

GRADE 4

CURRICULUM GUIDE

The Duxbury Public Schools Curriculum Guide highlights the targeted skills for each grade level, Kindergarten through grade 5. Targeted skills are from the most recent Massachusetts Curriculum Frameworks in the following areas:

[Massachusetts Curriculum Frameworks for English Language Arts and Literacy, 2017](#)

[Massachusetts Curriculum Frameworks for Mathematics, 2017](#)

[Massachusetts Curriculum Frameworks for Science and Technology, 2016](#)

[Massachusetts Curriculum Frameworks for History and Social Science, 2018](#)

[Massachusetts Comprehensive Health Curriculum 1999](#)

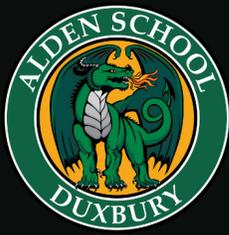
[Massachusetts Digital Literacy and Computer Science Framework, 2016](#)

The Massachusetts Department of Elementary and Secondary Education has provided this wonderful [one page guide](#) for each subject area in grade 4. It will give you a great overview of the new skills specific to grade 4.

It is available in other languages and grades at this site
<https://www.doe.mass.edu/highstandards/default.html>

If you are looking for specific grade level standards, read on in this curriculum guide.

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Literacy

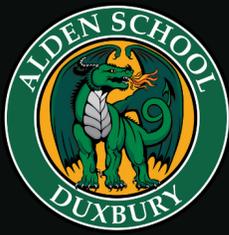
Literacy consists of the skills necessary to read, write, listen and speak. The following are the targeted standards for Fourth Grade Literacy Instruction:

Reading Literature

- Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
- Determine a theme of a story, drama, or poem from details in the text; summarize a text.
- Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).
- Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean); explain how figurative language (e.g., simile, metaphor) enriches a text.
- Explain major differences among prose, poetry, and drama and refer to the structural elements of each (e.g., paragraphs and chapters for prose; stanza and verse for poetry; scene, stage directions, cast of characters for drama) when writing or speaking about a text.
- Compare and contrast the points of view from which different stories are narrated, including the difference between first- and third-person narrations.
- Make connections between a written story or drama and its visual or oral presentation, identifying where the presentation reflects specific descriptions and directions in the written text.
- Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.
- Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 4.

Reading Informational Texts

- Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
- Determine the main idea of a text and explain how it is supported by key details; summarize a text.



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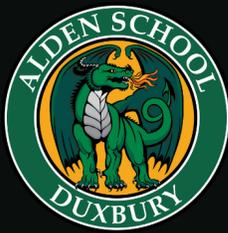
- Describe the relationship between a series of historical events, scientific ideas or concepts, mathematical ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.
- Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on webpages) and explain how the information contributes to an understanding of the text in which it appears.
- Explain how an author uses reasons and evidence to support particular points in a text.
- Integrate information from two texts on the same topic in order to write or speak knowledgeably about the subject.
- Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 4.

Foundational Skills

- Know and apply grade-level phonics and word analysis skills in decoding words.
 - Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
- Read with sufficient accuracy and fluency to support comprehension.
 - Read grade-level text with purpose and understanding.
 - Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

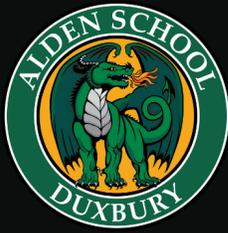
Writing

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped in paragraphs and sections to support the writer's purpose.
 - Provide reasons that are supported by facts and details.



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- Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).
 - Provide a concluding statement or section related to the opinion presented.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly and group related information in paragraphs and sections; include text features (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic
 - Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.
- Write narratives in prose or poem form to develop experiences or events using effective literary techniques, descriptive details, and clear sequences.
 - Orient the reader by establishing a situation and introducing a speaker, narrator, and/or characters; organize an appropriate narrative sequence.
 - Use dialogue and description to develop experiences or events or show responses to situations.
 - Use a variety of transitional words and phrases to manage sequence.
 - Use concrete words and phrases, figurative language such as similes and metaphors, and sensory details to convey experiences or events precisely.
 - Provide a sense of closure appropriate to the narrated experiences or events.
 - For poems, use patterns of sound (e.g., rhyme, rhythm, alliteration, consonance) and visual patterns (e.g., line length, grouped lines as stanzas or verses) to create works that are distinctly different in form from prose narratives.
- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- Develop and strengthen writing as needed by planning, revising, and editing.
 - Demonstrate command of standard English conventions
 - Demonstrate the ability to use general academic and domain-specific vocabulary appropriately
- Use technology, including current web-based communication platforms, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

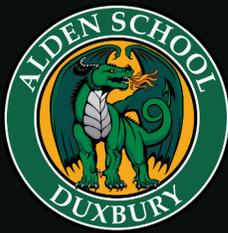


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- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources
- Draw evidence from literary or informational texts to support written analysis, reflection, and research, applying one or more grade 4 standards for Reading Literature or Reading Informational Text as needed.
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Speaking and Listening

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - Review the key ideas expressed and explain their own ideas and understanding in light of the discussion .
- Paraphrase portions of a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Identify the reasons and evidence a speaker provides to support particular points.
- Report on a topic, text, procedure, or solution to a mathematical problem, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace and use appropriate vocabulary.
- Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- Differentiate between contexts that call for formal English (e.g., presenting research findings) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.



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Language

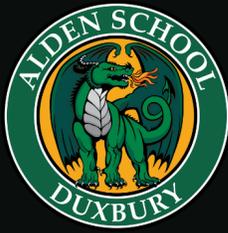
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades.

Sentence Structure and Meaning

- Produce complete sentences, using knowledge of subject and predicate to recognize and correct inappropriate sentence fragments and run-on sentences.
- Correctly use frequently confused words (e.g., their/there).
- Use helping verbs, also known as auxiliaries (e.g., can, may, might, should), to convey various conditions of possibility, likelihood, obligation, or permission, choosing among helping verbs depending on the overall meaning of the sentence.
- Use relative pronouns and relative adverbs to add more information about a noun or verb used in a sentence.
- Form and use prepositional phrases in sentences to add more information about qualities such as location, time, agency, and direction.

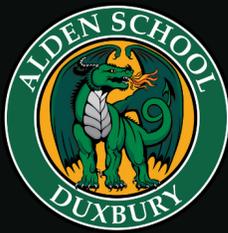
Word Usage

- Form and use progressive verb tenses.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Write legibly and fluently by hand, using either printing or cursive handwriting; write their given name signature in cursive.
 - Use correct capitalization.
 - Use commas and quotation marks to mark direct speech and quotations from a text.
 - Use a comma before a coordinating conjunction in a compound sentence.
 - Spell grade-appropriate words correctly, consulting references as needed.
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Choose words and phrases to convey ideas precisely.
 - Choose punctuation for effect.
 - Differentiate between contexts that call for formal English (e.g., presenting research findings) and situations where informal discourse is appropriate (e.g., small-group discussion).
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.
 - Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.



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- Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).
- Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Recognize and use appropriately abbreviations related to grade-level content or common in everyday life (e.g., hr., min., sec.)
- Recognize and use appropriately symbols related to grade-level content or common in everyday life (e.g., &, #, *).
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).
- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).



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MATH

Fourth Grade Math focuses on the three main areas of developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and 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

Operations and Algebraic Thinking (OA)

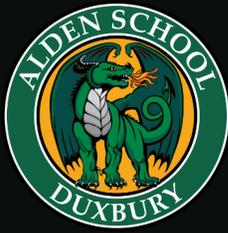
- Distinguishing multiplicative comparison from additive comparison
- Multiplying or dividing to solve word problems using drawings and equations with a variable
- Finding all factor pairs for a whole number in the range of 1-100, recognizing multiples, and determining prime or composite numbers
- Generating a number or shape pattern that follows a given rule and explaining informally why it works

Number and Operations in Base Ten (NBT)

- Reading, writing, and comparing multi-digit whole numbers using base ten numerals, number names, and expanded form
- Using place value understanding and properties of operations to perform multi-digit arithmetic
- Fluently adding and subtracting multi-digit whole numbers using the standard algorithm
- Illustrating and explaining division calculations using equations, rectangular arrays, and/or area models

Number and Operations—Fractions (NF)

- Building fractions from unit fractions by applying and extending previous understandings of operations on whole numbers
- Understanding addition and subtraction of fractions as joining and separating parts referring to the same whole
- Adding and subtracting mixed numbers with like denominators
- Solving word problems involving addition and subtraction of fractions with like denominators using drawings, visual fraction models, and equations to represent the problem



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- Using decimal notation to represent fractions with denominators of 10 or 100 and comparing decimal fractions

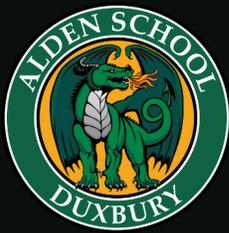
Geometry (G)

- Drawing and identifying lines (parallel and perpendicular) and angles (right, acute, obtuse) and classifying shapes by properties of their lines and angles
- Recognizing a line of symmetry for a 2- dimensional figure
- Recognizing angles as geometric shapes, measuring them using protractors, and solving addition and subtraction problems to find an unknown angle

Measurement and Data (MD)

- Solving problems involving measurement and conversion of measurements from a larger unit to a smaller unit within a single system of measurement
- Applying the area and perimeter formulas for rectangles in real world and mathematical problems
- Making a line plot (dot plot) to display a data set of measurements in fractions of a unit, and using it to solve addition and subtraction problems

[Quick Reference Guide: Standards for math practice Grades 3-5](#)



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SCIENCE

The following are the targeted standards for Fourth Grade Science instruction:

Earth Science

- Explaining that erosion and deposition over time result in rock and landscape formations
- Collecting data showing that Earth's matter is broken down and moved
- Interpreting maps to describe patterns of land formations, volcanoes, and earthquakes
- Obtaining information about human use of renewable and nonrenewable energy resources
- Evaluating a design solution to reduce impact of natural disasters

Life Science

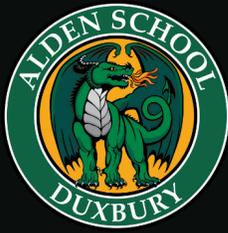
- Constructing an argument that plants and animals have structures that support key life functions

Physical Science

- Explaining the relationship of an object's speed to its energy
- Observing energy transfer
- Predicting changes in energy when objects collide
- Testing and refining a device that converts motion into electrical, light, or sound energy
- Using a model to show wave patterns
- Describing how the reflection of light allows objects to be seen
- Comparing ways to send information through a coded pattern

Technology/Engineering

- Planning and carrying out tests to a model or prototype
- Evaluating design features when developing a model for a problem
- Recognizing that technology is any modification to fulfill a need or want



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SOCIAL STUDIES

The following are the targeted standards for Fourth Grade Social Studies instruction:

- Use maps of North America to find and learn about physical features (like mountain ranges) and political features (like state borders).
- Describe the Native civilizations that were in North America before the Europeans arrived.
- Use maps of North America and the Caribbean to show where Europeans explored in the 1400s and 1500s.
- Use maps and timelines to explain how the United States grew and expanded westward in the 1800s.
- Explain how people adapted to the environments of different United States regions (Northeast, Southeast, Midwest, Southwest, West).
- Explain the different meanings of the terms continent, country, nation, county, state, province, and city.
- Understand that some people immigrated to the United States and some were brought against their will.
- Compare firsthand and secondhand accounts (like a witness statement and a newspaper story) of the same historical event or topic.