes
- Identify when shapes are equal
- Describe equal shapes using vocabulary: halves, fourths and quarters, half of, fourth of, and quarter of
- Describe the whole as two of two or four of four equal shapes
- Analyze that dividing a circle or rectangle into more equal pieces creates smaller shapes

MEASUREMENT AND DATA

- Identify the measurement known as the length of an object
- Directly compare the length of three objects
- Order three objects by length
- Compare the lengths of two objects indirectly by using a third object (e.g. if the length of object A is greater than the length of object B, and the length of object B is greater than the length of object C, then the length of object A is greater than the length of object C)
- Know to use the same size non-standard objects as repeating units
- Know that length can be measured with various units
- Compare a smaller unit of measurement to a larger object
- Determine the length of a measured object to be the number of smaller iterated or repeated objects that equal its length
- Compose the measurement of an object using non-standard units (e.g., paper clips, unifix cubes, etc.) by laying the units of measurement end to end with no gaps or overlaps
- Recognize that analog and digital clocks are objects that measure time

- Know hour hand and minute hand and distinguish between the two
- Determine where the minute hand must be when the time is to the hour (o'clock)
- Determine where the minute hand must be when the time is to the half-hour (thirty)
- Tell and write the time to the hour and half-hour correctly using analog and digital clocks
- Recognize different methods to organize data
- Recognize different methods to represent data
- Organize data with up to three categories
- Represent data with up to three categories
- Interpret data representation by asking and answering questions about the data

NUMBER AND OPERATIONS IN BASE TEN

- Recall numbers and numerals up to 120
- Represent a number of objects up to 120 with a written numeral
- Count to 120, starting at any number less than 120
- Read and write numerals up to 120
- Explain what each digit of a two-digit number represents
- Define a bundle of 10 ones as "ten"
- Represent numbers 11-19 as composed of a ten and correct number of ones
- Represent the numbers 20, 30, 40, 50, 60, 70, 80, and 90 as composed of the correct number of tens
- Identify the value of each digit represented in a two-digit number
- Know what each symbol represents greater than, less than, and =
- Compare two two-digit numbers based on meanings of the tens and ones digit
- Use greater than, =, and less than symbols to record the results of comparisons
- Identify the value of each digit of a number within 100
- Decompose any number within one hundred into ten(s) and one(s)
- Choose an appropriate strategy for solving an addition problem within 100
- Relate the chosen strategy (using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtractions) to a written method (equation) and explain the reasoning used
- Use composition and decomposition of tens when necessary to add within 100
- Identify the value of each digit in a number within 100
- Explain how to mentally find 10 more or 10 less than a given two-digit number
- Apply knowledge of place value to mentally add or subtract 10 to/from a given two-digit number
- Identify the value of each digit of a number within 100
- Subtract multiples of 10 in the range of 10-90 from multiples of 10 in the range of 10-90 (positive or zero differences)
- Choose appropriate strategy (concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction) for solving subtraction problems with multiples of 10
- Relate the chosen strategy to a written method (equation) and explain the reasoning used

OPERATIONS AND ALGEBRAIC THINKING

- Use a symbol for an unknown number in an addition or subtraction problem within 20
- Interpret situations to solve word problems with unknowns in all positions within 20 using addition and subtraction
- Determine appropriate representations for solving word problems involving different situations using addition and subtraction within 20
- Solve word problems within 20 using addition and subtraction
- Know how to add three whole numbers whose sum is less than or equal to 20
- Solve word problems that call for addition of 3 whole numbers whose sum is less than or equal to 20
- Define properties of operation strategies
- Apply properties of operation as strategies to solve addition and subtraction problems
- Identify the unknown in a subtraction problem

- Solve subtraction problems to find the missing addend
- Explain the relationship of addition and subtraction
- Know how to count on and count back
- Explain how counting on and counting back relate to addition and subtraction
- Apply strategies to add and subtract within 20
- Add fluently within 20
- Subtract fluently within 20
- Explain the meaning of an equal sign (the quantity on each side of the equality symbol is the same)
- Compare the values on each side of an equal sign
- Determine if an equation is true or false
- Recognize part-part-whole relationships of addition and subtraction equations
- Determine the unknown whole number in an addition or subtraction equation with three whole numbers

SOCIAL STUDIES

Grade 1

ECONOMICS

Production/Consumption/Distribution:

- Identify the interdependence between business and workers
- Name resources and products from the United States and around the world

Exchange:

- Explain the role of banks

HISTORY

Time:

- Recognize a timeline and its use
- Construct a personal timeline. Identify and use a variety of sources to gather and record information about the past

People:

- Name some important people in history
- Recognize that History is about ALL people - we are part of history

Events:

- Describe some important events in history
- Introduce an awareness of current events

POLITICAL SCIENCE

Citizenship:

- Explain the various behaviors that promote or hinder cooperation
- Explain forms of civic action: voting, local improvements, protesting

Laws:

- Learn basic community laws and explain why they are needed

Government:

- Identify the types of leaders in a community

GEOGRAPHY

Location:

- Identify the continents

Map Skills:

- Identify Cardinal Directions
- Understand and construct a simple map using a key and legend
- Know map terms

Human Environment Interaction:

- Name environmental changes in a community
- Identify changes people make to a community over time
- Name ways to protect the environment
- Identify earth's resources and ways people use them

Place:

- Identify physical features: rivers, lakes, and mountains

BEHAVIORAL SCIENCE

Individual:

- Recognize the uniqueness of individual classmates and others

Institution:

- Understand the importance of belonging to groups

Society:

- Explore cultures of each continent
- Complete projects working in cooperative groups

CATHOLIC SOCIAL TEACHINGS

Life and Dignity of the Human Person:

- Recognizes all life as a gift from God
- Relates to others with respect
- Demonstrates the value of sharing to help others
- Responds to conflicts in a peaceful way

The Call to Family, Community, and Participation:

- Identifies at a primary level the family as a basic social institution
- Recognizes examples of social responsibility
- Understands the concept of the blended family
- Shares self and material things for the good of others

The Rights and Responsibilities of the Human Person:

- Begins to solve problems in a peaceful way
- Recognizes obligations of Christians to seek justice in the world
- Understands the basic rights of people

Option for the Poor and the Vulnerable:

- Can discuss ways to care for the poor
- Identifies vulnerable (those who need help) members of a family, class, and neighborhood
- Expresses and shows compassion to those in need
- Practices behaviors that help others
- Can tell stories about what poor children and children who are not poor have in common

Dignity of Work and the Rights of Workers:

- Practices good work habits and sees them as important
- Demonstrates good responsible behavior in class
- Shows respect for others' work

Solidarity of the Human Family:

- Identifies examples of prejudice
- Displays examples of individual and cultural differences
- Participates in simple service projects that benefit others

Care for God's Creation:

- Can name bad elements that hurt the environment (land, air, and water)
- Demonstrates that people can make the environment better by their actions
- Takes part in simple activities that improve the environment
- Identifies God as the maker of everything in the environment

SCIENCE

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(ren) 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:

- Make vibrations with different objects to make a sound.
- Use sound to make an object vibrate.
- Sort objects by their ability to allow light to pass through (transparent, translucent, opaque).
- Define reflection and make light reflect with a mirror.
- See objects when there is light.
- Predict the path of light.
- Explain why a shadow is made.
- Design, create, and test a device that communicates using light or sound.
- Improve a design.

Life Science:

- Identify the external parts of animals.
- Define the different ways body parts help animals survive.
- Identify the external parts of plants.
- Define the different ways the parts of a plant help it grow.
- Understand that adult plants and animals have offspring.
- Identify diverse ways offspring's needs are met (food-nursing, protection-herding, hiding).
- List animal behaviors that help them survive.
- Identify similarities and differences of animal offspring and parents.
- Identify similarities and difference of mature and developing plants.

Earth Science:

- Predict, observe, and document the moon's location in the sky.
- Predict, observe, and document the sun's location in the sky during different times in the day.
- State that stars are seen at night and not during the day.
- Identify the sun as the central and largest body in the solar system.

- Compare and order the amount of daylight in each season.
- Predict the amount of daylight from one season to the next.

Science and Engineering Practices:

- Ask questions and define a problem.
- Construct explanations and design solutions.
- Obtain, evaluate, and communicate information.
- Plan and carry out investigations.
- Analyze and interpret data.
- Use mathematics and computational thinking.
- Develop and use models.

Catholic Social Teachings:

- Work cooperatively and respectfully with my classmates.
- Explain that God created the world and I can do my part to take care of it.

