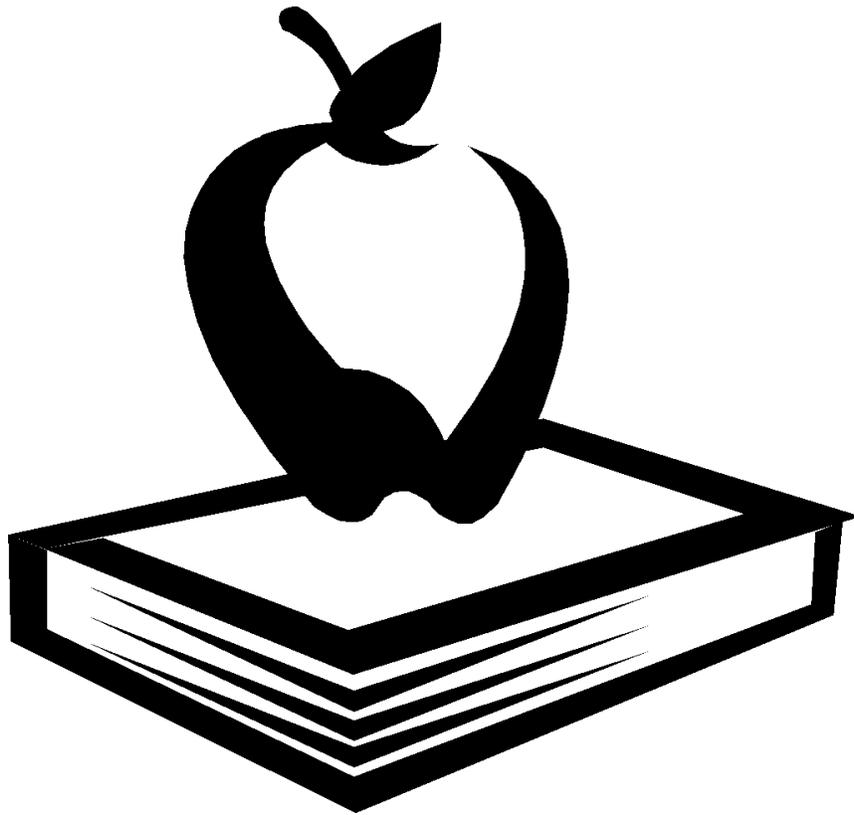


FARMINGTON PUBLIC SCHOOLS

**PARENT GUIDE TO THE
ELEMENTARY CURRICULUM**

September 2019



September 2019

Dear Parent or Guardian,

This Parent Guide to the Elementary Curriculum is intended to provide a broad overview of the expectations, core subjects, and experiences that your child will have as he or she progresses through elementary school. The guide provides a description of the academic standards and subject matter taught in kindergarten through grade four in Farmington. The Farmington Public Schools has a strong, comprehensive, standards-based curriculum, which follows the guidelines of the Common Core for State Standards for both literacy and mathematics and includes sequential instruction in social studies, science, the arts and physical education.

We hope that this guide serves as an invitation for you to become a partner in your child's education. By becoming aware of the curriculum that your child will experience, you have the unique opportunity to extend your child's learning through a trip to the library, a visit to a museum, a walk in the outdoors, or by sharing a bedtime story. When children see that their parents are interested in what they are learning in school, they in turn place greater value on their schoolwork.

No single document can fully explain the rich and complex nature of the elementary school curriculum and instructional goals. We hope that you add to your understanding of the elementary curriculum by attending open house and curriculum night programs at your child's school and by talking with teachers and administrators.

Sincerely,

Kimberly Wynne
Assistant Superintendent

OVERVIEW OF THE K-4 CURRICULUM

Elementary curriculum in Farmington is designed to promote literacy, develop math skills, enhance students' understanding of the world around them, cultivate collaborative and independent behaviors and work habits, and teach citizenship.

All of Farmington's curriculum, kindergarten through grade twelve, is developed through content standards and essential understandings which have been written for each discipline. These standards define the important knowledge, skills, and understandings we believe all students must acquire in order to become fully functioning, well-educated citizens. Our skilled and dedicated teachers are committed to helping all children reach these high standards.

The Farmington **reading** program is designed to develop skills, strategies, and habits to foster life-long reading. Students read and discuss high quality texts with teacher guidance and independently read self-selected "just right books". Students also read a variety of content texts in other curriculum areas, such as science, social studies and mathematics.

Writing is integrated into all aspects of the curriculum. Students write in a variety of forms to communicate information, express opinions, and explore personal understanding of the world. Students also engage in the process of writing by developing prewriting strategies, composing drafts, revising, editing and reflecting upon finished work. Students are also provided with opportunities to develop **library, technology, and research skills**.

All literacy instruction is based on the following essential understandings:

- Reading and writing require a fundamental knowledge of sounds, letters, words and the conventions of language to read, write and speak effectively;
- Reading is a thinking process used to construct meaning; and
- Writing is a thinking process used to generate, clarify and communicate ideas.

The Farmington **mathematics** program focuses on developing students' skills in many areas of mathematics. By studying the underlying structure and relationship of numbers and operations students learn to compute, estimate and solve mathematical problems in meaningful ways. Instruction emphasizes problem solving strategies and reasoning as students arrive at and justify mathematical solutions. Students are also helped to make connections among mathematical concepts to strengthen and further their understanding.

The Farmington **science** program is designed to help students develop a sense of appreciation and wonder about our world. Students engage in the practices of science and engineering as they explore phenomenon and solve problems. As students progress through the years, they will develop enough knowledge to engage in discussions on

important issues and become critical consumers of scientific information related to their lives.

Throughout the elementary curriculum Farmington students are provided opportunities to acquire the basic knowledge, skills and **health** literacy related to living a healthy and balanced life. Across the curriculum students gain the knowledge and confidence to make healthy decisions and to respect their bodies and minds as well as those of others.

The goal of the Farmington **social studies** program is to help students become knowledgeable, thinking, and active citizens. They develop understanding by engaging in inquiry and investigation about topics related to history, civics, geography and economics. Students focus on developing their skills to analyze issues from multiple perspectives, develop claims and support them with evidence, and take informed action.

Students in grades K, 1, and 2 will continue their study of **Spanish**. They will begin to understand and speak basic conversational Spanish, make connections between what they are learning in Spanish and the content and skills they are learning in their other academic work, and develop an awareness and an appreciation for other peoples and cultures. In addition to the long-term practical benefits of learning an additional language, studies have shown that this early introduction of a world language contributes to the development of the brain's executive functioning such as cognitive control, focus, and problem solving.

Farmington elementary students have daily 40-minute classes rotating **music, visual arts, and physical education**. The mission of Farmington's vocal music program encourages students to perform, create and understand divergent forms of music so that they will enjoy music throughout their lifetimes. Students develop independent musicianship required to perform collaboratively, create original compositions, and appreciate music of various cultures. The visual arts program promotes the development of artistic thinking skills in each individual. Through practice in production (the making of art), perception (the viewing of art) and reflection (the evaluation of art and ideas), students develop an understanding of themselves and the world around them. The elementary physical education program places an emphasis on students developing the competence, confidence and persistence to find success in increasingly complex game, dance, gymnastic, exercise and adventure movement environments. Students develop these movement skills and literacy in order to understand the importance of daily movement in their lives.

Administrators, teachers, parents, and students work together to make sure each of our elementary schools has an atmosphere that promotes active learning, student effort, confidence, cooperation and respect. Each child is given the help needed to learn important content, demonstrate high levels of achievement, and develop as individuals.



KINDERGARTEN

LANGUAGE ARTS

Reading

The development of literacy is the central focus of the kindergarten program. Throughout the year, students are immersed in a literature-rich environment. They are introduced to early concepts of print and provided with direct instruction in learning how to read and comprehend texts.

The kindergarten reading program includes *shared reading*, when teachers demonstrate reading skills and strategies in a relaxed enjoyable group setting; daily story time, when teachers *read aloud* quality literature; and *independent reading*, when students select books for personal reading. Students participate in *guided reading*, when small groups of students work with the teacher to use early reading strategies to read.

Kindergarten students meet the grade level reading standard by demonstrating ability to read and comprehend text. They have a large core of known words that they recognize automatically while reading continuous text. They use multiple sources of information; what makes sense, what sounds right, and what looks right when reading. Students apply letter-sound relationships and knowledge of how words work in both reading and writing. They use pictures as an important source of information, and they are beginning to process print with less picture support. Students are able to talk about the story when reading fiction and about what they learned when reading nonfiction.

Writing

Kindergarten students recognize the relationship between oral and written language. In other words, they learn that what they say can be put into print. They begin to understand that letters represent sounds, words are made by putting letters in purposeful sequences, and sentences are made of several words. Through exploration and direct instruction in the writing process, students generate story ideas. A Kindergarten writer expresses ideas in many ways. Students learn that they can tell a story through the use of drawings, labels, and written words. Direct instruction in letter formation supports students' ability to write legibly and fluently. Students write in three different text types: narrative, informational, and opinion.

MATHEMATICS

Another key focus of the kindergarten program is the development of numerical understanding by means of manipulating, counting, and comparing sets. Concepts and skills are presented and explored using concrete materials, hands-on activities, language

arts strategies, and visual representations. By the end of the year, students are solving addition and subtraction stories and representing them with numbers and symbols.

SCIENCE, SOCIAL STUDIES, AND HEALTH

Explorations: Kindergarteners will explore concepts in science, social studies, and health throughout the year. Students will learn through multisensory, open-ended explorations related to our themes: I am a Citizen in my Community; Thinking like Scientists and Engineers; Making Safe & Healthy Choices; and Our Beautiful Earth. As students engage in imaginative and constructive play together, they will make sense of their world and learn to collaborate, think critically, problem-solve, and innovate.

WORLD LANGUAGE

Students in Kindergarten will begin to understand and speak basic conversational Spanish. Students will learn vocabulary and phrases that will allow them to be able to express basic information about themselves, their daily routines, numbers, animals, and their environment.

LIBRARY/RESEARCH SKILLS

Kindergarten students are taught how to select appropriate books, replace books on the shelf, recognize basic library terms and demonstrate responsible book care. Kindergartners are introduced to a variety of books and authors, and learn to differentiate between fiction and nonfiction.

MUSIC

The K-4 elementary vocal music curriculum focuses upon the development of independent musicianship. Singing is the foundation of all music skills as the voice is the instrument. Music skills are sequentially taught through the musical processes of performing, responding, creating and connecting. Students develop independent musicianship by learning to read and write musical notation through grade appropriate songs. Exploring movement and creating new arrangements of music through song games and rounds allows students to make choices towards innovative solutions. Students listen and respond to music making cultural connections with language arts, social studies, art, and science through interdisciplinary learning. Communicating through the language of music enables students to independently explore the world around them through self-expression.

VISUAL ARTS

Students in grades K-4 explore and create art work using subject matter of architecture, design, landscape, portrait, still life, and symbol systems. They have many opportunities to explore a variety of materials while building and practicing skills and techniques that increase in complexity with each grade. Art units integrate classroom themes in language

arts, social studies, math, and science, and students develop an ability to transfer and apply knowledge from one situation to another, which results in deep authentic learning. Following the Arts Propel model of *perception*, *production* and *reflection*, students gain understanding and appreciation of the visual arts and their role in the world around them, across cultures and throughout history.

PHYSICAL EDUCATION

The kindergarten physical education program focuses on helping each student explore their potential for movement.

The kindergarten student begins to emerge from the movement of early childhood where movements tend to be more playful than purposeful. Movement for the kindergarten student is focused on exploring the bodies' capabilities for manipulating objects and moving and controlling their body in space. It is here that students begin to see the possibilities for throwing, kicking, running, rolling, twisting, turning, jumping and landing, etc. These fundamental movements form the foundation for future participation in games, dance, gymnastics and adventure based activities. Kindergarten students are provided opportunities to purposefully practice and explore these possibilities in individual and small group activities. The learning environment emphasizes effort and exploring as the foundation for success.



FIRST GRADE

LANGUAGE ARTS

Reading

Literacy is the focus of the first grade program. Throughout the year, students work to strengthen their reading strategies to read and comprehend text. This includes building sight vocabulary, developing fluency and monitoring and self-correcting reading errors.

Students begin first grade reading stories that are predictable and patterned. As the year progresses, they read less familiar, less predictable and longer stories. A wide variety of literature and information texts are used in first grade.

First grade students meet the grade level reading standard by demonstrating ability to read and comprehend text read orally as well as silently. They have a large core of known words that they recognize automatically while reading continuous text. They use multiple sources of information; what makes sense, what sounds right, and what looks right when reading. Students apply letter-sound relationships and knowledge of how words work in both reading and writing. On familiar texts they read fluently with phrasing, using the punctuation. They use pictures as an important source of information, and they are beginning to process print with less picture support. Students are able to talk about the story when reading fiction and about what they learned when reading non-fiction.

Writing

In first grade, the writing program focuses on writing as a means of personal expression and as a way to convey meaning. Using the writing process, students have the opportunity to think (brainstorm for ideas and topics), plan (using pictures and labels), draft a piece, re-read and check their own writing, master early language and writing conventions and share their writing with others.

Students have the opportunity to write for a specific purpose and should be able to answer the questions: What is your story about? What is the purpose of this piece? Students write in three different text types: narrative, informational, and opinion.

MATHEMATICS

Students continue to develop skills and concepts using manipulatives and clear visual models. A solid foundation of number sense is built during this important year. Students develop understanding by moving from the use of concrete materials to pictorial representations to abstract notation. Students are encouraged to practice and apply concepts, solve challenging problems, and explain their thinking both orally and in writing. They work with numbers within 100 by comparing, ordering, and adding/subtracting them. They use objects, pictures and symbols develop skills and concepts about number and to justify their thinking. Concepts about multiplication and division are introduced by the end of the year. Throughout the first grade experience, the emphasis is on deep understanding which is characterized by flexible thinking and problem solving.

SCIENCE

In first grade, children study two science units: Weather and Organisms. Students work on the practices of developing and using models, analyzing and interpreting data, and participating in the engineering process. They develop understanding of how we can observe and describe patterns in our world as well as how organisms have structures with related functions that help them survive.

Weather: During our weather unit, first graders learn to gather and organize data and then use it to make decisions. To begin the unit, students are presented with the task of developing a list of criteria for the principal to use when deciding if they should have indoor or outdoor recess. Students brainstorm a list of conditions they should study and use the inquiry process to gather information. They also engage in the engineering process to design a tool to measure the wind. They use these and other tools to collect data about the conditions of weather (and discuss/write whether or not those conditions would be safe/comfortable for outdoor recess). In addition, students learn to design and carry out a scientific investigation that helps them determine the best material to wear in the rain. Throughout the unit, students use data to make decisions about their lives and then support them with evidence.

Organisms: During the organisms unit, first graders study models of land and water habitats. Through reading and science-based discussions, they learn what it means to be alive and what plants and animals need to live. By observing, drawing, and writing in their science journals, students develop the understanding that each organism has structures and each structure has a function that helps it survive. First graders are introduced to the idea that scientists work with evidence; they learn to draw conclusions about organisms based on their observations and support their ideas with evidence.

HEALTH

In first grade, students learn about the food pyramid and how to select healthy snacks and the importance of daily physical activity, obeying safety rules at school, home and in the

neighborhood. Basic hygiene is also reinforced. Students learn the importance of treating others with respect, and how to express feelings in appropriate ways. They practice ways to refuse things that are not good for them. The Farmington Youth Officer teaches bicycle safety and stranger safety; the Farmington Fire Department teaches fire safety.

SOCIAL STUDIES

Geography: First graders study how geography affects the way people live around the world. They begin with an introduction to different types of maps (political, physical, climate) and then explore the features of maps and learn how to use them to get information. After examining various maps, they follow and create their own. As the unit progresses, first graders will study how people adapt to live in climates all over the world. They also engage in the engineering process to design, build, and test a model of a house for a rainy climate.

WORLD LANGUAGE

First graders will begin to understand and speak basic conversational Spanish. Students will learn vocabulary and phrases that will allow them to be able to express basic information about themselves, numbers, pets, celebrations with family, shopping. They will also be able to communicate in Spanish some of what they learn in science class. This course is designed as a continued introduction to Spanish.

LIBRARY/RESEARCH SKILLS

First graders learn about the various sections in the library and to locate both fiction and nonfiction collections. They learn to identify author, title and illustrator for any book, read and hear a variety of fiction and nonfiction, and learn to distinguish unique characteristics of selected authors' and illustrators' styles. First graders begin to recognize their personal preferences in book selection. They also perform simple inquiry tasks using a variety of print and electronic resources.

MUSIC

The K-4 elementary vocal music curriculum focuses upon the development of independent musicianship. Singing is the foundation of all music skills as the voice is the instrument. Music skills are sequentially taught through the musical processes of performing, responding, creating and connecting. Students develop independent musicianship by learning to read and write musical notation through grade appropriate songs. Exploring movement and creating new arrangements of music through song games and rounds allows students to make choices towards innovative solutions. Students listen and respond to music making cultural connections with language arts, social studies, art, and science through interdisciplinary learning. Communicating through the language of music enables students to independently explore the world around them through self-expression.

VISUAL ARTS

Students in grades K-4 explore and create art work using subject matter of architecture, design, landscape, portrait, still life, and symbol systems. They have many opportunities to explore a variety of materials while building and practicing skills and techniques that increase in complexity with each grade. Art units integrate classroom themes in language arts, social studies, math, and science, and students develop an ability to transfer and apply knowledge from one situation to another, which results in deep authentic learning. Following the Arts Propel model of *perception*, *production* and *reflection*, students gain understanding and appreciation of the visual arts and their role in the world around them, across cultures and throughout history.

PHYSICAL EDUCATION

In first grade physical education students continue to build a repertoire of movement responses related to manipulating objects (throwing, catching, kicking, etc.) ,loco-motor movements (skipping, galloping, sliding, rolling) and non-locomotor movements (bending, twisting, turning) and begin to refine these movements towards a mature form. Beyond beginning to understand *what* the body can do, students begin to understand the concepts related to movement such as; Effort (amount of muscular effort need for a particular movement as well as the speed and rhythm of the movement), Space (where the body can and should move in a given situation) and *Body Awareness* (the relationship between the mover and other movers, boundaries, and equipment.) In addition, the first grade students begin to understand the physiological concepts related to movement such as heart rate and strength as well as the importance of daily physical activity. The learning environment in grade 1 emphasizes continued effort and exploration with an emerging focus on having students tolerate initial failure and to keep trying.



SECOND GRADE

LANGUAGE ARTS

Reading

The second grade literacy program continues to strengthen and extend reading skills. Throughout the year, students work to increase fluency and to acquire significant vocabulary. There is continued emphasis on monitoring and self-correcting reading errors, improving accuracy, and reading with phrasing and expression. Students engage in rich discussions about books.

A wide variety of quality literature is used in second grade. Students read poetry, folk tales, fairy tales, biographies, stories and informational texts. Skills and strategy instruction is integrated into discussion about literature selections during guided reading lessons. Second grade students are also taught to make appropriate book choices as they independently read for enjoyment and information.

Writing

In second grade, the writing program continues to focus on writing as a means of personal expression and as a way to convey meaning. Students learn to think (brainstorm for ideas and topics), plan, draft, revise, edit, and share their writing with others. Although aspects of the writing process are highlighted during classroom instruction, students come to understand how they recur and interrelate during actual composing. Second grade writers continue to learn the craft of writing: structure, development and language conventions.

Students have the opportunity to write for different audiences, for a specific purpose and in a variety of forms including narrative, opinion, and informational writing.

MATHEMATICS

Second grade students continue to develop skills and concepts using manipulatives and clear visual models. Students expand their understanding of the base-ten system by building on previously taught concepts and moving from the use of concrete materials to pictorial representations to abstract notation. Students develop fluency with adding and subtracting within 100. They work with numbers within 1000 by comparing, ordering, and adding/subtracting them using objects, pictures and symbols. Multiplication and division concepts for 2, 5, and 10 are developed mid-year and expand to 3s and 4s by the end of the year. Second grade students learn about standard units of linear measure. They build, draw, analyze, and reason about composing and decomposing shapes in order to develop a foundation for understanding geometry concepts. Students are encouraged to practice

and apply concepts, solve challenging problems, and explain their thinking both orally and in writing across all topics. Throughout the second grade experience, the emphasis is on deep understanding which is characterized by flexible thinking and problem solving.

SCIENCE

Second graders begin their study of science with a few experiences that help them develop an understanding of what scientists do and how science plays a role in our everyday lives. During the year, they study two science unit: Forces and Pollinators.

Forces: Inquiry and Investigations: Students work as collaborative groups to study topics of choice related to forces such as magnets, static electricity, and motion. They read informational books, take notes in research journals, and write books to share with others. Students work as scientists as they learn to ask testable questions, design and carry out investigations, and draw conclusions from their data. In addition, students engage in two engineering projects to which they apply their knowledge about forces. First, they design, build, and test models of roller coasters. Next, they design and build toys that involve forces for the kindergarteners to use during explorations.

Pollinators: This unit kicks off with a video that explores a phenomenon in nature: pollination. What is this important and fascinating process that is happening with plants and animals? Second graders learn the parts of a butterfly while watching them hatch from caterpillars into painted lady butterflies. They also learn about the life cycle of a plant while observing it firsthand (mystery seeds). As they study life cycles of both butterflies and plants, students further explore their interdependence and the process of pollination. Next, students research various pollinators (bees/hummingbirds) and learn more about why these pollinators are important. Students take a field trip to Auer Farm to participate in experiences created for our district. To culminate the unit, classes will decide on how to take action in order to have an impact (ie - promote awareness, plant a pollinator garden, etc.).

HEALTH

In second grade, students learn about the types of foods in each category of the food pyramid and learn to plan a healthy breakfast. They begin to read food labels and learn to identify the salt, sugar, fat and caffeine content of foods. The positive effects of daily physical exercise are emphasized. Safety in school, at home and in the neighborhood is reinforced through classroom lessons and a visit from the Farmington Youth Officer. Fire safety is taught by the Farmington Fire Department. Students learn and practice how to express feelings in appropriate ways.

The negative effects of alcohol and tobacco are discussed and second grade students begin to develop ways to “say no” in dangerous situations.

SOCIAL STUDIES

Conflict and Resolution: The second grade year begins with a social studies/health unit about conflict and resolution. The first bend on friendships and feelings begins with a call to create resources to teach others about solving our own problems. Classes brainstorm ways that they would like to do this (videos, skits, etc). Using literature and discussion, students explore the qualities that make a good friend and set goals for themselves. They learn about feelings and discuss how to recognize the feelings of others. Next, students explore various causes of conflicts with others and learn strategies for resolving these conflicts. Finally, students explore internal conflicts and learn strategies for resolving conflicts within themselves.

People who Make a Difference: Second graders also engage in a civics unit called “People Who Make a Difference.” They begin by learning about people who have taken action to make a difference in our society. They discuss their beliefs and the meaning of democratic values such as equality, justice, individual rights, and the common good. After learning about how we honor and remember those who have made a difference, students select one person of interest to study. In the final part of the unit, second graders focus on how children can make a difference locally by offering comfort or being a friend, providing a need, and/or educating people about important issues. They work collaboratively to decide on an action that they could take and then design and carry out their plan in order to make a difference in the community.

WORLD LANGUAGE

Second graders continue to understand and speak basic conversational Spanish. Students will continue to learn vocabulary and phrases that will allow them to be able to express and elicit basic information related to age, family, feelings, sports and hobbies, travel, and restaurants. They will also be able to communicate in Spanish some of what they learn in science class. The course will begin to assess students’ interpersonal speaking proficiency level in the language based on American Council on the Teaching of Foreign Languages Proficiency Levels.

LIBRARY/RESEARCH SKILLS

Second graders are introduced to a variety of new books, series, and authors, and can identify their personal reading preferences. Second graders perform at least one inquiry project using both print and electronic resources. They are taught note taking techniques and how to organize information accessed from multiple sources. They learn how to access information from several online databases.

MUSIC

The K-4 elementary vocal music curriculum focuses upon the development of independent musicianship. Singing is the foundation of all music skills as the voice is the instrument. Music skills are sequentially taught through the musical processes of

performing, responding, creating and connecting. Students develop independent musicianship by learning to read and write musical notation through grade appropriate songs. Exploring movement and creating new arrangements of music through song games and rounds allows students to make choices towards innovative solutions. Students listen and respond to music making cultural connections with language arts, social studies, art, and science through interdisciplinary learning. Communicating through the language of music enables students to independently explore the world around them through self-expression.

String instrument lessons begin in second grade. Participating students have a thirty-minute lesson and a forty-minute group instruction class each week.

VISUAL ARTS

Students in grades K-4 explore and create art work using subject matter of architecture, design, landscape, portrait, still life, and symbol systems. They have many opportunities to explore a variety of materials while building and practicing skills and techniques that increase in complexity with each grade. Art units integrate classroom themes in language arts, social studies, math, and science, and students develop an ability to transfer and apply knowledge from one situation to another, which results in deep authentic learning. Following the Arts Propel model of *perception*, *production* and *reflection*, students gain understanding and appreciation of the visual arts and their role in the world around them, across cultures and throughout history.

PHYSICAL EDUCATION

In second grade students continue to refine fundamental manipulative, loco-motor and non-locomotor skills with a strong focus on demonstrating mature form for selected skills. Students also begin to become more sophisticated in using the vocabulary of movement related to Body, Effort and Space concepts. Second grade students are engaged in a variety of individual, partner and small group activities with a focus on using their emerging skills in developmentally appropriate activities in games, exercise, gymnastics and adventure activities. In second grade students begin to understand the components of fitness and start to become familiar with assessments for each. The learning environment is focused on students developing their competence, confidence and persistence in movement.



THIRD GRADE

LANGUAGE ARTS

Reading

The third grade literacy program further develops the skills and strategies necessary for reading and understanding texts independently while also nurturing interest in a variety of genres. Through a program rich in fiction and non-fiction, students continue to acquire vocabulary, and to apply multiple reading strategies while fluently reading increasingly more complex texts. During the year, students participate in units of study when they learn specific strategies to enhance understanding of fiction, non-fiction, and poetry selections.

Third grade students continue to develop the ability to comprehend a variety of texts. They read silently most of the time and begin to focus on the deeper meaning of the text. Readers are able to sustain silent reading and understanding over longer periods of time as well as through longer texts. Readers begin to show interest in a wide variety of genre including realistic fiction, biography, historical fiction, science fiction and informational text. Third graders are able to integrate a variety of reading skills and strategies to enhance understanding of text. They write about text-related ideas and participate in discussions to share interpretations with others.

Writing

Third grade writers continue to learn the craft of writing: structure, development and language conventions. Students become increasingly familiar with the recursive nature of the writing process as they think (brainstorm for ideas and topics), plan, draft, revise, edit and share their writing with others. Students have the opportunity to write for different audiences, for a specific purpose and in a variety of forms including narrative, opinion, and informational writing.

MATHEMATICS

Third grade students continue to develop skills and concepts using manipulatives and clear visual models. Students expand their understanding of the base-ten system by building on previously taught concepts and moving from the use of concrete materials to pictorial representations to abstract notation. Students develop fluency with multiplication and division within 100 using equal size groups, arrays, and area models.

They develop an understanding of fractions. They compare and classify 2 dimensional shapes and apply fraction and multiplication concepts to determine area. Students are encouraged to practice and apply concepts, solve challenging problems, and explain their thinking both orally and in writing across all topics. Throughout the third grade experience, the emphasis is on deep understanding which is characterized by flexible thinking and problem solving.

SCIENCE

Earth's Resources: This unit begins by prompting students to think about a scientific phenomena: Where does our drinking water come from? Third graders construct models of their current beliefs and revisit them during the unit. Students learn more about what natural resources are, how we use them in our own lives, and how Farmington has many natural resources that we use in different ways. Next, students focus on the health of the Farmington River. In this phase, students will learn about the origin of the Farmington River, discuss changes that have happened in the river, and conduct tests to evaluate the health of the Farmington River. This includes an engineering project related to water filtration and an investigation to learn more about pH and its impact on the health of organisms in the river. To culminate the unit, students decide how to take action to protect our natural resources.

Organisms and Habitats: In this integrated unit, students access and synthesize information from multiple sources in order to learn how changes in an environment affect organisms. They study the variety of ecosystems around the world and how organisms survive in their habitats. After participating in a collaborative inquiry study about a related topic of interest, students compose informational picture books in order to document and expand their understanding of the world.

HEALTH

In grade three, students continue to study nutrition by learning to plan a healthy menu for a day using the food pyramid as a guide. They chart their daily physical activity and set personal fitness goals. "Home Alone" and "Bike, Skateboard, In-Line Skating Safety and Fire Safety" presentations are made to each third grade classroom by the Farmington Youth Officer and the Farmington Fire Department. Students learn to express feelings in healthy, appropriate ways.

SOCIAL STUDIES

When Cultures Collide: Third graders develop an understanding about the big ideas of geography, culture, and history by engaging in inquiry studies about Native Americans and Colonial Americans. Students explore how geography (natural resources, landforms) affects how people live, and how culture is composed of perspectives (beliefs), products (what they have), and practices (what they do). After studying both cultures, students will learn about key historical events during which the cultures came together and discuss how people use cooperation, compromise, and/or aggression to resolve conflicts. Focus

will be on the critical thinking skills of understanding different points of view and supporting thinking with evidence.

WORLD LANGUAGE

Third graders continue to understand and speak basic conversational Spanish. Students will continue to learn vocabulary and phrases that will allow them to be able to express and elicit basic information related to their personality traits, school life, hobbies and interests, getting around town, shopping, and animal habitats in Connecticut. This course will assess students' interpersonal speaking proficiency level in the language based on American Council on the Teaching of Foreign Languages Proficiency Levels.

LIBRARY/RESEARCH SKILLS

Third grade students learn to access books in the library collection via the online catalog, in order to retrieve sources to meet personal and assigned needs. Third grade students are introduced to a variety of series, authors, and genres through book talks and read-alouds. They perform at least one research/inquiry project using a variety of print and electronic resources. They are introduced to several digital methods of communicating their results, and learn the importance of giving credit to sources.

MUSIC

The K-4 elementary vocal music curriculum focuses upon the development of independent musicianship. Singing is the foundation of all music skills as the voice is the instrument. Music skills are sequentially taught through the musical processes of performing, responding, creating and connecting. Students develop independent musicianship by learning to read and write musical notation through grade appropriate songs. Exploring movement and creating new arrangements of music through song games and rounds allows students to make choices towards innovative solutions. Students listen and respond to music making cultural connections with language arts, social studies, art, and science through interdisciplinary learning. Communicating through the language of music enables students to independently explore the world around them through self-expression.

String instrument lessons continue in third grade. Students have a thirty-minute lesson and a forty-minute group instruction class each week.

VISUAL ARTS

Students in grades K-4 explore and create art work using subject matter of architecture, design, landscape, portrait, still life, and symbol systems. They have many opportunities to explore a variety of materials while building and practicing skills and techniques that increase in complexity with each grade. Art units integrate classroom themes in language arts, social studies, math, and science, and students develop an ability to transfer and apply knowledge from one situation to another, which results in deep authentic learning.

Following the Arts Propel model of *perception*, *production* and *reflection*, students gain understanding and appreciation of the visual arts and their role in the world around them, across cultures and throughout history.

PHYSICAL EDUCATION

Third grade students begin to purposefully apply their increasingly mature fundamental skills in increasingly more complex and specialized environments. For instance, in a modified game, students are challenged to throw both close and far from the body, while standing still or running, and to targets that can be stationary or moving. Students are challenged to take discrete gymnastic-like skills they have developed, such as rolling or jumping and landing, and to start combining these skills with smooth transitions and connecting movement between them. Third grade students utilize their growing movement vocabulary as they work in small groups and begin to assess their own performance as well as the performance of others. Students also experience practicing the Connecticut Physical Fitness Assessment (CPFA) and understanding their own results.



FOURTH GRADE

LANGUAGE ARTS

Reading

The fourth grade literacy program continues the development of skills and strategies necessary for reading and understanding more complex texts independently while also broadening a wide interest in reading. Through a program rich in both fiction and non-fiction, students continue to build extensive vocabulary, and to apply multiple reading strategies while fluently reading more complex texts. During the year, students participate in units of study where they learn specific strategies to enhance understanding of fiction, nonfiction, and poetry selections. Fourth grade readers continue to practice choosing books that best match their personal interests and skill levels, and they are expected to read self-selected books independently throughout the year.

Fourth grade students continue to develop the ability to comprehend a variety of texts. They read silently most of the time. They can sustain reading, interest and understanding over long texts. They analyze words in flexible ways and attempt to figure out unfamiliar, multi-syllable words in flexible ways. When reading, students are involved in a continuous process of building background knowledge, which they use to understand increasingly complex ideas. They continue to acquire new vocabulary through reading and to use reading as a tool for learning in the content areas. As they read a wide variety of texts, fourth grade readers apply higher level thinking skills and form interpretations. They integrate a variety of reading skills and strategies to enhance understanding of a text, and they become increasingly adept at sharing text-related ideas in written responses and in discussions with others.

Writing

In fourth grade, the writing program continues to emphasize the writing process, the writing traits and reflective thinking. Students use the recursive nature of the writing process as they generate topics, plan, draft, revise, edit and share their writing with a variety of audiences. Students continue to have opportunities to write for different audiences, for specific purposes and in a variety of forms including narrative, opinion, and informational writing.

MATHEMATICS

Fourth grade students continue to develop skills and concepts using manipulatives and clear visual models. Students expand their understanding of the base-ten system by building on previously taught concepts and moving from the use of concrete materials to pictorial representations to abstract notation. Students develop fluency using the four operations with multi-digit whole numbers. They extend understanding of fractions, including decimal notation for fractions. Students solve problems involving measurement and conversion of measurement. They draw and identify lines and angles, and classify shapes by their properties. Students are encouraged to practice and apply concepts, solve challenging problems, and explain their thinking both orally and in writing across all topics. Throughout the fourth grade experience, the emphasis is on deep understanding which is characterized by flexible thinking and problem solving.

SCIENCE

Properties of Matter: Students will engage in tasks such as explorations and investigations in order to determine the best recipe for putty/slime (and support their opinion with evidence). During the study, fourth graders will learn about states of matter, properties of matter, and physical and chemical changes.

Earth's Changing Surface: Students begin with a scientific phenomena: How is it that scientists could find marine fossils on the top of a mountain? Students work collaboratively to create models (labeled diagrams and explanations) of how this might have happened over time. They have the opportunity to continuously revise their models as they learn about fossil formation, mountain formation, and erosion. Students also engage in the engineering design process as they develop and test models of earthquake-resistant structures.

Energy/Electricity: During this unit, fourth graders engage in the inquiry process in order to develop understanding of energy forms and energy transformations with a focus on electricity. Students work as scientists as they design and carry out investigations. They will also work as engineers as they design and build a device that uses light to solve a problem.

HEALTH

Fourth grade students learn how to be safe at school and in the community. They begin to discuss the differences between appropriate and inappropriate behavior at school and in the community. A presentation on vandalism, shoplifting and dangerous weapons is made by the Farmington Youth Officer. Fire safety is taught by the Farmington Fire Department. Students learn the importance of talking to a trusted adult about health and safety concerns and they practice listening and communication skills. They learn how to take care of personal hygiene and to recognize the beginning signs of puberty. Fourth

grade students learn about the effects of tobacco, alcohol, and other drugs, and they practice refusal skills that include how to handle peer pressure.

SOCIAL STUDIES

American Revolution: Fourth graders engage in an integrated study called Journey to Independence. It introduces students to the major causes of the American Revolution and important historical figures and their contributions. Students explore roles of cooperation and conflict in gaining freedom from Britain and in forming a new nation. They focus on what caused the colonists to seek their freedom, the impact of this quest, and the reasons why colonists were able to win their independence.

WORLD LANGUAGE

Fourth graders continue to understand and speak basic conversational Spanish. Students will build on previously learned vocabulary and phrases in order to express basic information about themselves, including personal interests, school interests, daily routines, travel to Spanish speaking countries, and making plans with friends and family. This course assesses students' interpersonal speaking proficiency level in the language based on American Council on the Teaching of Foreign Languages Proficiency Levels.

LIBRARY/RESEARCH SKILLS

Fourth grade students continue their use of the online catalog, learning to modify keywords and to use visual searches to improve search results. They are introduced to new books, series, and authors through read-alouds, book talks, digital book reviews, and peer recommendations. They learn techniques for accessing information in online resources. They communicate research results using a variety of online tools. They also learn to evaluate websites for usefulness and truthfulness.

MUSIC

The K-4 elementary vocal music curriculum focuses upon the development of independent musicianship. Singing is the foundation of all music skills as the voice is the instrument. Music skills are sequentially taught through the musical processes of performing, responding, creating and connecting. Students develop independent musicianship by learning to read and write musical notation through grade appropriate songs. Exploring movement and creating new arrangements of music through song games and rounds allows students to make choices towards innovative solutions. Students listen and respond to music making cultural connections with language arts, social studies, art, and science through interdisciplinary learning. Communicating through the language of music enables students to independently explore the world around them through self-expression.

String instrument lessons continue in fourth grade. Students have a thirty-minute lesson and a forty-minute group instruction class each week. Fourth grade students also

participate in the school orchestra and may join the school chorus. Students are able to sight read musical phrases and perform a solo on their instrument.

VISUAL ARTS

Students in grades K-4 explore and create art work using subject matter of architecture, design, landscape, portrait, still life, and symbol systems. They have many opportunities to explore a variety of materials while building and practicing skills and techniques that increase in complexity with each grade. Art units integrate classroom themes in language arts, social studies, math, and science, and students develop an ability to transfer and apply knowledge from one situation to another, which results in deep authentic learning. Following the Arts Propel model of *perception*, *production* and *reflection*, students gain understanding and appreciation of the visual arts and their role in the world around them, across cultures and throughout history.

PHYSICAL EDUCATION

Fourth grade students continue to refine their skills but now do so in increasingly specialized game, gymnastic, exercise, and adventure environments. Students work on using a particular skill for a particular purpose and to demonstrate effective and efficient movement. Students are engaged in more complex games (numbers of players, boundaries, rules), gymnastic routines, as well as exercise and adventure activities that challenge them physically, socially and intellectually. They are heavily invested in assessing their own performance and understanding what a quality performance looks like. The learning environment is focused on producing students who are competent, confident and persistent movers and are inclined to make regular physical activity a part of their day.

TECHNOLOGY

In grade 4, the technology program emphasizes beginning keyboarding and word processing skills. Students receive instruction in basic typing skills with opportunities to practice through an electronic tutorial. Students use a word processing program to edit and revise their work. In the library, students learn the basics of searching databases, the electronic catalog, and the Internet to assist in their research on a wide variety of topics.