NORTH PENN SPRONG

Elementary Curriculum Guide 2020-2021

A resource illustrating North Penn School District's curriculum in kindergarten through sixth grade.

Dear Families,

The elementary school years represent a fun and exciting time for children as they learn new skills, solve new problems and grasp new concepts. This is also a time for students to develop close relationships with peers and staff members. As goals are achieved each year from kindergarten through sixth grade, students become more confident in themselves and their abilities.

The elementary years are extremely important in that they set the foundation for the child's academic future. The first goal of the North Penn School District's Strategic Plan is academic excellence with the primary focus of providing all students the opportunity to achieve at their highest level. With this in mind, we continually review and revise our curriculum to reflect the changing world and the changing needs of our students. If all children are to succeed, we need an academic program that challenges students and teachers alike.

The North Penn School District realizes that learning is not only about books and tests; therefore, we provide an educational experience that is also safe, nurturing and fun. In addition to this academic curriculum guide, please remember that a multitude of extra-curricular activities are available to our elementary school students that complement classroom work. This includes field trips, assembly programs and student clubs.

As superintendent of the North Penn School District, I am extremely proud of the excellence found in the students and staff members in all of our schools and classrooms, from kindergarten through 12th grade. With the collaborative efforts between students, staff members and families early in a student's academic career, there is no doubt that the North Penn School District will continue its successes and become one of the leading school districts in the state of Pennsylvania.

Sincerely,

Dr. Curtis R. Dietrich, Superintendent

North Penn School District

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Table of Contents

E	100	in all	
	NIP	St)
	INI	21	

Pennsylvania Core Standards3	Third Grade
What Are The PA Core Standards?	Art11
PA Core For The Language Arts 3	Health11
PA Core For Mathematics	English Language Arts
Services	Library
Gifted Program 4	Mathematics
Guidance 4	Music
Special Education 4	Physical Education
Grade-Based Curriculum4	Science
Overview 4	Fourth Grade
Social Studies: K-Sixth Grade 4	Art
Kindergarten5-6	Health
Art 5	English Language Arts
Health 5	Library
English Language Arts 5	Mathematics
Library	Music
Mathematics 5	Physical Education
Music	Science
Physical Education 6	Fifth Grade15-16
Science 6	Art 15
First Grade7-8	Health15
Art7	English Language Arts
Health 7	Library
English Language Arts 7	Mathematics
Library	Music
Mathematics	Physical Education
Music	Science
Physical Education 8	Sixth Grade
Science	Art 17
Second Grade9-10	Health17
Art9	English Language Arts
Health9	Library
English Language Arts9	Mathematics
Library	Music
Mathematics	Physical Education
Music	Science
Physical Education	
Science	

What Are The PA Core Standards?

Educational standards describe what students should know and be able to do in each subject in each grade. In Pennsylvania, the State Board of Education decides on the standards for all students, from kindergarten through high school.

In 2010, Pennsylvania adopted the PA Core State Standards. Having the same standards helps all students get a good education. The PA Core State Standards focus on core conceptual understandings and procedures starting in the early grades, thus enabling teachers to take the time needed to teach core concepts and procedures well — and to give students the opportunity to master them.

Teachers, parents and education experts designed the PA Core to prepare students for success in college and the workplace. At North Penn, these standards form the basis of our curriculum.

PA Core For The Language Arts

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

The standards also draw on the most important international models as well as research and input from numerous sources, including state departments of education, scholars, assessment developers, professional organizations, educators from kindergarten through college, and parents, students and other members of the public. In their design and content, refined through successive drafts and numerous rounds of feedback, the Standards represent a synthesis of the best elements of standards-related work to date and an important advance over that previous work.

The standards are (1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous and (4) internationally bench marked. A particular standard was included in the document only when the best available evidence indicated that its mastery was essential for college and career readiness in a twenty-first century, globally competitive society.

As a natural outgrowth of meeting the charge to define college and career readiness, the Language Arts standards also lay out a vision of what it means to be a literate person in the twenty-first century. Indeed, the skills and understandings students are expected to demonstrate have wide applicability outside the classroom or workplace. Students who meet the Standards readily undertake the close, attentive reading that is at the heart of understanding and enjoying complex works of literature. They habitually perform the critical reading necessary to pick carefully through the staggering amount of information available today in print and digitally. They actively seek the wide, deep and thoughtful engagement with high-quality literary and informational texts that builds knowledge, enlarges experience and broadens worldviews. They reflexively demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic. In short, students who meet the Standards develop the skills in reading, writing, speaking and listening that are the foundation for any creative and purposeful expression in language.

Our elementary English Language Arts curriculum, instruction and assessments are aligned with the Pennsylvania Core Standards.

PA Core For Mathematics

For over a decade, research studies of mathematics education in high-performing countries have pointed to the conclusion that the mathematics curriculum in the United States must become substantially more focused and coherent in order to improve mathematics achievement in this country. To deliver on the promise of common standards, the standards must address the problem of a curriculum that is "a mile wide and an inch deep." These standards are a substantial answer to that challenge. Instead, these standards aim for clarity and specificity.

These standards endeavor to follow such a design, not only by stressing conceptual understanding of key ideas, but also by continually returning to organizing principles such as place value or the laws of arithmetic to structure those ideas. These Standards define what students should understand and be able to do in their study of mathematics. Asking a student to understand something means asking a teacher to assess whether the student has understood it. But what does mathematical understanding look like? One hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, why a particular mathematical statement is true or where a mathematical rule comes from. Mathematical understanding and procedural skill are equally important and both are assessable using mathematical tasks of sufficient richness.





Gifted Program

North Penn's gifted program seeks to support gifted students in maximizing their unique talents and abilities through a varied approach. Students identified as gifted are supported through GIEPs (Gifted Individualized Education Programs) where individualized goals and short-term learning outcomes are specified. In addition to enrichment and extension activities in the general education classroom, students may receive small group instruction from a gifted support teacher, or enroll in gifted seminars and mentorships at the secondary level as determined by their GIEP teams.

NPSD strives to support gifted students in developing higher-level creative and critical thinking skills, self-awareness and leadership skills and providing them with challenging and rich curriculum to reach their academic potential.

A student may be considered mentally gifted if he or she has an IQ of 130 or higher, or when multiple criteria strongly indicate gifted ability and is in need of specially designed instruction. A referral for a gifted multidisciplinary evaluation shall be made when the student is suspected by teachers or parents/guardians of being gifted and requiring specially designed instruction. A parent or teacher may request an evaluation by contacting the student's guidance counselor.

Guidance

During the elementary school years a student will gradually develop his or her various abilities with the assistance of our developmental guidance program. By sixth grade, the student will achieve the following objectives:

Intellectual Development:

- Develop the abilities of cooperation, consideration and respect which will allow the student to work effectively in a group
- Demonstrate personal responsibility for learning
- Be able to follow through on a plan for the completion of an assignment
- Understand and use systematic problem solving techniques
- Develop the ability to question and challenge the ideas of others in an acceptable manner
- Demonstrate an awareness of career possibilities

Emotional Development:

- Be able to set realistic personal goals
- Learn to make decisions and accept their consequences
- Accept his or her individual limitations and adjust to them
- Feel comfortable in group situations as well as alone

Social Development:

- Learn empathy for others, positive social norms and specifically responsive behaviors
- Participation in large group situations
- Increasingly expand his or her social contacts
- Demonstrate a willingness to meet new situations in secondary schools

Special Education

The special education program at NPSD is committed to assisting students in achieving their maximum potential and facilitating Independence through a highly individualized approach. A continuum of special education services are available to meet a student's unique needs. North Penn offers various programs to students based on their IEP's (Individualized Education Plans):

- Learning Support
- Autistic Support
- Life Skills Support
- Emotional Support
- Hearing and Vision Support
- Speech and Language Support
- Multiple Disabilities Support

Related services such as speech and language, occupational, physical, vision, and hearing therapies, as well as assistive devices may be provided to eligible students as determined by their IEP teams.

A parent or teacher may request an evaluation to determine if a student has a disability and is in need of specially designed instruction by contacting the student's guidance counselor.

Grade-Based Curriculum



Overview

What follows is an outline of curriculum based on grade level for:

- Art
- Health
- English Language Arts
- Library
- Mathematics
- Music
- Physical Education
- Science

Social Studies: K - Sixth Grade

As for Social Studies, the curriculum for all grades will focus on the academic standards of:

- Civics and Government
- Economics
- Geography
- History

The social studies curriculum at North Penn promotes higher-order thinking skills of critical, analytic, chronological and strategic thinking, when using content to meet the concepts.

Kindergarten

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- Learn about the elements of art and the principles of design; learn about balance, contrast, emphasis/focus, movement/rhythm, proportion/scale, repetition/pattern, unity and harmony
- Understand the concept of line, recognize and use simple shapes, recognize and distinguish between primary and secondary colors, be introduced to texture, tactile surfaces, space and simple form
- Be exposed to and use a variety of materials

Health

- Identify family members; the five senses and the corresponding body parts; the difference between "junk foods" and "healthy foods"; the food groups in the food guide; healthy personal hygiene practices; health care workers; the possible health problems caused by environmental factors; health related signs and terminology; identify and follow safety rules and procedures
- Understand the stages of growth and development; that medicine can be helpful and harmful; that proper hygiene can prevent the spread of germs
- Participate in emergency drills and discuss appropriate responses
- · Learn refusal strategies

English Language Arts

Foundational Skills

- Utilize book handling skills
- Demonstrate understanding of the organization and basic features of print
- Demonstrate understanding of spoken words, syllables and sounds
- Know and apply grade-level phonics and word analysis skills in decoding words
- Read emergent reader texts with purpose and understanding

Reading Literature and Informational Text

- Answer questions about key details in a text
- Name the author and illustrator of a story and define the role of each in telling the story
- Recognize common types of text
- Answer questions about unknown words in a text
- Use words and phrases acquired through conversations, reading, being read to and responding to texts
- Actively engage in group reading activities with purpose and understanding

Writing/Speaking & Listening

- Use a combination of drawing, dictating and writing to focus on one specific topic
- With prompting and support, generate ideas and details to convey information that relates to a chosen topic
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- Make logical connections between drawing and writing
- With guidance and support from adults and peers, respond to questions and suggestions from peers, and add details to strengthen writing

- With guidance and support, explore a variety of digital tools to produce and publish writing or in collaboration with peers
- Write routinely over short time frames
- Participate in collaborative conversations with peers and adults in small and large groups
- Speak audibly and express thoughts, feelings and ideas clearly

Library

- Discern between author and illustrator
- Listen to and look at a variety of Caldecott Award books
- Listen to books by various authors and illustrators
- Locate fiction and non-fiction areas in the library
- Recognize the terms: title, spine, spine label, cover and page
- Care for materials: carrying, storing, turning pages, cleanliness, etc.
- Develop appropriate library manners: listening, speaking, sitting, walking and respecting others
- Learn check-out and return procedures
- Identify the title of a book
- Learn browsing procedures
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Count to 100 by ones and tens; count forward beginning from a given number within the known sequence, count to answer "how many?" questions
- Write numbers from 0 to 20
- Represent a number of objects with a written numeral 0 to 20
- Understand the relationship between numbers and quantities, connect counting to cardinality
- Given a number 0 to 20; count out that many objects
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group
- Compare two numbers between 0 and 20 presented as written numerals
- Extend the concept of putting together and taking apart to add and subtract within 5
- Solve addition and subtraction word problems
- Add and subtract within 10 using objects/drawings to represent the problem
- Identify, describe, analyze, compare, create and compose 2- and 3 dimensional shapes
- Describe/compare measurable attributes of objects (longer, shorter, taller, etc.)
- Classify objects and count the number of objects in each category

Music

- Learn vocal and instrumental techniques
- Perform using speaking/singing voice, match pitches and maintain tempo
- Demonstrate proper breathing, sing songs from diverse cultures and styles; proper posture, use and handling of musical instruments, good tone production, appropriate dynamics, diction and phrasing

- Identify melodic direction and phrasing, and understand question and answer patterns of melodic and rhythmic phrases; examples of music and the role of musicians, genres of music and musical cultures; and demonstrate appropriate behavior for various settings
- Read simple notation, identify common terms such as form, tone color, dynamics, melody, rhythm and tempo
- Listen to music representing genres and styles from diverse cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more Information.

Physical Education

- Learn basic locomotor skills, movement, body and spatial awareness, balance, dodging, chasing, fleeing, throwing and catching, dribbling with hands, kicking and punting, volleying and striking
- Introduce students to team building and adventure education concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Materials and Motion: Students come to understand that humans use natural resources for everything they do and that people affect the world around them. Students use those materials to engineer structures, applying physical science core ideas of energy transfer. Students investigate the effect of pushes and pulls, and apply their intuitive notion of the concept of variables to change the strength and direction of rolling balls to achieve specific outcomes.
- Trees and Weather: Students develop an understanding of what plants (and animals) need to survive and the relationship between their needs and where they live. By monitoring local weather, students experience the patterns and variations in weather and come to understand the importance of weather forecasts to prepare for severe weather.
- Animals by Two: Kindergarten students will observe and describe the structures of fish, birds, snails, earthworms, and isopods. Appropriate classroom habitats are established, and students learn to care for the animals.



- Learn about and experience the elements of art and the principles of design; learn the three different ways to create a focal point; learn that elements can be used to create the illusion of movement; learn the repetition of elements create a pattern and that using related elements creates harmony; experiment with and learn about various types of lines
- Recognize geometric and free form shapes, be introduced to secondary colors and neutral hues; recognize that texture can be seen and felt, produce two and three dimensional art using an entire space, develop simple forms, recognize visual balance in 2D and 3D art
- Use opposing elements to create contrast

Health

- Identify and describe changes in the human life cycle; identify the function of bone and muscle; identify the roles and responsibilities of health care workers; identify possible health related problems caused by environmental factors; identify and list safety rules for school and home
- Provide examples of each type of food group in the food guide
- Demonstrate healthy habits and healthy personal hygiene practices
- Discriminate between good & bad decisions; define and describe drugs
- Participate in emergency drills and discuss appropriate responses

English Language Arts

Foundational Skills

- Demonstrate understanding of the organization and basic features of print
- Demonstrate understanding of spoken words, syllables, and sounds
- Know and apply grade-level phonics and word analysis skills in decoding words
- Read on-level text with accuracy and fluency to support comprehension

Reading Literature and Informational Text

- Identify the main idea and recall key details of a text
- Ask and answer questions about key details in a text
- Use text features and search tools to locate key facts or information in a text
- Describe connections between events, individuals, key ideas, or other texts
- Use words and phrases acquired through conversations, reading, and being read to, to respond to text
- Determine or clarify the meaning of unknown and multiple meaning words and phrases
- Actively engage in group reading activities with purpose and understanding

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/explanatory, opinion/argumentative and narrative pieces
- Develop topic facts and details or thoughts and feelings to describe experiences and events

- Create an organizational structure that includes reasons and provides a sense of closure
- Choose words and phrases for effect
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- With guidance and support, use a variety of digital tools to produce and publish writing including in collaboration with peers
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically and respond intelligently as individuals or in group discussions

Library

- Learn to select books independently; practice appropriate library manners: listening, speaking, sitting, walking, respecting others; check-out and return materials; locate magazines in the library; become familiar with the alphabetical arrangement of fiction books and numerical arrangement of non-fiction books and their location in the library
- Listen to and look at a variety of Caldecott award books
- Identify the terms: author, title, illustrator; recognize the genres of fiction, non-fiction and poetry
- Recognize a book's spine label for fiction and non-fiction (differentiate)
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Add and subtract within 20; work with addition and subtraction equations
- Represent and solve problems involving addition and subtraction
- Use addition and subtraction within 20 to solve word problems; use place value understanding and properties of operations to add and subtract
- Count to 120 starting at any number less than 120; read and write numerals to 120; add within 100 using concrete models or drawings and strategies based on place value
- Understand and apply properties of operations and the relationship between addition and subtraction; understand Place Value; understand that the two digits of a two-digit number represent amounts of tens and ones
- Compare two digit numbers based on meanings of tens and ones digits, recording the results of comparisons with symbols
 >, =, <
- Given a 2-digit number, mentally find 10 more or 10 less than the number without having to count then explain the reasoning used
- Order three objects by length and compare them using a third object
- Divide circles and rectangles into two and four equal shares
- Subtract multiples of 10, in the range 10 to 90, from other multiples of 10 from 10 to 90 (60-20=40) using concrete models or drawings and strategies based on place value
- Express the length of an object as a whole number of length units by laying multiple copies of a shorter object end to end with no overlaps or gaps

- Tell and write time in hours and half-hours using analog and digital clocks
- Represent and interpret data; ask and answer questions about the total number of data points
- Reason with shapes and their attributes; compose (build) and decompose (take-apart) a 2D or 3D shape by using 2 or more shapes; measure lengths indirectly and by repeating length units

Music

- Learn vocal and instrumental techniques; match pitches, identify melodic direction, maintain steady tempo, identify like and unlike phrases
- Demonstrate and practice correct posture and handling of instruments, proper breathing, appropriate dynamics and phrasing, understand question and answer patterns of melodic and rhythmic phrases, and improvise simple melodies and rhythmic/melodic ostinato; read, compose and notate simple melodic patterns and recognize musical symbols
- Identify form, tone color, dynamics, rhythm, melody and tempo; identify the role of musicians and examples of music and demonstrate appropriate behavior for various settings and genres of music and musical cultures
- Listen to music representing genres and styles from diverse cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more information.

Physical Education

- Learn about basic locomotor skills, movement, body and spatial awareness, balance, dodging, chasing, fleeing, throwing and catching, dribbling with hands, kicking and punting, volleying and striking
- Introduce students to team building and adventure education concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Sounds and Light- This module provides experiences that help students develop an understanding of how to observe and manipulate sound and light. They explore these dimensions of the natural world using simple tools and musical instruments.
- Air and Weather- Students find out about properties of air by exploring how objects interact with air. Students observe daily changes in air temperature and connect them to the daily movement of the Sun in the sky. They monitor changes in hours of daylight over the seasons and connect them to changing weather conditions. And they find the Moon in the day and night skies and monitor its movement over the month.
- Plants and Animals- Students observe the structures of plants and discover ways to propagate new plants from mature plants (from seeds, bulbs, roots, and stem cuttings). They observe and describe changes that occur as plants grow, and compare classroom plants to those in the schoolyard. They design terrariums (habitat systems) and provide for the needs of both plants and animals living together in the classroom. Students explore variation in the same kind of organism, including variation between young and adults. They learn about the behaviors of parents to help their young (offspring) survive. And they explore structure and function relationships as they sort different kinds of animal and plant structures.



- Learn about and experience the elements of art and the principles of design; discuss and recognize warm/cool and light/dark colors
- Create and characterize the concept of line; use shape to create depth and patterns; recognize various surface textures
- Identify space in regard to near/far and via symmetrical composition and work with 3D form; use two or more objects to show scale
- Use elements to create balance and contrast, learn how to create a focal point; express movement in art using one of the elements
- Use the repetition of two or more elements in a linear format
- Create art using one or more elements to produce a unified theme

Health

- Describe how abilities and responsibilities change over time; describe possible health related problems caused by environmental factors; describe the negative effects caused by the misuse of drugs; describe the general function of organs and body systems
- Demonstrate healthy personal hygiene practices; demonstrate appropriate responses to emergency situations
- Identify the steps in a decision making model; identify the roles and responsibilities of community and health care workers; identify good & bad decisions, provide alternatives; identify appropriate ways to resolve conflicts

English Language Arts

Foundational Skills

- Know and apply grade-level phonics and word analysis skills in decoding words
- Read on-level text with accuracy and fluency to support comprehension

Reading Literature and Informational Text

- Identify the main idea and recall key details in multi-paragraph text
- Ask and answer questions about key details in a text
- Use text features and search tools to locate key facts or information in text
- Describe connections between events, individuals, key ideas, or other texts
- Compare and contrast similar characters, events, or text
- Determine/infer the central message/theme of a text
- Use words and phrases acquired through conversations, reading, and being read to, to respond to texts
- Determine or clarify the meaning of unknown and multiple meaning words and phrases
- Draw evidence from texts to support analysis, refection, and critique

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/explanatory, opinion/argumentative and narrative pieces
- Develop topics, facts, details, thoughts and feelings to describe experiences and events

- Create an organizational structure that includes reasons and includes a concluding statement
- Choose words and phrases for effect and to appeal to the audience
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- With guidance and support, use a variety of digital tools to produce and publish writing including in collaboration with peers
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically and respond intelligently as individuals or in a group discussion

Library

- Identify the purpose of the Caldecott Award
- Study the genre areas of: poetry, biography, mystery, non-fiction, auto-biography, folklore; locate the biography section; recognize the purpose of the online library catalog; select books independently on reading level
- Demonstrate check-out and return procedures; demonstrate appropriate library manners: behavior, respect, book care and other procedures
- Learn keyword, author, title and subject buttons on online catalog; learn location, purpose and use of index, table of contents and title page
- Utilize book parts to assist in book selection (i.e. cover, pages, spine)
- Distinguish books according to alphabetical arrangement of easy, fiction and numerical arrangement of non-fiction
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones
- Count, read and write numbers to 1,000 using base-ten numerals, number names and expanded form; add and subtract within 1,000
- Determine whether a group of objects is an odd or even number
- Fluently add and subtract within 100; add up to four two-digit numbers; mentally add/subtract 10 or 100 to a given number 100-900
- Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers
- Fluently add and subtract within 100; add and subtract within 1,000
- Tell and write time from an analog and digital clock to the nearest 5 minutes using A.M. and P.M.
- Solve word problems involving currency
- Draw a picture graph and bar graph to represent a data set with up to four categories; solve simple problems using the bar graph
- Measure the length of an object by using appropriate tools; estimate lengths using units of inches, feet, centimeters and meters; measure to determine how much longer one object is than another

- Analyze and draw 2D and 3D shapes having specified attributes
- Use fractions to partition shape; describe the shape as fractions

Music

- Learn vocal and instrumental techniques
- Match pitches; maintain steady tempo; identify form, tone color, dynamics, rhythm, melody and tempo; identify the role of musicians and examples of music, and demonstrate appropriate behavior for various settings and genres of music and musical cultures; identify melodic direction; identify like and unlike phrases; demonstrate and practice correct posture and handling of instruments, proper breathing, appropriate dynamics and phrasing
- Understand question and answer patterns of melodic and rhythmic phrases, and improvise simple melodies and rhythmic/melodic ostinato
- Read, compose and notate simple melodic patterns and rhythmic/melodic ostinato and recognize musical symbols
- Listen to music representing genres and styles from diverse cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more information.

Physical Education

- Learn about locomotor skills, fundamental movement skills including jumping, changing speed and direction and manipulation of an object in time; learn non-locomotor skills including bending, twisting, turning, pushing, pulling, moving up and down and rolling skills
- Body and spatial awareness, balance, transfer of weight, shooting skills, dodging, chasing, fleeing, throwing, catching, kicking, punting, volleying, striking
- Emphasize team building, adventure education and physical fitness concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Solids and Liquids They conduct investigations to find out
 what happens when solids and water are mixed and when liquids and water are mixed. They use their knowledge of solids
 and liquids to conduct an investigation on an unknown material (toothpaste). They gain firsthand experience with reversible
 changes caused by heating or cooling, and read about changes
 caused by heating that are irreversible.
- Pebbles, Sand and Silt Students use simple tools to observe, describe, analyze, and sort solid earth materials and learn how the properties of the materials are suited to different purposes. Students explore how wind and water change the shape of the land and compare ways to slow the process of erosion. Students learn about the important role that earth materials have as natural resources
- Insects and Plants Provides students with life science core ideas dealing with structure and function of living things, growth and development of plants and animals, interactions of organisms with their environment, and biodiversity of organisms on land and in water. Students see the life cycles of insects unfold in real time and compare the stages exhibited by each species to reveal patterns. At the same time, students grow one type of plant from seed and observe it through its life cycle to produce new seeds. They gain experience with the ways that plants and insects interact in feeding relationships, seed dispersal, and pollination, and students develop models to communicate their understanding.



- Learn about and experience the elements of art and the principles of design; identify positive and negative space
- Use line to create a focal point and to express emotion; use the repetition of two or more elements to create art in a non-linear format
- Differentiate between geometric and free form shapes; create 3D forms using additive and subtractive processes; use a focal point to create a theme in a work of art; Interpret movement through shape repetition
- List color families, mix neutral colors, use a variety of media to express texture; learn that the opposite of harmony is discord
- Recognize that dissimilar elements can create balance and use contrast to make a more dramatic artistic statement; recognize that physical movement and musical movement can be expressed in art

Health

- Describe the changes that occur between childhood and adolescence; describe the function of the body systems; demonstrate an understanding of appropriate strategies to resist drug misuse and abuse
- Explain the components of a healthy diet
- Identify and define communicable and non-communicable diseases; identify health related products and services; identify ways to reduce exposure to the environmental factors that pose health related problems
- Demonstrate and explain appropriate responses to emergency situations
- Apply knowledge of safety rules and procedures to various situations

English Language Arts

Foundational Skills

- Know and apply grade-level phonics and word analysis skills in decoding words
- Read on-level text with accuracy and fluency to support comprehension

Reading Literature and Informational Text

- Determine the main idea of a text; recount key details and explain how they support the main idea
- Ask and answer questions about a text and make inferences from the text; referring to the text to support responses
- Use text features and search tools to locate and interpret information
- Describe connections between events, individuals, key ideas, or other texts
- Compare and contrast similar characters, events, texts and most important points presented in two texts on the same topic
- Determine/infer the central message, lesson, or moral in text and explain how it is conveyed
- Explain point of view of the author
- Acquire and use accurately grade-appropriate conversational, academic, and domain-specific words
- Draw evidence from texts to support analysis, refection and critique

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/explanatory, opinion/argumentative and narrative pieces
- Develop topics, facts, details, thoughts and feelings to describe experiences and events
- Create an organizational structure that includes information grouped and connected logically with a concluding statement or section
- Choose words and phrases for effect and to appeal to the audience
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- With guidance and support, use technology to produce and publish wiring (using keyboarding skills) as well as to interact and collaborate with others
- Write routinely over extended time frames (time for research, reflection and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically and respond intelligently as individuals or in a group discussion

Library

- Extend knowledge of Caldecott Award books
- Study the genre areas of: realistic fiction and fables; review the genres of poetry, non-fiction, biographies and mystery; differentiate between fact and fiction books; locate information in text/print
- Select books on appropriate level; locate fiction and non-fiction books in the library by call number; use a printed resource to acquire information; learn the use of reference materials, print and non-print
- Work with classmates to solve information problems
- Use resources and equipment responsibly; identify appropriate print resources based on need
- Perform a directed online search when needed; perform a keyword/subject, title, author and series search within the catalog
- Learn the importance of a bibliography; learn selected online databases
- Use correct format when searching for person names; use a table of contents and index
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Round two- and three-digit whole numbers to the nearest ten or hundred, respectively; add two- and three-digit whole numbers; subtract two- and three-digit numbers from three-digit whole numbers
- Order a set of whole numbers from least to greatest or greatest to least
- Solve one-and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs; translate information from one type of display to another
- Interpret and/or describe products of whole numbers; multiply one-digit whole numbers by two-digit multiples of 10
- Compare total values of combination of coins and/or dollar bills

- to less than \$5; make change for an amount up to \$5 with no more than \$2 change given; round amounts of money to the nearest dollar
- Interpret and/or model division as a multiplication equation with an unknown factor; interpret and/or describe whole-number quotients
- Use multiplication and/or division to solve word problems in situation involving equal groups, arrays and/or measurement quantities
- Determine the unknown whole number in a multiplication or division equation relating three whole numbers
- Identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations
- Identify the missing symbol (+, -, x, /, <, >, =) that makes a number sentence true; create or match a story to a given combination of symbols (+, -, x, /, <, >, =) and numbers
- Assess the reasonableness of answers; solve two-step word problems using the four operations; represent two-step word problems using equations with a symbol standing for unknown quantity
- Demonstrate that when a whole or set is partitioned into y equal parts, the fraction 1/y represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole
- Represent fractions of a number; recognize and generate simple equivalent fractions; express whole numbers as fractions, and/ or generate fractions that are equivalent to whole; compare two fractions with the same denominator using symbols and/or justify the conclusions
- Use a ruler to measure lengths to the nearest quarter inch or centimeter; measure areas by counting unit squares; measure and estimate liquid volumes and masses of objects using standard units
- Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning
- Tell, show and/or write time (analog) to the nearest minute; calculate elapsed time to the minute in a given situation
- Add, subtract, multiply and divide to solve one-step word problems involving masses or liquid volumes that are given in the same units
- Use a ruler to measure lengths to the nearest quarter inch or centimeter
- Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units – whole numbers, halves, or quarters
- Explain that shapes in different categories may share attributes and that the shared attributes define a larger category
- Partition shapes into parts with equal areas; express the area of each part as a unit fraction of the whole

Music

- Learn vocal/instrumental techniques
- Maintain consistent tonality and steady beat/meter; identify melodic direction and like/unlike phrases; match melodic pitch

- Recognize phrasing and form; improvise simple melodies and rhythmic/melodic ostinato; sing harmonically
- Learn basic chord progressions; read simple notation and notate
- Compose simple melodic and rhythmic patterns in various meters
- Identify elements of music, various form, tone color, instruments and their families; identify the role of musicians and examples of music, and demonstrate appropriate behavior for various settings and genres of music and musical cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more information.

Physical Education

- Learn locomotor skills, movement skills such as accelerating and decelerating, speed and force, and jumping skills
- Recognize spatial awareness and movement through force, flow and speed
- Develop concepts of balance, transfer of weight, dodging, chasing and fleeing, throwing and catching, shooting skills, dribbling with hands, volleying, striking, kicking and punting, emphasize team building, adventure education and physical fitness concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- · analyzing and interpreting data
- · using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Motion and Matter Provides grade 3 students with physical sciences core ideas dealing with forces and interactions, matter and its interactions, and with engineering design. Magnetism and gravity are the forces students explore as they look for patterns of motion to predict future motion. Students use metric tools to refine observations by measuring mass and volume, they make mixtures and solutions to develop a foundational understanding of conservation of mass, and they observe a simple chemical reaction to extend their understanding of conservation.
- Water and Climate Provides students with experiences to explore the properties of water, the water cycle and weather, interactions between water and other earth materials, and how humans use water as a natural resource.
- Structures of Life Students observe, compare, categorize, and care for a selection of organisms. Students engage in science and engineering practices to investigate structures and behaviors of the organisms and learn how some of the structures function in growth and survival. Students look at the interactions between organisms of the same kind, among organisms of different kinds, and between the environment and populations over time.

- Learn about and experience the elements of art and the principles of design; simulate and invent texture
- Illustrate form and create value with line; reduce a simple object to simple shapes and recognize proportional relationships
- Emphasize mixing color to create tints and shades; utilize color relationships of monochromatic, warm and cool colors
- Address form in sculpture through additive and subtractive processes
- Use dissimilar elements to create balance; use contrast to create mood or feeling; address subtleties in contrast of white, grey and black
- Recognize that focal point of art can change with the observer
- Express visually rhythm or movement; recognize that scale
 is a key factor in perspective and that pattern creates details
 and texture; recognize that discord attracts the observer's attention to a work of art; recognize positive and negative space
 in art and perspectives of foreground, background and middle
 ground

Health

- Explain the importance of having healthy relationships; explain how families influence personal health behaviors; explain the structure and function of the body systems including the nervous system
- Identify the unique strengths individuals bring to Relationships; identify and explain common community health problems
- Generalize how individuals can address community and environmental issues; generalize several non-violent, positive behaviors for resolving conflict; assess personal safety habits
- Explain the interdependency among living things and their environment; explain the structure and function of the immune system; identify communicable and non-communicable diseases and ways they can be avoided; explain and use safe practices to reduce chance of injury
- Evaluate decisions and recommend alternatives
- Extend knowledge of appropriate responses to emergencies
- Develop personal safety goals and identify the steps necessary for their accomplishment

English Language Arts

Foundational Skills

- Know and apply grade-level phonics and word analysis skills in decoding words
- Read on-level text with accuracy and fluency to support comprehension

Reading Literature and Informational Text

- Determine the main idea of a text and explain how it is supported by key details
- Refer to details and examples in a text to support what the text says explicitly and make inferences
- Use text features and search tools to locate and interpret information
- Determine the meaning of words and phrases as they are used in grade level text, distinguishing literal from nonliteral meaning as well as shades of meaning among related words

- Integrate information from two texts on the same topic to demonstrate understanding of that topic
- Determine/infer the central message, theme, lesson, or moral in text and explain how it is conveyed
- Compare and contrast an event or topic told from the two different points of view they represent
- Acquire and use accurately grade-appropriate conversational, academic and domain-specific words
- Draw evidence from texts to support analysis, refection and critique

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/ explanatory, opinion/argumentative and narrative pieces
- Develop the topic with facts, definitions, details, quotations, or other information and examples related to the topic
- Group related information in paragraphs and sections, linking ideas within categories of information using words and phrases; providing a concluding statement or section
- Use precise language and domain-specific vocabulary to inform about or explain the topic
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- With some guidance and support, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrating sufficient command of keyboarding skills to type a minimum of one page in a single setting
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions

Library

- Review genre areas of historical fiction and fantasy; review books that are Caldecott Award recipients
- Select books on appropriate level and/or interest
- Recognize the Newbery and Coretta Scott King Awards
- Learn the terms copyright and plagiarism; learn of citation formatting
- Work with classmates to locate information; use equipment and materials responsibly; learn criteria that will help to evaluate resources
- Review appropriate electronic resources; learn of research methods such as the Big6; learn of specialized research tools such as an atlas, almanac, biographical dictionary, etc.
- Perform searches in catalog including keyword, author, title, series, Webpath Express, call number and subject
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Learn the multiplication facts to 12
- Know and apply skills to name the values of digits to hundred millions; estimate sums and differences of multi-digit numbers
- Add positive and negative integers; solve multi-digit multiplication and division problems using traditional and alternative strategies; solve rate problems using rate tables
- Demonstrate, explain and write strategies for solving multiplication and division number stories
- Rename fractions with denominators of 10 and 100 as decimals; identify equivalencies between 100ths - fractions, decimals and percents
- Estimate the weight of objects in ounces and grams; express metric measures with decimals
- Recall and apply formulas to find areas of rectangles, parallelograms and triangles; identify, draw and measure acute, right, obtuse, straight and reflex angles; name, draw and label line segments, lines, rays, angles, triangles and quadrangles; identify and describe right angles, parallel lines and line segments
- Name and locate points specified by ordered number pairs on a coordinate grid; Interpret open sentences by identifying the variable
- Apply parentheses to make true number sentences; apply landmarks of maximum, minimum, median, mode and range

Music

- Learn vocal and instrumental techniques
- Maintain consistent tonality and steady beat/meter
- Identify melodic direction and like/unlike phrases
- Match melodic pitch; sing harmonically
- Recognize phrasing and form; learn basic chord progressions
- Improvise simple melodies and rhythmic/melodic ostinato
- Read simple notation and notate/compose simple melodic and rhythmic patterns in various meters; identify elements of music, various form, tone color, instruments and their families
- Respond to cues of a conductor; rehearse music in two or more parts
- Identify the role of the audience, the role of musicians and examples of music
- Demonstrate appropriate behavior for various settings and genres of music and musical cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more information.

Physical Education

- Learn about locomotor skills, movement skills such as accelerating and decelerating, speed and force, and jumping skills
- Recognize spatial awareness and movement through force, flow and speed
- Develop concepts of balance, transfer of weight, dodging, chasing and fleeing, throwing and catching, shooting skills, dribbling with hands, volleying and striking, kicking, punting and dribbling

• Emphasize team building, adventure education and physical fitness concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

Science Modulars

- Energy provides first-hand experiences in physical science dealing with energy and change. Students investigate electricity and magnetism as related effects and engage in engineering design while learning useful applications of electromagnetism in everyday life. They explore energy transfer through waves, repeating patterns of motion, that result in sound and motion.
- Soils, Rocks and Landforms Provides students with firsthand experiences with soils and rocks and modeling experiences using tools such as topographic maps and stream tables to study changes to rocks and landforms at Earth's surface.
- Environments Students design investigations to study preferred environments, range of tolerance, and optimum conditions for growth and survival of specific organisms. They conduct controlled experiments by incrementally changing specific environmental conditions to determine the range of tolerance for early growth of seeds and hatching of brine shrimp, and use these data to develop and use models to understand the impact of changes to the environment. They graph and interpret data from multiple trials of experiments and build explanations from evidence.



- Learn about and experience the elements of art and the principles of design
- Create movement and rhythm with line
- Create the illusion of 3D space on a 2D surface with line
- Use size and placement of shapes to create a focal point
- Recognize that warm colors advance and cool colors recede
- Learn how to use color theory to express moods and feelings
- Use texture to create the illusion of realistic objects
- Use a one point perspective with a vanishing point
- Use various processes to produce relief and free standing sculpture
- Use shades and tints to create the illusion of a 3D form on a 2D surface
- Create balance by using similar and dissimilar elements
- Recognize that real balance is related to but different from visual balance
- Use elements to create subtle contrasts in art
- Identify obvious and subtle focal points to support the emotional response
- Recognize that movement is not always portrayed through a focal point
- Use distortion of scale to create tension and mood
- Employ pattern to visually illustrate or actually create a tactile surface
- Introduce discord in a work of art

Health

- Identify the physical and psychology changes of puberty
- Explain ways to maintain healthy relationships
- Enhance interpersonal communication skills
- Apply conflict resolution skills to family situations
- Explain the relationship between diet and good health
- Explain the location and function of the body systems including the reproductive system
- Demonstrate an understanding of the appropriate use of drugs and the effects of alcohol, tobacco and illegal drugs
- Generalize the impact illegal drug use has on society
- Distinguish between accurate, reliable information and misinformation
- Analyze the messages in advertisements
- Explain the importance of assuming personal responsibility for personal health and safety; develop, initiate and evaluate a personal health goal
- Explain the structure and function of the immune system
- Practice effective decision making

English Language Arts

Foundational Skills

- Know and apply grade-level phonics and word analysis skills in decoding words
- Read on-level text with accuracy and fluency to support comprehension

Reading Literature and Informational Text

• Determine the main idea of a text and explain how it is supported by key details

- Refer to details and examples in a text to support what the text says explicitly and make inferences
- Use text structure to interpret information
- Determine the meaning of words and phrases as they are used in grade level text including figurative language
- Integrate information from several texts on the same topic to demonstrate understanding of that topic
- Determine/infer the central message, theme, lesson, or moral in text and explain how it is conveyed
- Analyze multiple accounts of the same event or topic, noting the important similarities and differences in the point of view they represent
- Acquire and use accurately grade-appropriate conversational, academic, and domain-specific words
- Draw evidence from texts to support analysis, reflection, and critique

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/explanatory, opinion/argumentative, and narrative pieces
- Develop the topic with facts, definitions, details, quotations, or other information and examples related to the topic
- Group related information logically linking ideas within and across categories of information using words, phrases and clauses; providing a concluding statement or section
- Use precise language and domain-specific vocabulary to inform about a topic or explain the topic; use sentences of varying length
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- With some guidance and support, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrating sufficient command of keyboarding skills to type a minimum of two pages in a single setting
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in a group discussion
- Use appropriate verbs in written work; identify main, helping and being verbs; identify and use pronouns used after being verbs
- Develop focus, content, organization and style in written materials
- Revise and edit written work
- Give oral report from notes

Library

- Review the characteristics of a variety of genres; select books of interest
- Choose Newbery and Coretta Scott King Award books to read
- Work with classmates to locate and share information
- Review cyber-safety issues; use equipment and materials responsibly
- Search for periodicals using Power Library databases

- Search for information online; learn strategies to broaden or narrow a search
- Understand evaluation criteria of online resources such as timeliness/relevancy, etc.
- Use the Big6 process research method to complete an information project
- Conduct keyword searches using a search engine
- Locate information using appropriate sources such as encyclopedias, periodicals, biographical tools, almanacs, geographical tools, atlases and dictionaries; use Boolean operators "and" and "or"
- Perform the following searches in the catalog: keyword, author, title, series, Webpath Express, call number and subject
- Use appropriate citation; review issues about plagiarism and copyright
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Identify place value in numbers to billions and thousandths; round decimals to the nearest 100th
- Identify all factors and prime factorization; identify the greatest common factor and least common multiple of two numbers
- Compute the sum, difference, quotient and product of multi-digit whole number and decimals
- Convert between fractions, mixed numbers, decimals and percents
- Add, subtract and multiply fractions and mixed numbers with like and unlike denominators; identify prime and composite numbers
- Understand how square numbers and their square roots are related
- Rename numbers written in exponential notation
- Write and solve open sentences with variables for word problems
- Know and apply formulas to find the area, perimeter and volume of space figures and the area and circumference of a circle
- Estimate and measure different types of angles within two degrees and determine measures based on relationships between angles
- Understand and apply order of operations to evaluate expressions and solve number sentences; write algebraic expressions to describe situations
- Solve one and two-step pan balance problems; solve and represent rate and ratio problems through the use of formulas, graphs and tables
- Identify the maximum, minimum, median, mode, range and mean for a data set
- Use tree diagrams to find all possible ways a sequence of choices can be made
- Compute the probability of outcomes when choices are equally likely

Music

- Learn vocal/instrumental techniques
- Maintain consistent tonality and steady beat/meter
- Identify melodic direction and like/unlike phrases
- Match melodic pitch; recognize phrasing and form
- Improvise simple melodies and rhythmic/melodic ostinato
- Sing harmonically; learn basic chord progressions
- Read simple notation and notate/compose simple melodic and rhythmic patterns in various meters
- Rehearse songs in major/minor mode; rehearse music in two or more parts

- Identify elements of music, various form, tone color, instruments and their families; respond to cues of a conductor
- Identify the role of the audience, the role of musicians and examples of music
- Demonstrate appropriate behavior for various settings and genres of music and musical cultures
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Please ask your child's music teacher for more information.

Physical Education

- Learn about locomotor skills, running, leaping and fundamental movements, and will use force, flow and speed to transition between movements
- Use pathways, levels and directions to build body and spatial awareness skills, and develop concepts of transfer of weight, throwing and catching, shooting skills, kicking, punting, dribbling, volleying and striking
- Emphasize team building, adventure education and physical fitness concepts

Science

Scientific Practices

- · asking questions and defining problems
- · developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Mixtures and Solutions Introduces students to fundamental ideas about matter and its interactions. Students come to know that matter is made of particles too small to be seen and develop the understanding that matter is conserved when it changes state—from solid to liquid to gas—when it dissolves in another substance, and when it is part of a chemical reaction. Students have experiences with mixtures, solutions of different concentrations, and reactions forming new substances. They also engage in engineering experiences with separation of materials.
- Earth and Sun Provides students with experiences to explore the properties of the atmosphere, energy transfer from the Sun to Earth, and the dynamics of weather and water cycling in Earth's atmosphere. Other experiences help students to develop and use models to understand Earth's place in the solar system, and the interactions of Earth, the Sun, and the Moon to reveal predictable patterns.
- Living Systems Students start by looking at Earth as the interaction of four Earth systems or subsystems—the geosphere, the atmosphere, the hydrosphere, and the biosphere. The focus of the module then turns to the biosphere as students explore ecosystems and organisms in terms of their interacting parts. Students come to understand through a variety of experiences that plants get the materials they need for growth primarily from water and air, and that energy in animals' food was once energy from the Sun.

- Learn about and experience the elements of art and the principles of design
- Use the qualities of line and various drawing techniques to create textures and patterns; use focal point to create emotional response
- Develop and refine technique to show depth on a 2D surface; recognize that real balance is different from visual balance and apply real balance to 3D art
- Identify groups of related colors (natural, analogous)
- Create an awareness of textural surfaces
- Explore one point perspective and positive and negative space
- Form functional and non-functional sculptures
- Use contrast to create mood; create art using discord in a planned fashion
- Create the illusion of movement in a work of art
- Use distortion of scale to create an emotional response to art
- Recognize repetition of form can create a sculpture

Health

- Expand the knowledge of the physical and emotional changes associated with puberty
- Explain how the physical, emotional and social aspects of health interrelate during adolescence
- Explain several health benefits associated with physical activity, rest and a healthy diet
- Explain ways to effectively express feelings and opinions
- Explain the role of self-concept and self-esteem in promoting wellness
- Analyze the impact of marketing and advertising techniques on food and fitness choices
- Identify sources of reliable health information and services
- Develop, initiate and evaluate a personal goal and a personal health plan
- Identify and demonstrate various strategies to resolve conflicts
- Extend knowledge of effective decision making and refusal skills
- Demonstrate an understanding of safety procedures and appropriate responses to emergency situations

English Language Arts

Reading Literature and Informational Text

- Determine two or more main or central ideas of a text and how they are conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments
- Cite textual evidence to support analysis of what the text says explicitly as well as inferences and/or generalizations drawn from text
- Analyze in detail how a key individual, event, or idea is introduced, illustrated and elaborated in a text
- Determine an author's point of view or purpose in a text and explain how it is conveyed
- Analyze the author's structure through the use of paragraphs, chapters, or sections
- Determine the meaning of words and phrases as they are used in grade level reading and content, including interpretation of figurative language

- Integrate information presented in different media or formats to develop understanding
- Evaluate an author's argument by examining claims and determining if they are supported by evidence
- Examine how two authors present similar information in different types of text
- Acquire and use accurately grade-appropriate conversational, academic, and domain-specific words
- Analyze the development of meaning through overall structure of text
- Compare and contrasts texts in different forms or genres in terms of their approaches to similar themes and topics
- Draw evidence from literary or informational texts to support analysis, reflection, critique and research

Writing/Speaking & Listening

- Write for different purposes and audiences by composing informative/explanatory, opinion/argumentative and narrative pieces
- Develop and analyze the topic with facts, definitions, details, quotations, or other information and examples related to the topic
- Organize ideas, concepts, and information using strategies such as definition, classification, comparison/ contrast and cause/ effect; use appropriate transitions to clarify the relationships; provide a concluding statement or section
- Use precise language and domain-specific vocabulary to inform about a topic or explain the topic; use sentences of varying lengths and complexities; develop and maintain a consistent voice and formal style
- Demonstrate a grade appropriate command of the conventions of Standard English grammar, usage, capitalization, punctuation and spelling
- Use narrative techniques such as dialogue, description and pacing to develop experiences, events and/or characters
- 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 three pages in a single setting
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single setting or day or two)
- Present appropriately in formal speaking situations, listen critically and respond intelligently as individuals or in group discussions

Library

- Review the characteristics of various genres, including science fiction
- Recognize and choose Newbery and Coretta Scott King Award books
- Select books of interest
- Work with classmates to solve information problems
- Understand cyber-safety issues
- Develop strategies to broaden a search and narrow a search using the Boolean operators "and" and "or"
- Develop an awareness of other information providers such as government agencies and public libraries
- Determine and locate appropriate resources in print and electronic format
- Perform periodical searches using the Power Library databases
- Evaluate resources using established criteria, such as timeliness, etc.

- Use the Big6 research process to complete an information project
- Cite resources in presentations using a structured format
- Review issues regarding copyright and plagiarism
- Students will interact with literature through design-thinking challenges as part of the LAUNCH modules

Mathematics

- Read, write and compare numbers from thousandths to trillions
- Use exponential notation for large numbers
- Estimate products and multiply decimals
- Estimate the quotient and divide a decimal by whole numbers
- Multiply by positive and negative powers of 10
- Compare and order a combination of positive and negative integers, fractions, decimals and percents
- Compare and order positive and negative numbers
- Rename numbers expressed by fractions, mixed numbers, decimals and percents
- Understand and apply the associative, commutative and distributive properties for addition and multiplication
- Add, subtract, multiply and divide positive and negative numbers
- Calculate the degree measure of each sector in a circle graph
- Evaluate algebraic expressions
- Use variables to describe general patterns
- Find equivalent names for numbers
- Solve and graph solutions for inequalities
- Write and identify equivalent expressions and equivalent equations
- Write and solve equations that represent problem situations
- Use formulas to solve problems
- Simplify expressions and equations with parentheses
- Understand how increased number of trials affects experimental results
- Represent rates with formulas, tables and graphs
- Collect data and construct and interpret a variety of types of graphs
- Interpret information on a spreadsheet
- Plot ordered number pairs in four quadrants; use ordered number pairs to name points in four quadrants
- Calculate probability in simple situations
- Understand and use probability tree diagrams to solve problems

Music

- Learn vocal and instrumental technique
- Maintain consistent tonality and steady beat/meter
- Identify melodic direction and like/unlike phrases
- Match melodic pitch; sing harmonically
- Recognize phrasing and form, improvise simple melodies and rhythmic/melodic ostinato
- Learn basic chord progressions
- Read simple notation and notate/compose simple melodic and rhythmic patterns in various meters
- Rehearse songs in major/minor mode; rehearse music in two or more parts
- Identify elements of music, various form, tone color, instruments and their families
- Respond to cues of a conductor
- Identify the role of musicians, the audience and examples of music
- Identify music in SATB format
- Demonstrate appropriate behavior for various settings and

- genres of music and musical cultures; analyze music representing different genres
- Develop criteria for evaluating music using musical terminology

Note: Band and strings are available for students at various grade levels. Ask your child's music teacher for more information.

Physical Education

- Learn about locomotor skills, running, leaping, and fundamental movements, and use force, flow and speed to transition between movements
- Use pathways, levels and directions to build body and spatial awareness skills, and develop concepts of transfer of weight, throwing and catching, shooting skills, kicking, punting, dribbling, volleying and striking
- Emphasize team building, adventure education and physical fitness concepts

Science

Scientific Practices

- asking questions and defining problems
- developing and using models
- planning and carrying out investigations
- analyzing and interpreting data
- using mathematics and computational thinking
- constructing explanations and designing solutions
- engaging in argument from evidence
- obtaining evaluating and communicating information

- Waves The course proceeds from the most concrete observations, those of physical properties of mechanical waves, to the most abstract concepts, by which students develop a model of electromagnetic waves. Students will also delve into engineering applications and real-life connections along the way.
- Gravity and Kinetic Energy Students test motion at various speeds to explore acceleration and to learn about gravity. They use digital video analysis to calculate the acceleration of gravity. They observe patterns of collisions to discern how the variables of mass and speed affect energy, and they develop a model of force and energy transfer within systems based on Newton's three laws of motion.
- Weather and Water Focuses on the phenomena of Earth's atmosphere, weather, and water. The anchor phenomena is observable local weather conditions. Students will delve into phenomena that may seem unrelated to weather, including a dose of the disciplines of physics and chemistry.
- Human Systems Interactions Students explore how organ systems interact to support each and every cell in the body. What happens when the body is attacked by an invader or an organ system malfunctions? How do cells get the resources they need to live? How do cells gain access to the energy stored in energy-rich compounds? How do systems support the human organism as it senses and interacts with the environment?
- Heredity and Adaptation Students explore the varied lines of evidence, including the fossil record, the similarities between past and present organisms, the genetic principles of inheritance, and how natural selection produces adaptations that lead to changes in species and eventually the creation of new species.

