

How the World Works – Engineering Our World

ELA Standards

LAFS.2.RL.1.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

LAFS.2.RL.1.3 Describe how characters in a story respond to major events and challenges.

LAFS.2.RL.2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. **LAFS.2.RL.2.5** Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.

LAFS.2.RL.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.

LAFS.2.RL.3.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

LAFS.2.RL.4.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

LAFS.2.RF.3.3 Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Distinguish long and short vowels when reading regularly spelled one-syllable words.
- b. Know spelling-sound correspondences for additional common vowel teams.
- c. Decode regularly spelled two-syllable words with long vowels.
- d. Identify words with inconsistent but common spelling-sound correspondences.
- e. Recognize and read grade-appropriate irregularly spelled words.

LAFS.2.RF.4.4 Read with sufficient accuracy and fluency to support comprehension.

- a. Read on-level text with purpose and understanding.
- b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.
- c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

LAFS.2.RI.1.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts

LAFS.2.RI.1.2 Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts

LAFS.2.RI.1.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

LAFS.2.RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

LAFS.2.RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

LAFS.2.RI.3.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

LAFS.2.RI.4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

LAFS.2.W.1.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning

LAFS.2.W.1.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

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LAFS.2.W.3.8 Recall information from experiences or gather information from provided sources to answer a question.

LAFS.2.SL.1.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- b. Build on others' talk in conversations by linking their comments to the remarks of others.
- c. Ask for clarification and further explanation as needed about the topics and texts under discussion.

LAFS.2.SL.1.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

LAFS.2.SL.1.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information

LAFS.2.SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences, additional information, or deepen understanding of a topic or issue.

LAFS.2.SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification

LAFS.2.L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- a. Demonstrate legible printing skills.

LAFS.2.L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- a. Capitalize holidays, product names, and geographic names.
- b. Use commas in greetings and closings of letters.
- c. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).

LAFS.2.L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.

LAFS.2.L.3.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.

- a. Use sentence-level context as a clue to the meaning of a word or phrase.
- b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
- c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).

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Math Standards	<p>MAFS.2.OA.1.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>MAFS.2.OA.2.2 Determine the unknown whole number in an equation relating four or more whole numbers. For example, determine the unknown number that makes the equation true in the equations $37 + 10 + 10 = \underline{\hspace{1cm}} + 18$, $? - 6 = 13 - 4$, and $15 - 9 = 6 + \square$.</p> <p>MAFS.2.OA.3.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>MAFS.2.NBT.1.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 100 can be thought of as a bundle of ten tens — called a “hundred.” The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
Science Standards	<p>SC.2.N.1.1 Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.</p> <p>SC.2.N.1.2 Compare the observations made by different groups using the same tools.</p> <p>SC.2.N.1.3 Ask “how do you know?” in appropriate situations and attempt reasonable answers when asked the same question by others</p> <p>SC.2.N.1.4 Explain how particular scientific investigations should yield similar conclusions when repeated.</p> <p>SC.2.N.1.5 Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).</p> <p>SC.2.N.1.6 Explain how scientists alone or in groups are always investigating new ways to solve problems.</p>
Social Studies Standards	<p>SS.2.A.1.2 Utilize the media center, technology, or other informational sources to locate information that provides answers to questions about a historical topic.</p> <p>SS.2.C.1.1 Explain why people form governments.</p> <p>SS.2.C.1.2 Explain the consequences of an absence of rules and laws.</p> <p>SS.2.C.2.2 Define and apply the characteristics of responsible citizenship.</p> <p>SS.2.G.1.4 Use a map to locate the countries in North America (Canada, United States, Mexico, and the Caribbean Islands).</p>