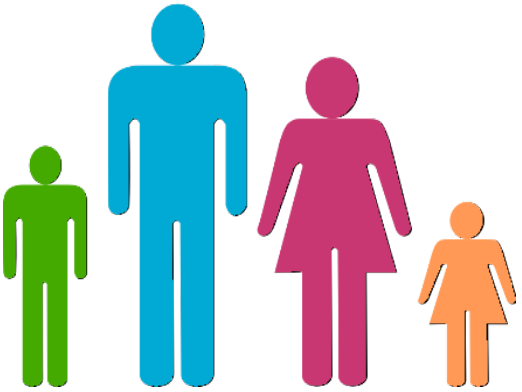
A Curriculum Guide For Families



Grade Four

Religion
Language Arts/Reading
Mathematics
Science
Social Studies
Fine Arts
Health & Physical Education
Technology

Office of Catholic Education
Revised 2022

Dear Family,

The purpose of this ***Curriculum Guide for Families*** is to communicate to parents and guardians the major skills and concepts that will be presented and developed in Grade Four. As a parent or guardian it is important that you are aware of the skills and concepts your child will be learning in the school setting. As the primary teacher, you will want to work with the teacher to reinforce that learning. By working together we, teacher and parent or guardian, can ensure maximum student learning.

You are encouraged to use this Guide as a basis for working with your child. You can use the Guide to support learning in the classroom by following the suggestions of ways you might work with your child. This Guide is a reminder of the key role you play in the education of your child. When home and school work together, student learning and achievement is more readily accomplished.

The ***Curriculum Guide for Families*** is an overview of the major learning objectives that will be taught in each of the content areas during Grade Four. The classroom teacher, in implementing the complete curriculum, will make decisions about the order in which concepts and skills are taught and the types of learning experiences that will be provided. In making these decisions, the teacher carefully considers:

- the experiences, needs, interests, and skills of each child,
- information shared by parents and guardians about the child, and
- appropriate teaching methods to be used.

In order to ensure that the curriculum is current, the Guide is reviewed every three years and modifications made if necessary. Every six years the curriculum undergoes a complete review and revision.

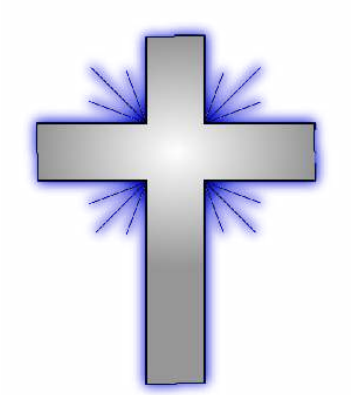
If you have any questions about the progress of your child in the educational program, please contact the teacher and/or principal.

We wish you well in your efforts to work with us to provide a quality Catholic education for your child.

The Office of Catholic Education
Catholic Diocese of Cleveland

MISSION

**The Catholic Schools
of the Diocese of Cleveland
will work together
to provide a faith-centered
Catholic Education
rooted in the Gospel message
and evidenced
in community life,
family life
and
Christian witness
in service to others.**



PROFILE
OF A CATHOLIC SCHOOL GRADUATE

A Catholic School Graduate is a faith-filled disciple of Christ who is

Called by Baptism and nourished by the Eucharist;
Active in the sacramental life of the Church through weekly participation in the Eucharist and regular participation in Reconciliation;
Centered in Gospel values;
Prayerful.

(As we describe the faith commitment of the Catholic School graduate, we understand that students of other faiths express these values in alternate faith commitments.)

A Catholic School Graduate is a Christian leader who is

A decision-maker whose conscience is formed by the teachings of the Catholic Church;
A witness to the Faith;
A person of integrity;
Respectful;
Committed to justice;
Collaborative;
A community builder;
A steward of the environment;
Active in parish life.

A Catholic School Graduate is a centered, well-rounded person who is

Self-confident;
Self-disciplined;
Open to growth;
Responsible;
An active and productive citizen.

A Catholic School Graduate is a loving person who is

Compassionate;
Kind;
Appreciative of diversity;
Welcoming;
A peace-filled mediator;
Respectful of the talents and abilities of others.

A Catholic School Graduate is a life-long learner who is

Articulate;
Creative;
Technologically literate;
Academically and spiritually competent;
A critical thinker;
A problem-solver.

A Catholic School Graduate is a healthy person who is

Respectful of life;
Practicing good health habits;
Committed to reaching his/her full potential;
A good sport.

CATHOLIC IDENTITY

INTEGRATED THROUGHOUT THE CURRICULUM

The Catholic schools of the Diocese find their true justification in the mission of the Church. Our schools are a means for the local church to evangelize, educate and contribute to the formation of a healthy and morally sound lifestyle among its members. Our schools fulfill this responsibility by ensuring that all aspects of the school are rooted in Catholic education philosophy, which brings faith, culture and life into harmony. (Adapted from: *Guidelines for Ohio Catholic Schools*. 2002)

Our school communities actively promote discipleship of Jesus Christ as integral to their Catholic culture and mission. Our schools offer a curriculum infused with Catholic beliefs and teachings and Gospel values. In particular, our schools provide a curriculum infused with the *Catholic Social Justice Teachings* and guided by the *Rights of Children*. In addition, all curricula are infused with Catholic Standards which are based on the *Catechism of the Catholic Church*. These Catholic Standards fall into the categories of The Profession of Faith, Life in Christ, The Celebration of the Christian Mystery, and Christian Prayer.

Catholic Social Justice Teachings

Life and Dignity of the Human Person
This principle is the foundation for the other six and calls for a reverence of life at all stages. Issues range from poverty to abortion, war, and economic policies and systems.

Call to Family, Community, and Participation
We live life in various communities. Our responsibilities include service to school and parish and involvement in the political system.

The Rights and Responsibilities of Every Person
This call involves both our personal and societal rights and duties.

The Preferential Option for the Poor and Vulnerable
Essential to the Gospel, this challenging theme calls for consideration of the marginalized and most in need in society. Concern for those left out, left alone, or left behind requires action for justice.

The Dignity of Work and the Rights of Workers

The right of the worker is key to making a living. Issues involve just wages and safe and healthful working conditions, as well as opportunities for education and training and societal support for those in situations limiting their ability to work or find work.

Love of Neighbor: Solidarity with All Peoples

The justice principles apply to all racial, ethnic, and religious groups. Respect for cultural and religious differences and valuing the contributions to society by every group is essential.

Care for Creation

Response to this theme encompasses awe and wonder, gratitude and reverence for the beauty, intricacies, and mysteries of creation on micro and macro scales: past, present, and future.

The Rights of Children

ALL CHILDREN HAVE:

- **THE RIGHT TO A CATHOLIC COMMUNITY** that witnesses to Christ and the Gospel by protecting them from child abuse, including sexual abuse and neglect.
- **THE RIGHT TO A SAFE ENVIRONMENT** that promotes care, protection, and security.
- **THE RIGHT TO BE RESPECTED AS INDIVIDUALS** with human dignity.
- **THE RIGHT TO WORK ACTIVELY TOWARD THEIR OWN EMPOWERMENT** through the development of their gifts and talents.
- **THE RIGHT TO A LEARNING ENVIRONMENT THAT VALUES COOPERATION** and challenges its members to critical and reflective thinking in their search for truth.
- **THE RIGHT TO DEVELOP POSITIVE, RESPONSIBLE AND CARING ATTITUDES AND BEHAVIORS TOWARD OTHERS** and to recognize the rights of others to be safe and free from harassment and abuse.
- **THE RIGHT TO LEARN THE SKILL OF SELF-PROTECTION** by identifying safe and unsafe situations.
- **THE RIGHT TO LEARN RESPONSIBILITY** for themselves and their actions.
- **THE RIGHT TO MAKE RESPONSIBLE DECISIONS** founded on religious conviction.
- **THE RIGHT TO GUIDANCE FROM THE CHURCH** in their development as loving people.

RELIGION

The curriculum is organized around the four strands of the *Catechism of the Catholic Church*.

The Profession of Faith

CCC 14. "'Those who belong to Christ through faith and Baptism must confess their baptismal faith before men' (Cf. Mt 10:32, Rom 10:9). First therefore the Catechism expounds revelation, by which God addresses and gives himself to man, and the faith by which man responds to God (Section One). The profession of faith summarizes the gifts that God gives man: as the Author of all that is good; as Redeemer; and as Sanctifier. It develops these in the three chapters on our baptismal faith in the one God: the almighty Father, the Creator; his Son Jesus Christ, our Lord and Savior; and the Holy Spirit, the Sanctifier, in the Holy Church (Section Two)."

The Celebration of Christian Mystery

CCC 15. "The second part of the Catechism explains how God's salvation, accomplished once for all through Christ Jesus and the Holy Spirit, is made present in the sacred actions of the Church's liturgy (Section One), especially in the seven sacraments (Section Two)."

Life in Christ

CCC 16. "The third part of the Catechism deals with the final end of man created in the image of God: beatitude, and the ways of reaching it - through right conduct freely chosen, with the help the twofold commandment of charity, specified in God's Ten Commandments (Section Two)."

Christian Prayer

CCC 17. "The last part of the Catechism deals with the meaning and importance of prayer in the life of believers (Section One). It concludes with a brief commentary on the seven petitions of the Lord's Prayer (Section Two), for indeed we find in these the sum of all the good things which we must hope for, and which our heavenly Father wants to grant us."

As a parent or guardian at home, you can help your child in religion by:

- praying together with him or her;
- involving the whole family in a service experience;
- joining together to celebrate Sunday as the Day of the Lord;
- affirming him or her in the practice of respect and courtesy;
- discussing with your child what he/she learned about his/her faith;
- writing and sharing a prayer of petition, praise, contrition, blessing or adoration, and thanksgiving;
- praying together before meals and at bedtime;
- encouraging an attitude of "think before you speak;"
- helping your child develop a feeling for conscience, our inner guide to right and wrong;
- practicing good works and service to others;
- reading about the saints.

LANGUAGE ARTS

The Language Arts Curriculum is aligned to Ohio's New Learning Standards and develops the skills of communication in Reading: Literature, Informational Text, and Foundational Skills; Writing; Listening and Speaking; and Language. The new standards have brought about three shifts in language arts:

Informational Text: In addition to literature, students will be reading more non-fiction pieces from across all content areas.
Evidence from Texts: Students will also have to read more carefully to understand the message the author is trying to convey. Writing will focus more on opinion rather than narration.
Complex Text and Academic Language: The standards create a staircase of complexity, so all students will be exposed to complex text for their reading level and given strategies for understanding this text in order to be prepared for success in college or the career of their choosing in future years.

Capacities of the Literate Individual

- They demonstrate independence.
- They build strong content knowledge.
- They respond to the varying demands of audience, task, purpose, and discipline.
- They comprehend as well as critique.
- They value evidence.
- They use technology and digital media strategically and capably.
- They come to understand other perspectives and cultures.

Reading: Literature

Key Ideas and Details

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine a theme of a story, drama, or poem from details in the text; summarize the text.
- Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

Craft and Structure

- Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).
- Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.
- Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.

Integration of Knowledge and Ideas

- Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
- Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Range of Reading and Level of Text Complexity

- By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading: Informational Text

Key Ideas and Details

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- 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.

Craft and Structure

- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- 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.
- 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

- 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.

- Explain how an author uses reasons and evidence to support particular points in a text.
- 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

- By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading: Foundational Skills

Phonics and Word Recognition

- Know and apply grade-level phonics and word analysis skills in decoding words.
    a. 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.

Fluency

- Read with sufficient accuracy and fluency to support comprehension.
    a. Read grade-level text with purpose and understanding.
    b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
    c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing

Text Types and Purposes

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
    a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.
    b. Provide reasons that are supported by facts and details.
    c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).
    d. Provide a concluding statement or section related to the opinion presented.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
    a. 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.
    b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
e. Provide a concluding statement or section related to the information or explanation presented.

- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
    a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
    b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.
    c. Use a variety of transitional words and phrases to manage the sequence of events.
    d. Use concrete words and phrases and sensory details to convey experiences and events precisely.
    e. Provide a conclusion that follows from the narrated experiences or events.

Production and Distribution of Writing

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
- 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

- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
    a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions].").
    b. Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").

Range of Writing

- 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.

Speaking and Listening

Comprehension and Collaboration

- 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.
    a. 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.
    b. Follow agreed-upon rules for discussions and carry out assigned roles.
    c. 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.
    d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.
- Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Identify the reasons and evidence a speaker provides to support particular points.

Presentation of Knowledge and Ideas

- 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.
- Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- 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.

Language

Conventions of Standard English

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

    a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).

b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.
c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions.
d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).
e. Form and use prepositional phrases.
f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.
g. Correctly use frequently confused words (e.g., to, too, two; there, their).

- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
    a. Use correct capitalization.
    b. Use commas and quotation marks to mark direct speech and quotations from a text.
    c. Use a comma before a coordinating conjunction in a compound sentence.
    d. Spell grade-appropriate words correctly, consulting references as needed.

Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
    a. Choose words and phrases to convey ideas precisely.
    b. Choose punctuation for effect.
    c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.
    a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
    b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).
    c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
    a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.
    b. Recognize and explain the meaning of common idioms, adages, and proverbs.

c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).

- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

As a parent or guardian at home, you can help your child in language arts by:

- having your child read to you or to a sibling;
- reminding your child to proofread for spelling, grammar, and precise vocabulary;
- practicing word usage and spelling by using a dictionary;
- having your child practice following multi-step directions;
- playing learning games which involve words;
- asking your child to read written work/display written work;
- listening to your child read to you and asking him or her to repeat the main idea or to give a summary.

MATHEMATICS

The Mathematics Curriculum is built upon Ohio's New Learning Standards for Mathematical Practice and Mathematical Content. Developing a solid mathematical foundation means nurturing the confidence of students and increasing their successes. In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Three important shifts have occurred in mathematics as a result of the new standards:

Focus: Each year, teachers will spend more time teaching important areas in mathematics. By focusing deeply on specific content, students will gain a strong foundation and a solid understanding of the concepts.
Coherence: The standards logically progress from grade to grade. The majority of standards at each grade level are not new topics, but extensions of what students have learned in previous years.
Rigor: Students are expected to have conceptual understanding of certain topics, fluency and skill in procedural calculations, and the ability to apply what they have learned in the classroom in everyday situations.

Standards for Mathematical Practice

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

- Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
- Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Gain familiarity with factors and multiples.

- Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Generate and analyze patterns.

- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
- Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.

- Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Number and Operations–Fractions

Extend understanding of fraction equivalence and ordering.

- Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

- Understand a fraction a/b with a > 1 as a sum of fractions 1/b.
    a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
    b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.
    c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
    d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
    a. Understand a fraction a/b as a multiple of 1/b. *For example, use a visual fraction model to represent 5/4 as the product 5 × (¼), recording the conclusion by the equation 5/4 = 5 × (¼).*
    b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)*
    c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*

Understand decimal notation for fractions, and compare decimal fractions

- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.*
- Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.
- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.

Measurement and Data

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36).*
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using

diagrams such as number line diagrams that feature a measurement scale.

- Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*

Represent and interpret data.

- Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometric measurement: understand concepts of angles and measure angles.

- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:
    a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.
    b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
- Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry

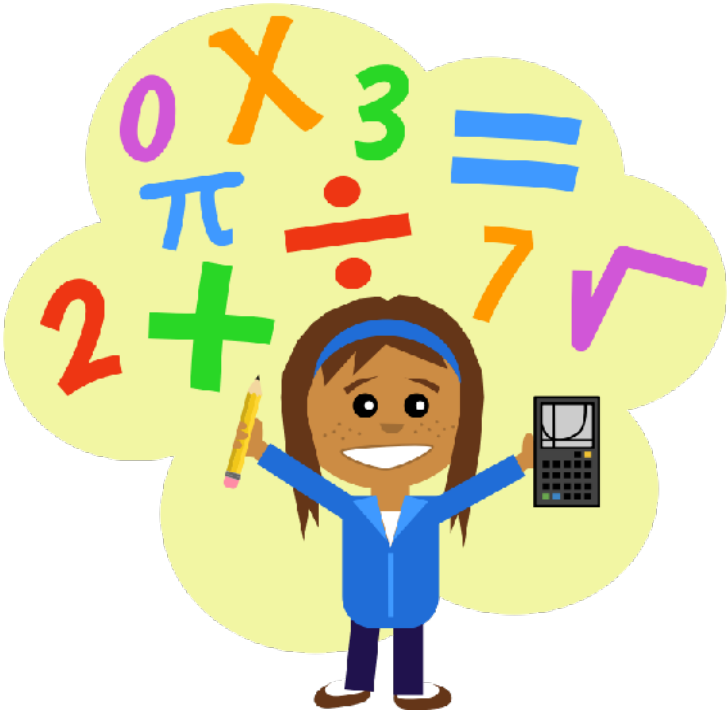
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- 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. Recognize right triangles as a category, and identify right triangles.
- 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

matching parts. Identify line-symmetric figures and draw lines of symmetry.

As a parent or guardian at home, you can help your child in mathematics by:

- pointing out the use of math in daily life;
- asking your child to describe the shapes of objects;
- listening to your child practice multiplication and division tables;
- helping your child check homework problems;
- encouraging your child to notice patterns and explore large numbers;
- using household items to demonstrate mathematical operations or relationships;
- playing games involving math;
- involving your child in household projects of measurement and estimation;
- pointing out and interpreting graphs and charts in the newspaper;
- having your child identify fractional parts of an object or group of objects.



SCIENCE

The Science Curriculum is designed to give learners a greater awareness of how science is integrated in their daily lives and its importance for survival. It is our hope that students will learn to apply science concepts to their world. But most importantly, the science curriculum is a foundation for greater understanding of science in relation to our Catholic beliefs and a deeper appreciation of our Creator. Teaching students to respect God, themselves, others, and our world is vitally important. We are guests of God in creation and have a responsibility to care for the earth.

Science Inquiry and Application

Theme: Interconnections within Systems. This theme focuses on helping students recognize the components of various systems and then investigate dynamic and sustainable relationships within systems using scientific inquiry.

- Observe and ask questions about the natural environment;
- Plan and conduct simple investigations;
- Employ simple equipment and tools to gather data and extend the senses;
- Use appropriate mathematics with data to construct reasonable explanations;
- Communicate about observations, investigations and explanations;
- Review and ask questions about the observations and explanations of others.

Earth and Space Science (ESS)

Topic: Earth's Surface

- Earth's surface has specific characteristics and landforms that can be identified.
- The surface of Earth changes due to weathering.
- The surface of Earth changes due to erosion and deposition.

Physical Science (PS)

Topic: Electricity, Heat and Matter

- The total amount of matter is conserved when it undergoes a change.
- Energy can be transformed from one form to another or can be transferred from one location to another.

Life Science (LS)

Topic: Earth's Living History

- Changes in an organism's environment are sometimes beneficial to its survival and sometimes harmful.
- Fossils can be compared to one another and to present day organisms according to their similarities and differences.

As a parent or guardian at home, you can help your child in science by:

- encouraging your child to collect data or information to verify a guess;
- encouraging your child to develop curiosity and to take notes on observations;
- visiting the Cleveland Science Center, Metroparks, and zoo;
- visiting the local library with your child;
- visiting recommended or screened websites with your child;
- observing the sky together and identifying the objects in the sky and define and discuss their significance;
- identifying types of clouds present in the sky and determining what type of precipitation they will produce;
- identifying unique land features of your area and discussing how they were formed;
- starting a small garden with your child and letting him or her care for it;
- discussing news articles about science and determine what is fact and what is fiction;
- going for a walk with your child and talking about the various aspects of nature.

SOCIAL STUDIES

Social Studies is a multifaceted discipline, integrating the study of social sciences and humanities. The purpose of the Social Studies Curriculum is to promote civic competence and responsible behaviors that enable students to actively participate in our democratic society. Our approach in the teaching of Social Studies integrates our Christian values with the development of civic attitudes and responsibilities. We consciously connect responsible citizenship with the Social Justice Teachings of the Catholic Church, establishing real-world applications for Social Justice in the study of historical events and figures, economic conditions, cultural influences and appreciation, political issues, and the participation of civilizations in society.

History

Theme: Ohio in the United States
Topic: Historical Thinking and Skills

- The order of significant events in Ohio and the United States can be shown on a timeline.
- Primary and secondary sources can be used to create historical narratives.

Topic: Heritage

- Various groups of people have lived in Ohio over time including prehistoric and historic American Indians, migrating settlers and immigrants. Interactions among these groups have resulted in both cooperation and conflict.
- The 13 colonies came together around a common cause of liberty and justice, uniting to fight for independence during the American Revolution and to form a new nation.
- The Northwest Ordinance established a process for the creation of new states and specified democratic ideals to be incorporated in the states of the Northwest Territory.
- The inability to resolve standing issues with Great Britain and ongoing conflicts with American Indians led the United States into the War of 1812. Victory in the Battle of Lake Erie contributed to American success in the war.
- Sectional issues divided the United States after the War of 1812. Ohio played a key role in these issues, particularly with the anti-slavery movement and the Underground Railroad.
- Many technological innovations that originated in Ohio benefited the United States.

Geography

Theme: Ohio in the United States
Topic: Spacial Thinking and Skills
- A map scale and cardinal and intermediate directions can be used to describe the relative location of physical and human characteristics of Ohio and the United States.

Topic: Places and Regions
- The economic development of the United States continues to influence and be influenced by agriculture, industry and natural resources in Ohio.
- The regions of the United States known as the North, South and West developed in the early 1800s largely based on their physical environments and economies.

Topic: Human Systems
- People have modified the environment since prehistoric times. There are both positive and negative consequences for modifying the environment in Ohio and the United States.
- The population of the United States has changed over time, becoming more diverse (e.g., racial, ethnic, linguistic, religious). Ohio's population has become increasingly reflective of the cultural diversity of the United States.
- Ohio's location and its transportation systems continue to influence the movement of people, products and ideas in the United States.

Government

Theme: Ohio in the United States
Topic: Civic Participation and Skills
- Individuals have a variety of opportunities to participate in and influence their state and national government. Citizens have both rights and responsibilities in Ohio and the United States.
- Civic participation requires individuals to make informed and reasoned decisions by accessing and using information effectively.
- Effective participants in a democratic society engage in compromise.

Topic: Rules and Laws
- Laws can protect rights, provide benefits and assign responsibilities.
- The U.S. Constitution establishes a system of limited government and protects citizens' rights; five of these rights are addressed in the First Amendment.

Topic: Roles and Systems of Government
- A constitution is a written plan for government. Democratic constitutions provide the framework for government in Ohio and the United States.
- The Ohio Constitution and the U.S. Constitution separate the major responsibilities of government among three branches.

Economics

Topic: Economic Decision Making and Skills

- Tables and charts help people to understand information and issues. Tables organize information in columns and rows. Charts organize information in a variety of visual formats (pictures, diagrams, graphs).

Topic: Production and Consumption

- Entrepreneurs organize productive resources and take risks to make a profit and compete with other producers.

Topic: Financial Literacy

- Saving a portion of income contributes to an individual's financial well-being. Individuals can reduce spending to save more of their income.

As a parent or guardian at home, you can help your child in social studies by:

- telling your child about family and local history;
- having your child read maps, tables, and graphs with you;
- encouraging your child to visit exhibitions related to history or watch programs or movies related to historical periods;
- learning about the state of Ohio together;
- speaking about the ideals of good citizenship;
- discussing values in family and society;
- looking at maps of Ohio with your child and locating places of interest;
- visiting historical sites in Ohio;
- identifying goods and products used in the home that were made in Ohio;
- watching the evening news together and discussing the events happening in Ohio;
- discussing issues that are being decided, how those decisions will be made, and how they will affect Ohio;
- discussing the qualities that you might look for in a political candidate;
- encouraging your child to go to the library so that he or she will be able to use books and other resources needed in writing reports.

FINE ARTS
ART AND MUSIC

The Fine Arts play a major role in developing the Christian call to Message, Worship, Community, and Service. Stained glass windows have told biblical stories as cathedrals have told stories of faith in stone. Music, whether Gregorian chant or polyphonic pieces, has bound faith communities together in faith and worship. The arts have enhanced ritual and religious drama from Medieval mystery, morality, and miracle plays to vestments, incense, and bells. The arts depict symbols and have often been a means of breaking down barriers, developing understanding, and bonding people together in peace. Art and music are a part of every culture. They are the vehicle for expressing inner thoughts and emotions. Art and music expand an individual's world view and appreciation for diverse nationalities.

ART

Perceiving/Knowing (PE)

- Use sensory details and descriptive language to identify and describe universal themes, subject matter and ideas expressed across arts disciplines.
- Notice and describe different visual effects resulting from artmaking techniques.
- Compare and contrast art forms, techniques and functions and artistic styles from a variety of cultures and historical periods.
- Identify and describe how artists from various cultural and ethnic groups have impacted Ohio's history.
- Link ideas in and design of works of art to the emotions and moods expressed in them.
- Identify and name the sources for artmaking ideas (e.g., self, environment and other people).

Producing/Performing (PR)

- Identify, select and vary art materials, tools and processes to achieve desired results in their artwork.
- Experiment with art materials by using them in unexpected and creative ways to express ideas and convey meaning.
- Generate ideas and employ a variety of strategies to solve visual problems.
- Demonstrate motivation, independence and persistence during studio practices to complete artworks.

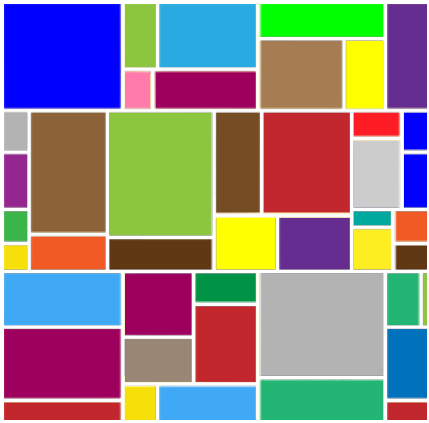
- Combine the elements and principles of art and design to create visually effective compositions in original works of art.
- Demonstrate technical skill through the integration of common processes and topics from other subject areas.

Responding/Reflecting (RE)

- Identify qualities that contribute to the design and meaning of their artworks and the works of others.
- Develop and share their ideas, beliefs and values about art.
- Recognize and describe the relationship of artworks to their social and cultural contexts.
- Generate criteria for discussing and assessing works of art.
- Refer to criteria and use art vocabulary when discussing and judging the quality of artworks.
- Give and use constructive feedback to produce artworks that achieve learning goals.

As a parent or guardian at home, you can help your child in art by:

- encouraging your child to use leisure time for art activities;
- visiting the Cleveland Museum of Art and other art galleries;
- displaying the art work of your child in a place of honor in your home;
- commenting on patterns and designs in nature and in interior environments;
- taking a trip to the studio of a local artist;
- studying the art work in your parish church with your child.



MUSIC

Perceiving/Knowing/Creating (CE)

- Classify instruments by the four families of the orchestra.
- Describe the way sound is produced by various instruments and the human voice.
- Listen, identify and respond to music of different composers and world cultures.
- Discuss the lives and times of composers from various historical periods.
- Identify and respond to basic music forms (e.g., AABA and rondo).
- Identify elements of music using developmentally appropriate vocabulary.
- Describe the roles of musicians in various music settings.
- Describe the use of technology and digital tools in music.

Producing/Performing (PR)

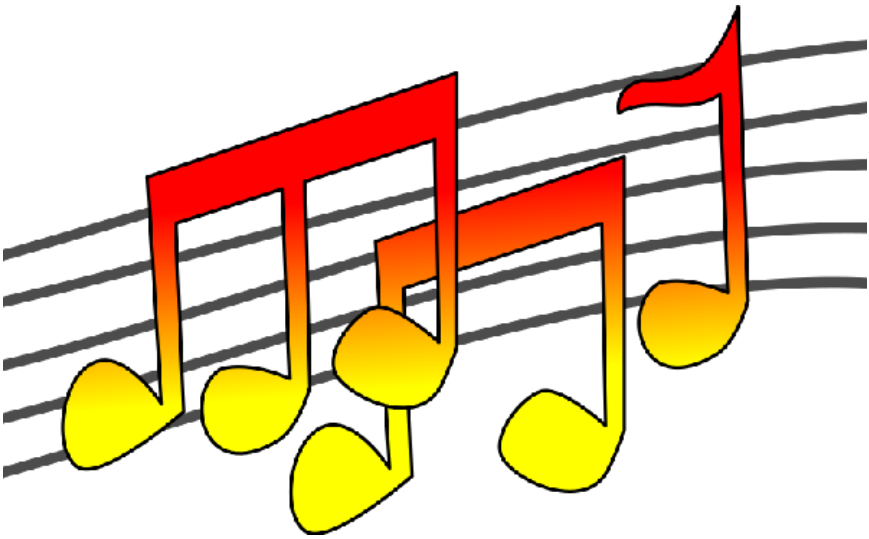
- Sing a varied repertoire with accurate rhythm and pitch and expressive qualities individually and with others.
- Use the head voice to produce a light, clear sound employing breath support and maintaining appropriate posture.
- Play a variety of classroom instruments with proper technique.
- Sing, move and respond to music from world cultures and different composers.
- Improvise and compose short compositions using a variety of classroom instruments and sound sources.
- Read, write and perform using sixteenth through whole note values including syncopated rhythms in 2/4, 3/4 and 4/4 meter.
- Read, write and perform in treble clef extended pentatonic melodies G, F and C.
- Demonstrate appropriate audience etiquette at live performances.

Responding/Reflecting (RE)

- Explain how the elements and subject matter of music connect with disciplines outside the arts.
- Describe the connection between emotion and music in selected musical works.
- Explain classification of musical instruments, voices, composers and forms using appropriate music vocabulary.
- Discuss the roles of musicians heard in various performance settings.
- Interpret a selected musical work using dance, drama or visual art.
- Use constructive feedback to improve and refine musical performance and response.

As a parent or guardian at home, you can help your child in music by:

- singing and dancing at family gatherings;
- encouraging your child to listen to a variety of music;
- attending musical performances by the Cleveland Orchestra and other musical groups;
- participating in the singing at Sunday Mass;
- listening to classical music with your child.



HEALTH

Health is an integral part of all learning. The Health Curriculum contributes to critical thinking and problem solving. It provides a solid foundation for lifetime wellness. Through the curriculum students appreciate the sanctity of life, Christian values and principles and take responsibility to make healthy choices in an ever-changing society. The curriculum focuses on nutrition, growth and development, disease prevention and control, safety, abuse prevention and first aid, and health issues and dangerous substances. Each area enables students to understand the importance of a healthy lifestyle.

Health Promotion and Disease Prevention

- Describe the relationship between healthy behaviors and personal health.
- Identify examples of emotional, intellectual, physical, and social health.
- Describe ways in which safe and healthy school and community environments can promote personal health.
- Describe ways to prevent common childhood injuries and health problems.
- Describe when it is important to seek health care.

Influence of Factors on Health Behaviors

- Describe how family influences personal health practices and behaviors.
- Identify the influence of culture on health practices and behaviors.
- Identify how peers can influence healthy and unhealthy behaviors.
- Describe how the school and community can support personal health practices and behaviors.
- Explain how media influences thoughts, feelings, and health behaviors.
- Describe ways that technology can influence personal health.

Valid Information, Products and Services

- Identify characteristics of valid health information, products, and services.
- Locate resources from home, school, and community that provide valid health information.

Interpersonal Communication Skills

- Demonstrate effective verbal and nonverbal communication skills to enhance health.
- Demonstrate refusal skills that avoid or reduce health risks.
- Demonstrate nonviolent strategies to manage or resolve conflict.
- Demonstrate how to ask for assistance to enhance personal health.

Decision-Making Skills

- Identify health-related situations that might require a thoughtful decision.
- Analyze when assistance is needed in making a health-related decision.
- List healthy options to health-related issues or problems.
- Predict the potential outcomes of each option when making a health-related decision.
- Choose a healthy option when making a decision.
- Describe the outcomes of a health-related decision.

Goal-Setting Skills

- Set a personal health goal and track progress toward its achievement.
- Identify resources to assist in achieving a personal health goal.

Health-Enhancing Behaviors

- Identify responsible personal health behaviors.
- Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health.
- Demonstrate a variety of behaviors to avoid or reduce health risks.

Advocacy

- Express opinions and give accurate information about health issues.
- Encourage others to make positive health choices.

As a parent or guardian at home, you can help your child in health by:

- encouraging your child to choose healthy foods;
- reminding your child about proper hygiene;
- encouraging appropriate daily exercise;
- ensuring that your child has a balanced diet;
- taking walks with your child;
- taking your child swimming, bowling, bike-riding, etc.;
- talking to your child about safe ways of handling food and medicines;
- reviewing safety procedures to be used in the home;
- practicing effective responses to emergency and potentially dangerous situations: fire, tornado;
- exploring what factors of personal understanding contribute to resisting harmful substances, such as alcohol, tobacco, and drugs;
- teaching your child to say a firm and clear NO to a stranger and to leave unsafe situations immediately.

American Cancer Society. *National Health Education Standards: Achieving Excellence, Second Edition*. (Atlanta, GA: American Cancer Society, 2007), 8, cancer.org/bookstore.

PHYSICAL EDUCATION

The Physical Education Curriculum helps our students to acquire knowledge about movement and the development of skills through progressively designed experiences. This knowledge enables them to participate in a variety of movement experiences and fosters the desire for continued participation throughout life. The Physical Education Curriculum encourages thinking and self-discovery for the development of a positive self-concept with regard to the body and physical activities. It fosters qualities of self-confidence, self-discipline, and self-direction. Students learn to make choices related to physical education based on Christian values.

Competency in Motor Skills and Movement Patterns

Combine locomotor and non-locomotor skills into movement patterns.

- Perform a movement sequence comprised of both basic and intermediate skills (e.g., dance, gymnastics, jump rope).
- Jump rope demonstrating a variety of footwork and arm action skills.
- Combine balance and weight transfer skills in a movement sequence.
- Combine locomotor movement patterns and dance steps to create and perform a dance.

Apply the critical elements of fundamental manipulative skills in a variety of physical activities.

- Throw overhand with varying degrees of force using appropriate critical elements to reach different distances.
- Catch two-handed during a game or game-like situation using the critical elements.
- Strike an object with an implement using the critical elements.
- Kick a ball with the inside of the foot using the critical elements to targets at different distances, locations and relationship to objects.
- Dribble with control while moving through space to avoid stationary objects using the critical elements.
- Send (e.g., pass, roll) an object to a target using critical elements while varying space, distance, location and relationship to objects.

Knowledge of Movement and Performance

Demonstrate and apply basic tactics and principles of movement.

- Explain the importance of weight transfer in object propulsion skills (e.g., throw, strike).

- Describe and demonstrate the correct movement or movement qualities based on the characteristics of the task (e.g., size of object, distance to target, goal, speed or time to complete movement) and/or environment (e.g., space, number of players).
- Identify open space and areas of space to defend in a dynamic environment (e.g., partner or small group dance spacing, proximity to the ball or teammate in small-sided games).
- Select correct decision when presented with a tactical problem to score (e.g., ball possession, attack, moving an opponent).

Demonstrate knowledge of critical elements for more complex motor skills.
- Identify correct and incorrect aspects of skill performance using critical elements.
- Explain how to improve performance of a movement or skill.

Level of Physical Activity and Fitness

Describes current level of physical activity and identifies additional physical activity opportunities to create calorie balance.
- Identify school, home and community physical activity opportunities to meet physical activity guidelines.
- Track physical activity minutes to determine progress toward daily recommendation.
- Recognize the benefits of food choices from each food group related to physical activity.

Understand the principles, components and practices of health-related physical fitness to maintain or improve one's level of fitness.
- Link specific activities to the appropriate health-related fitness component.
- Interpret heart rate during physical activity and exercise to sustain a moderate to vigorous activity for longer periods of time.
- Identify activities to improve muscular strength and endurance in the upper and lower body.
- Identify warm-up and cool-down activities.
- Analyze the results of a fitness assessment to determine areas in the HFZ and those that need improvement.
- Identify the intensity and time of exercise in relationship to the FITT principle.

Behavior That Respects Self and Others

Understand the purpose of and apply appropriate rules, procedures and safe practices in physical activity settings.
- Follow rules and safe practices and engage in class activities.
- Adjust performance to characteristics of the environment to ensure safe play (e.g., space, equipment, others).

- Engage in activities and stay on task with prompts and encouragement from others.

Interact and communicate positively with others.
- Listen, discuss options and develop a plan to accomplish a partner or group task or to improve play.
- Participate with a group in cooperative problem-solving activities.
- Demonstrate cooperation with and respect for peers different from oneself.
- Demonstrate cooperation with others when resolving conflict.

Value of Physical Activity

Identifies multiple, specific health benefits as a reason to value physical activity.
- Identify three health benefits from different dimensions (e.g., physical, emotional, intellectual) by participation in physical activity.

Expresses multiple, specific reasons (enjoyment, challenge, social) to participate in physical activity.
- Identify specific reasons for enjoying a selected physical activity.
- Identify aspects of a physical activity that are challenging.
- Identify the social benefits of a selected physical activity.

As a parent or guardian at home, you can help your child in physical education by:

- encouraging your child to engage in appropriate daily exercise;
- taking walks with your child and observing nature;
- playing catch to develop coordination skills;
- encouraging physical activities or outdoor games;
- beginning to work and play co-operatively with your child.

TECHNOLOGY

An integral part of preparing students with core knowledge and skills for the future is the incorporation of technology into educational programs. Technology provides the framework for transforming teaching and learning. Technology is used by both students and teachers as a means of enhancing the teaching/learning environment. It is through exposure and experiences with integrated activities using technology that student achievement improves.

Information and Communications Technology

- Identify and use appropriate digital learning tools and resources to accomplish a defined task.
- Use digital learning tools and resources to locate, evaluate and use information.
- Use digital learning tools and resources to construct knowledge.
- Use digital learning tools and resources to communicate and disseminate information to multiple audiences.

Society and Technology

- Demonstrate an understanding of technology's impact on the advancement of humanity – economically, environmentally and ethically.
- Analyze the impact of communication and collaboration in both digital and physical environments.
- Explain how technology, society, and the individual impact one another.

Design and Technology

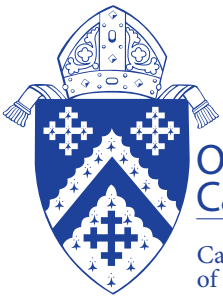
- Define and describe technology, including its core concepts of systems, resources, requirements, processes, controls, optimization and trade-offs.
- Identify a problem and use an engineering design process to solve the problem.
- Demonstrate that solutions to complex problems require collaboration, interdisciplinary understanding, and systems thinking.
- Evaluate designs using functional, aesthetic and creative elements.

As a parent or guardian at home, you can help your child in technology by:

- explaining reasons for adhering to Acceptable Use Policies for computers in schools, libraries, home, and other places;
- monitoring their use of computers and use of the internet;
- exploring educational sites together;
- encouraging stewardship in the care and use of computers and electronic media;
- pointing out Acceptable Use Policies in the local library or other public places;
- reminding your child to follow directions and rules related to computer use;
- using simple email to grandparents, favorite aunt/uncle, and to friends.

Notes

Notes



Office of
Catholic Education

Catholic Diocese
of Cleveland