Britton Deerfield Schools
K-5 Curriculum & Course Descriptions

Social Studies Curriculum

The purpose of social studies is to promote the knowledge, skills, intellectual processes, and dispositions required of people to be actively engaged in fulfilling their responsibility of civic participation. As members of a culturally diverse, democratic society in an interdependent world, young people need to learn how to make informed and reasoned decisions for the public good. Social studies fosters a renewed and reinvigorated commitment to the ideal, "government of the people, by the people, and for the people," as expressed by President Lincoln in his Gettysburg Address. The expectations outlined below are designed to fulfill that purpose

Kindergarten—*Myself and Others*

Using a familiar context for five and six year olds, kindergartners learn about the social studies disciplines (history, geography, civics and government, and economics) through the lens of "Myself and Others." Accordingly, each discipline focuses on developing rudimentary understandings through an integrated approach to the field.

First Grade—*Families and Schools*

In first grade, students continue to explore the social studies disciplines of history, geography, civics and government, and economics through an integrated approach using the context of school and families. This is the students' first introduction to social institutions as they draw upon knowledge learned in kindergarten to develop more sophisticated understandings of each discipline.

Second Grade—*The Local Community*

In second grade, students continue the integrative approach to social studies through the context of the local community. This the first time students are introduced to a social environment larger than their immediate surroundings and they draw upon knowledge learned in previous grades to develop more sophisticated understandings to explore the social studies disciplines of history, geography, civics and government, and economics.

Third Grade—*Michigan Studies*

Third grade students explore the social studies disciplines of history, geography, civics and government, and economics through the context of Michigan studies. Building on prior social studies knowledge and applying new concepts of each social studies discipline to the increasingly complex social environment of their state, the third grade content expectations help prepare students for more sophisticated studies of their country and world in later grades.

Fourth Grade—*United States Studies*

Using the context of the United States, fourth grade students learn significant social studies concepts within an increasingly complex social environment. They examine fundamental concepts in geography, civics and government, and economics through the lens of Michigan history and the United States.

Fifth Grade—*Integrated American History*

The fifth grade social studies content expectations mark a departure from the social studies approach taken in previous grades. Building upon the geography, civics and government, and economics concepts of the United States mastered in fourth grade and historical inquiry from earlier grades, the fifth grade expectations begin a more disciplinary-centered approach concentrating on the early history of the United States. Students begin their study of American history with American Indian peoples before the arrival of European explorers and conclude with the adoption of the Bill of Rights in 1791. Although the content expectations are organized by historical era, they build upon students' understandings of the other social studies disciplines from earlier grades and require students to apply these concepts within the context of American history.

Math Curriculum

All elementary courses focus on the CCSS strands including Numbers and Operations; Measurement; Geometry; Patterns, Algebra, and Probability; Problem Solving; Communication; Mathematical Reasoning, and connections to science, social studies, and daily situations.

Kindergarten

In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

(1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as 5 + 2 = 7 and 7 – 2 = 5. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

(2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes

First Grade

In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

(1) Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., “making tens”) to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

(2) Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

(3) Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.1

(4) Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

Second Grade

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

(1) Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).

(2) Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

(3) Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

(4) Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Third Grade

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

(1) Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.

(2) Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, 1/2 of the paint in a small bucket could be less paint than 1/3 of the paint in a larger bucket, but 1/3 of a ribbon is longer than 1/5 of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

(3) Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.
(4) Students describe, analyze, and compare properties of two dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Fourth Grade

In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

(1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

(2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., 15/9 = 5/3), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

(3) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Fifth Grade

In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

(1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to

understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.

(3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.

Science Curriculum

Science themes are covered through project based learning including topics in scientific thinking processes which include observation, communication, comparing, organizing, relating, inferences, and application. Common Core strands may include: Life Science; Earth and Space Science; Physical Science and Technology; Scientific Reasoning and Technology.

Kindergarten

Forces and Interactions: Pushes and Pulls

K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment

K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Weather and Climate

K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.

K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.

K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.

K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Engineering Design

K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

First Grade

Waves: Light and Sound

1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.

1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.
1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. *

Structure, Function, and Information Processing
1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Space Systems: Patterns and Cycles
1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.

1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.

Engineering Design
K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

Second Grade

Structure and Properties of Matter
2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.

2-PS1-4 Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

Interdependent Relationships in Ecosystems
2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow.

2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.

Earth's Systems: Processes that Shape the Earth
2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.

2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.

2-ESS2-2MI Develop a model to represent the state of Michigan and the Great Lakes, or a more local land area and water body.

2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.

2-ESS2-3MI Obtain information to identify where fresh water is found on Earth, including the Great Lakes and Great Lakes Basin.

Engineering Design

K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

Third Grade

Forces and Interactions

3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.

3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.

3-PS2-3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.

3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.

Interdependent Relationships in Ecosystems

3-LS2-1 Construct an argument that some animals form groups that help members survive.

3-LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Inheritance and Variation of Traits: Life Cycles and Traits

3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.

3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

Weather and Climate

3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.

3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

Engineering Design

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

Fourth Grade

Energy

4-PS3-1 Use evidence to construct an explanation relating the speed of an object to the energy of that object.

4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

4-PS3-3 Ask questions and predict outcomes about the changes in energy that occur when objects collide.

4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Waves: Waves and Information

4-PS4-1 Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

4-PS4-3 Generate and compare multiple solutions that use patterns to transfer information.

Structure, Function, and Information Processing

4-PS4-2 Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.

4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

4-LS1-2 Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

Earth's Systems: Processes that Shape the Earth

4-ESS1-1 Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

4-ESS1-1MI Identify evidence from patterns in rock formations and fossils in rock layers to support possible explanations of Michigan's geological changes over time.

4-ESS2-1 Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation

4-ESS2-2 Analyze and interpret data from maps to describe patterns of Earth's features.

4-ESS3-2 Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

4-ESS3-2MI Generate and compare multiple solutions to reduce the impacts of natural Earth processes on Michigan's people and places.

Engineering Design

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

Fifth Grade

Structure and Properties of Matter

5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.

5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.

5-PS1-3 Make observations and measurements to identify materials based on their properties.

5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

Matter and Energy in Organisms and Ecosystems

5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.

5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Earth's Systems

5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

5-ESS2-1MI Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact in Michigan and the Great Lakes basin.

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

5-ESS2-2MI Describe and graph the amounts and percentages of water and fresh water in the Great Lakes to provide evidence about the distribution of water on Earth.

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Space Systems: Stars and the Solar System

5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.

5-ESS1-1 Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.

5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Engineering Design

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

English Language Arts (ELA)

All elementary courses include comprehensive core reading and language arts curriculum which focuses on reading, language arts, and writing standards. The curriculum addresses the five areas of reading instruction: reading comprehension, phonics, phonemic awareness, fluency, and vocabulary while focusing on 21st Century skills including critical thinking and problem solving; communication and collaboration; creativity and innovation; and technology.

For all grade level information, including State standards and benchmarks, please visit the following link:
https://www.michigan.gov/documents/mde/MDE_ELA_Standards_599599_7.pdf

Physical Education & Health

Physical education is defined as an academic subject that provides students with a planned, sequential, K-12 standards based program of curricula and instruction designed to develop motor skills, knowledge, and behaviors for healthy active living, physical fitness, sportsmanship, self-efficacy, and emotional intelligence. The essential components of a physical education program include policies and environment, curriculum, appropriate instruction, and student assessment. Physical education provides unique learning opportunities that also contributes to and assures that students become physically literate and engage in a physically active lifestyle. Physical literacy is defined as the ability to move with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person.

The Michigan Model for Health (MMH) facilitates learning through a variety of interactive teaching and learning techniques. Skill development through demonstration and guided practice is emphasized resulting in the development of positive lifestyle behaviors for students and families. This curriculum is designed for teachers and educators to implement as a component of the core school curriculum, with each of the lessons lasting 15-45 minutes in length. Furthermore, some lessons include activities to facilitate parental and family involvement beyond the classroom. The Michigan Model for Health Elementary Curriculum (Grades K-6) addresses the major youth health risk behaviors identified by the Center for Disease Control and Prevention (CDC). The elementary curriculum is organized as seven modules by grade level and covers the following six main health topics with age-appropriate content per grade.

Art

Elementary art provides students with experiences to learn how to communicate through art, develop skills and a sense of craftsmanship through technique, to appreciate historical and cultural aspects, to make connection with real-life and other subjects, and to develop critical and creative thinking skills. Using the Elements of Art and Principles of Design as the framework, students will feel confident in creating their own style of art. Students will explore and use a variety of materials safely during the creative process. The courses explicitly teach art techniques through modeling and connecting them to master artists. During the creative process, students will apply art vocabulary, procedures, as well as time-management and collaborative skills. They will develop their observational skills, prior knowledge, and art critique skills to reflect on and interpret works of art. Throughout each multifaceted lesson the students will make connections to art and various cultures around the world. The course offers rich text to support art history instruction, including information on artists and art movements over time.

Music

Britton Deerfield School's elementary music education program is based on a sequence of experiences that provide students with continuous growth in musical skills, understanding, enjoyment and meaningful perceptions drawn from music itself and enhanced by their own life experiences.

Technology

This course is an introduction to technology for students in grades K-5 who are developing self-concepts, motor skills, and social relationships. They need opportunities for first-hand experiences in solving problems and manipulating devices to mature their understanding with the human and technology interaction. The elementary technology courses will enable students to develop basic skills in computer usage through engaging and age-appropriate content. The courses will expose students, within developmentally appropriate stages, to concepts such as problem solving and algorithms, security/privacy/copyright, computer programming basics and keyboarding skills.

Foreign Language

Elementary Chinese is an exploratory introduction to the Chinese culture and language. Students learn the target language in a story-based framework, providing a fun and positive experience with the learning. Each lesson is taught through an engaging, authentic story that gives students an opportunity to see and hear the language in context. Students will learn foundational skills in listening and speaking in the early levels, and then will add Chinese literacy skills beginning in Course 2. Elementary Chinese courses provide audio and visual stimuli for all learning types and ample opportunity to hear, speak, read, write, and record the language. Courses also provide strategically based reviews of past learning. Each course is built on connections to an authentic culture of a specific Chinese-speaking region through the arts, celebrations, and traditions of the culture, leading students on the path to becoming global citizens.