

# 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. The district currently uses the Social Studies Alive with students in grades K-5.

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 foster 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***

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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***

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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***

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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***

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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***

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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***

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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 Common Core Standards, including Numbers and Operations; Measurement; Geometry; Patterns, Algebra, and Probability; Problem Solving; Communication; Mathematical Reasoning, and connections to science, social studies, and daily situations. The district currently uses McGraw Hill, *My MATH* curriculum for students in grades K-5.

### Kindergarten

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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

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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.<sup>1</sup>
- (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**

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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**

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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,  $\frac{1}{2}$  of the paint in a small bucket could be less paint than  $\frac{1}{3}$  of the paint in a larger bucket, but  $\frac{1}{3}$  of a ribbon is longer than  $\frac{1}{5}$  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**

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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**

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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. The district currently uses the McGraw Hill *Inspire Science* curriculum in Grades K-5.

### **Kindergarten to Grade 5**

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Inspire Science is a science curriculum from McGraw Hill that is designed to meet the Next Generation Science Standards (NGSS) in the United States. The curriculum is available for grades K–12 and uses a three-dimensional learning framework that combines Science and Engineering Practices (SEP), Disciplinary Core Ideas (DCI), and Crosscutting Concepts (CCC). The program's goal is to help students develop a holistic understanding of science and scientific literacy, and to be able to apply their knowledge to solve real-world problems.

Inspire Science uses an application-based approach to learning and incorporates literacy and math to help students become scientists. The program is designed to engage students, spark their interest, and encourage them to ask questions, think critically, and come up with innovative ideas. It also uses formative assessment science probes to help students uncover preconceptions.

Some features of Inspire Science include:

- SmartBook  
An adaptive reading experience that helps students change the way they read and learn
- Friendly competition  
An engaging challenge format that uses adaptive technology to track student progress
- LearnSmart  
A feature that helps students retain knowledge by presenting content for review when it detects that they are likely to forget it
- Reporting tools  
Real-time tools that help teachers manage and track student progress more efficiently

## 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.

**Superkids** is a comprehensive English language arts curriculum crafted for grades K–2 using evidence-based literacy practices. This proven-effective reading program follows a unique systematic and explicit instructional path through engaging, increasingly complex text. The students are assessed through multiple measures including local assessment, beginning, middle and end of year content area assessment, NWEA, Fountas & Pinnell.

The **Read Side by Side** Reading Program is a curriculum for readers in grades 3–6 that is designed to help students develop reading skills and prepare them for lifelong reading. The program is based on chapter reading and uses award-winning trade books to motivate students and help them improve their reading skills. The program's curriculum includes scripted and ready-to-use lessons, and it also offers writing units that use read-aloud novels to teach narrative, expository, and persuasive writing. The students are assessed through multiple measures including local assessment, beginning, middle and end of year content area assessment, NWEA, Fountas & Pinnell and Reading Guide Unit Assessments.

The program's design incorporates strategies and text structure principles that are modeled and applied during the read-aloud portion of the curriculum. Students can then use these strategies when working with their book clubs, which helps support the principle of high road transfer. The program also uses graphic organizers and peer work to help students transfer what they've learned.

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](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.

## **Social Emotional Learning**

Lions Quest has been used by schools and other organizations for over 30 years. Through a series of SEL curriculum lessons, the program promotes positive student behaviors that lead to greater academic success, a greater connection to school and improved school climate. The curriculum is based on CASEL's Five Core Competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The lessons in each unit include grade appropriate content that develops sequentially by topic. The curriculum offers cross-curricular activities, family and community connection activities, as well as reinforcement and enrichment activities. Britton Deerfield Schools is excited to implement this curriculum and to partner with the Lyons Club throughout our endeavor.

## **Special Education**

### **Resource Room**

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The Britton Deerfield Resource Room program fulfills state and federal special education laws by providing services to qualifying students. Individual Education Plans (IEP) are developed to meet each student's individual learning style and education needs. IEP team members include the student, parent/guardian, general education and special education teachers, support personnel, counselors and administrators.

Resource Room students with a current IEP may enroll in required and elective courses with the special education department, but final classroom placements are determined by the IEP. Students may also get daily or frequent direct support for general education courses from the resource room teacher during the school day. They type and amount of Resource Room support is based on the student's individual educational needs as defined in the IEP.

Resource Room teachers are in contact with general education teachers regarding progress of each student in general education courses. Feedback is provided to student from the Resource Room staff, as well as through their general education teachers.