

Science cont.

Life Science

- * Use simple graphical representations to show that species have unique and diverse life cycles.
- * Provide evidence that plants and animals have traits inherited from parents and that variation of traits exist in similar organisms and distinguish between inherited characteristics and characteristics resulting from the environment
- * Use fossils to describe types of organisms and their environments that existed long ago and compare those to living organisms and their environment
- * Explain how the variations in characteristics among individuals within the same species provide advantages to these individuals in their survival

Physical Science

- * Describe and classify different kinds of materials by observable properties
- * Test different materials and analyze the data obtained to determine which materials have the properties that are best suited for the intended purpose
- * Construct an argument with evidence that some changes to materials caused by heating or cooling can be reversed and some cannot
- * Provide evidence to explain the effect of multiple forces, including friction, on an object
- * Determine the nature of the forces between two magnets based on their orientations and distance relative to each other
- * Define a simple design problem that can be solved by applying the use of the interactions between two magnets

Technology/Engineering

- * Define a simple design problem that reflects a need or want
- * Generate several possible solutions to a design problem and gather information on possible solutions

Social Studies

History

- * Identify the Wampanoag, their leaders and describe their way of life at the time of the arrival of the Pilgrims
- * Identify the Pilgrims and explain why they left Europe to seek religious freedom

Social Studies cont.

- * Explain important political, economic & military developments leading to and during the American Revolution
- * Identify the Declaration of Independence, the Constitution and the Bill of Rights as key American documents

Geography

- * Explain in writing why Map Keys are used and identify the meanings of symbols on a Map Key
- * On a map of the United States, locate New England states
- * On a map of Massachusetts, locate major cities and towns, Cape Ann, Cape Cod, Connecticut river, Charles River & Berkshire Hills, and the class's hometown
- * Identify when the students' town was founded, and describe in writing the different groups of people who have settled in the community since its founding

Civics & Government

- * Give examples of why it is necessary to have governments and how people can influence their local government

Economics

- * Define what a tax is and the purposes for taxes

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The Bourne Public Schools Curriculum Guides highlight the targeted skills for each grade level, Kindergarten through grade 4. Targeted skills are from the most recent Massachusetts Curriculum Frameworks in the following areas:

- * Massachusetts Curriculum Frameworks for English Language Arts & Literacy, March 2011
 - * Massachusetts Curriculum Frameworks for Mathematics, March 2011
 - * Massachusetts Science & Technology/Engineering Standards Draft, December 2013
 - * Massachusetts Curriculum Frameworks for History and Social Science, August 2003
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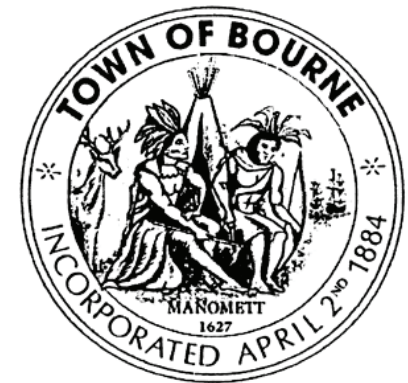
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BOURNE PUBLIC SCHOOLS

Curriculum Guide

Grade 3

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Bourne Public Schools
36 Sandwich Road
Bourne, MA 02532

www.bourneps.org

Literacy

Reading Literature and Informational Texts

- * Determine the main idea or central message in fiction and nonfiction texts
- * Describe how the characters, events, and ideas in a text relate to the each other
- * Refer to parts of stories, dramas, and poems (chapter, scene, stanza, etc.) when writing or speaking about them
- * Distinguish their own point of view from those of the characters, narrators, or authors of a text
- * Use evidence gained from words, text features, and illustrations when responding to a text
- * Compare and contrast key features or details in two non-fiction texts by the same author or on the same topic

Foundational Skills

- * Know and apply grade-level phonics and word analysis skills in decoding words
- * Read with sufficient accuracy and fluency to support comprehension of grade level texts

Writing

- * Compose a multi-paragraph piece in the following genres: opinion, informative/explanatory, narrative
- * Write poems, descriptions, and stories with figurative language
- * With guidance and support, produce writing in which the development and organization are appropriate to task and purpose
- * With guidance and support, develop and strengthen writing by planning, revising, and editing
- * With guidance and support, use technology to produce and publish writing (using keyboarding) as well as to interact and collaborate with others
- * Conduct short research projects

Speaking and Listening

- * Engage effectively in a range of collaborative discussions, building on others' ideas and expressing their own clearly
- * Ask and answer questions about information from a speaker, offering appropriate elaboration and detail
- * Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace

- * Create engaging audio recordings of stories or poems

Language

- * Demonstrate command of conventions of standard English grammar and usage when writing or speaking
- * Use knowledge of language and its conventions when writing, speaking, reading, or listening
- * Determine or clarify meaning of unknown and multiple-meaning words and phrases, choosing flexibly from strategies
- * Demonstrate understanding of word relationships and nuances in word meanings
- * Writes legibly in cursive

Math

Operations and Algebraic Thinking

- * Represent and solve word problems involving multiplication and division
- * Use multiplication and division within 100 to solve word problems
- * Determine unknown whole number in multiplication or division equations relating three whole numbers
- * Understand properties of multiplication and the relationship between multiplication and division (understanding of commutative, associative, and distributive properties)
- * Understand division as unknown-factor problem
- * Fluently multiply and divide within 100 using strategies, and know from memory all products of two one-digit numbers
- * Solve problems involving the four operations, and identify and explain patterns in arithmetic

Number and Operations in Base Ten

- * Use place value understanding of 4-digit numbers and properties of operations to perform multi-digit arithmetic
- * Round whole numbers to nearest 10 or 100
- * Fluently add and subtract within 1000
- * Multiply one-digit numbers by multiples of 10

Number and Operations - Fractions

- * Develop understanding of fractions as numbers
- * Demonstrate understanding of a unit fraction
- * Understand a fraction as a number on the number line; represent fractions on a number line
- * Explain equivalence of fractions in special cases
- * Compare fractions with the same denominator or numerator by reasoning about their size
- * Recognize and generate equivalent fractions

Measurement and Data

- * Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
- * Tell and write time to the nearest minute
- * Measure and estimate liquid volumes and masses of objects (grams, kilograms, and liters)
- * Generate measurement data by measuring length using rulers marked with halves and fourths of an inch
- * Understand concepts of area and relate area to multiplication and to addition
- * Recognize perimeter as an attribute of plane figures and distinguish between linear and area measurements

Geometry

- * Understand that shapes in different categories may share attributes
- * Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these sub-categories
- * Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole

Science

Earth and Space Sciences

- * Use graphs and tables of local weather data to describe and predict typical weather during a particular season in an area
- * Obtain and summarize information about the climate of different regions of the world to illustrate that typical weather conditions over a year vary by region