

Correlation to the
Florida Course Description for
Science – Grade Four
Course Code 5020050



HMH Science Dimensions Grade 4
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2016-2017 STATE OF FLORIDA INSTRUCTIONAL MATERIALS ADOPTION
STANDARDS ALIGNMENT
COURSE STANDARDS/BENCHMARKS (Form IM7)

BID ID:	<u>3309</u>
SUBMISSION TITLE:	<u>HMH Science Dimensions Grade 4 ©2018</u>
GRADE LEVEL:	<u>4</u>
COURSE TITLE:	<u>Science – Grade Four</u>
COURSE CODE:	<u>5020050</u>
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BENCHMARK CODE	BENCHMARK	LESSONS WHERE STANDARD/BENCHMARK IS DIRECTLY ADDRESSED IN MAJOR TOOL (MOST IN-DEPTH COVERAGE LISTED FIRST) (Include the student edition and teacher edition with the page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
SC.4.E.5.1	Observe that the patterns of stars in the sky stay the same although they appear to shift across the sky nightly, and different stars can be seen in different seasons.	ScienceSaurus (Blue Level, Grades 4–5): 234-237 Science & Engineering Leveled Readers: <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 <i>A Sky Full of Stars</i> (EN); Teacher Guide: 105-107 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 12-15 TE: 6
SC.4.E.5.2	Describe the changes in the observable shape of the moon over the course of about a month.	ScienceSaurus (Blue Level, Grades 4-5): 23 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 12-15 TE: 6

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SC.4.E.5.3	Recognize that Earth revolves around the Sun in a year and rotates on its axis in a 24-hour day.	ScienceSaurus (Blue Level, Grades 4–5): 218-222 Science & Engineering Leveled Readers: <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 12-15 TE: 6
SC.4.E.5.4	Relate that the rotation of Earth (day and night) and apparent movements of the Sun, Moon, and stars are connected.	ScienceSaurus (Blue Level, Grades 4–5): 218-222 Science & Engineering Leveled Readers: <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 12-15 TE: 6
SC.4.E.5.5	Investigate and report the effects of space research and exploration on the economy and culture of Florida.	This standard is beyond the scope of <i>HMH Science Dimensions Grade 4</i> .
SC.4.E.6.1	Identify the three categories of rocks: igneous, (formed from molten rock); sedimentary (pieces of other rocks and fossilized organisms); and metamorphic (formed from heat and pressure).	ScienceSaurus (Blue Level, Grades 4–5): 164-167 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 16-19 TE: 7

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SC.4.E.6.2	Identify the physical properties of common earth-forming minerals, including hardness, color, luster, cleavage, and streak color, and recognize the role of minerals in the formation of rocks.	ScienceSaurus (Blue Level, Grades 4–5): 160-163 Science & Engineering Leveled Readers: <i>Earth's Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-80 <i>Conserving Earth's Resources</i> (EN); Teacher Guide: 81-83 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 16-19 TE: 7
SC.4.E.6.3	Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.	SE: 526-539, 548-566 TE: 526-539, 548-566 ScienceSaurus (Blue Level, Grades 4–5): 319-333, 345 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 20-23 TE: 8

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SC.4.E.6.4	Describe the basic differences between physical weathering (breaking down of rock by wind, water, ice, temperature change, and plants) and erosion (movement of rock by gravity, wind, water, and ice).	SE: 359-361, 362-365, 366-368, 382-383, 387, 398 TE: 359-361, 362-365, 366-368, 382-383, 387, 398 ScienceSaurus (Blue Level, Grades 4–5): 165, 168, 171 Science & Engineering Leveled Readers: <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 24-27 TE: 9
SC.4.E.6.5	Investigate how technology and tools help to extend the ability of humans to observe very small things and very large things.	SE: 6-8, 94, 188-189, 192-193 TE: 6-8, 94, 188-189, 192-193 ScienceSaurus (Blue Level, Grades 4–5): 238, 314, 355-363 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23
SC.4.E.6.6	Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy).	SE: 195 TE: 195 Florida Statewide Science Assessment (FSSA) Review and Practice: SE:20-23 TE 8

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SC.4.L.16.1	Identify processes of sexual reproduction in flowering plants, including pollination, fertilization (seed production), seed dispersal, and germination.	SE: 257-262, 265-270, 271-272 TE: 257-262, 265-270, 271-272 ScienceSaurus (Blue Level, Grades 4–5): 82, 86-87 Science & Engineering Leveled Readers: <i>How Do Plants and Animals Reproduce and Adapt?</i> (OL/ES); Teacher Guide: 121-125 <i>Exploring the Galapagos Islands</i> (EN); Teacher Guide: 129-131 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 68-71 TE: 20
SC.4.L.16.2	Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.	TE: 26 ScienceSaurus (Blue Level, Grades 4–5): 96 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 72 TE: 21
SC.4.L.16.3	Recognize that animal behaviors may be shaped by heredity and learning.	ScienceSaurus (Blue Level, Grades 4–5): 92-95 Science & Engineering Leveled Readers: <i>Tiger Sharks in the Seagrass</i> (EN); Teacher Guide: 117-119 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 72 TE: 21

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SC.4.L.16.4	Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.	Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 60-63 TE: 18
SC.4.L.17.1	Compare the seasonal changes in Florida plants and animals to those in other regions of the country.	Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 72 TE: 21
SC.4.L.17.2	Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.	TE: 600 ScienceSaurus (Blue Level, Grades 4–5): 137-138 Science & Engineering Leveled Readers: <i>How Do Organisms Interact with Their Environment?</i> (OL/ES); Teacher Guide: 109-113 <i>Tiger Sharks in the Seagrass</i> (EN); Teacher Guide: 117-119
SC.4.L.17.3	Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.	TE: 600 ScienceSaurus (Blue Level, Grades 4–5): 137-138 Science & Engineering Leveled Readers: <i>How Do Organisms Interact with Their Environment?</i> (OL/ES); Teacher Guide: 109-113 <i>Tiger Sharks in the Seagrass</i> (EN); Teacher Guide: 117-119 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 64-67 TE: 19

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SC.4.L.17.4	Recognize ways plants and animals, including humans, can impact the environment.	SE: 382, 389, 536-542 TE: 382, 389, 536-542 ScienceSaurus (Blue Level, Grades 4–5): 334-343, 344-353 Science & Engineering Leveled Readers: <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 72 TE: 21
SC.4.N.1.1	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	TE: 9, 15, 18, 70, 76, 80, 114, 122, 124, 265, 271 ScienceSaurus (Blue Level, Grades 4–5): 2, 4-5 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 3-5 TE: 3

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SC.4.N.1.2	Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.	SE: 122-124, 245, 250 TE: 122-124, 244-245, 250 ScienceSaurus (Blue Level, Grades 4–5): 17 Science & Engineering Leveled Readers: <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 6-8 TE: 4
SC.4.N.1.3	Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.	TE: 22, 25, 29, 31, 35, 37, 39, 73, 79, 82, 105, 116, 125, 129, 132, 200, 202, 204, 207, 212, 216, 266, 456, 467, 472, 473, 475, 478, 482, 484, 486, 488, 491, 492, 496, 500, 502, 509, 563, 566, 575, 583, 585, 589, 596, 598, 600, 605, 607, 608, 612, 616 ScienceSaurus (Blue Level, Grades 4–5): 4, 18-19 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 9-11 TE: 5

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SC.4.N.1.4	Attempt reasonable answers to scientific questions and cite evidence in support.	TE: 22, 25, 29, 31, 35, 37, 39, 73, 79, 82, 105, 116, 125, 129, 132, 200, 202, 204, 207, 212, 216, 266, 456, 467, 472, 473, 475, 478, 482, 484, 486, 488, 491, 492, 496, 500, 502, 509, 563, 566, 575, 583, 585, 589, 596, 598, 600, 605, 607, 608, 612, 616 ScienceSaurus (Blue Level, Grades 4–5): 4, 18-19 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 9-11 TE: 5
SC.4.N.1.5	Compare the methods and results of investigations done by other classmates.	SE: 122-124, 245, 250 TE: 122-124, 244-245, 250 ScienceSaurus (Blue Level, Grades 4–5): 17 Science & Engineering Leveled Readers: <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 6-8 TE: 4

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SC.4.N.1.6	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	SE: 77, 269, 345, 367, 393, 541 TE: 77, 269, 345, 367, 393, 541 ScienceSaurus (Blue Level, Grades 4–5): 4, 11-15, 61 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 3-5 TE: 3
SC.4.N.1.7	Recognize and explain that scientists base their explanations on evidence.	TE: 22, 25, 29, 31, 35, 37, 39, 73, 79, 82, 105, 116, 125, 129, 132, 200, 202, 204, 207, 212, 216, 266, 456, 467, 472, 473, 475, 478, 482, 484, 486, 488, 491, 492, 496, 500, 502, 509, 563, 566, 575, 583, 585, 589, 596, 598, 600, 605, 607, 608, 612, 616 ScienceSaurus (Blue Level, Grades 4–5): 4, 18-19 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 9-11 TE: 5

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SC.4.N.1.8	Recognize that science involves creativity in designing experiments.	SE: 16, 34, 54, 527 TE: 16, 34, 54, 527 Science & Engineering Leveled Readers: <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23
SC.4.N.2.1	Explain that science focuses solely on the natural world.	TE: 9, 15, 18, 70, 76, 80, 114, 122, 124, 265, 271 ScienceSaurus (Blue Level, Grades 4–5): 2, 4-5 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11
SC.4.N.3.1	Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.	SE: 196, 448-449 TE: 196, 448-449 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5
SC.4.P.8.1	Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets.	ScienceSaurus (Blue Level, Grades 4–5): 245-247 Science & Engineering Leveled Readers: <i>Sculpting with Physical Properties</i> (EN); Teacher Guide: 33-35 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 28-31 TE: 10

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SC.4.P.8.2	Identify properties and common uses of water in each of its states.	ScienceSaurus (Blue Level, Grades 4–5): 188-189 Science & Engineering Leveled Readers: <i>How Does the Water Cycle Affect Weather?</i> (OL/ES); Teacher Guide: 85-89 <i>Hurricane!</i> (EN); Teacher Guide: 93-95
SC.4.P.8.3	Explore the Law of Conservation of Mass by demonstrating that the mass of a whole object is always the same as the sum of the masses of its parts.	This standard is beyond the scope of <i>HMH Science Dimensions Grade 4</i> .
SC.4.P.8.4	Investigate and describe that magnets can attract magnetic materials and attract and repel other magnets.	ScienceSaurus (Blue Level, Grades 4–5): 246-247, 272-273, 304-307 Science & Engineering Leveled Readers: <i>How Do We Generate and Use Electricity?</i> (OL/ES); Teacher Guide: 49-53 <i>Energy on Demand: Making Electricity</i> (EN); Teacher Guide: 57-59 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 32-35 TE: 11
SC.4.P.9.1	Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking.	ScienceSaurus (Blue Level, Grades 4–5): 246-247, 260, 290, 338 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 36-39 TE: 12

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SC.4.P.10.1	Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion.	SE: 68-84, 88-108 TE: 68-84, 88-108 ScienceSaurus (Blue Level, Grades 4–5): 284-294, 308-309, 315-316 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 40-43 TE: 13
SC.4.P.10.2	Investigate and describe that energy has the ability to cause motion or create change.	SE: 70-71, 74, 79-81, 83-84, 114-117, 125, 128-130 TE: 70-71, 80-81, 83-84, 89, 114-117, 125, 128-130 ScienceSaurus (Blue Level, Grades 4–5): 277-279 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 44-47 TE: 14

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SC.4.P.10.3	Investigate and explain that sound is produced by vibrating objects and that pitch depends on how fast or slow the object vibrates.	SE: 102-108 TE: 102-108 ScienceSaurus (Blue Level, Grades 4–5): 315-317 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 40-43 TE: 13
SC.4.P.10.4	Describe how moving water and air are sources of energy and can be used to move things.	SE: 149-151 TE: 149-151 ScienceSaurus (Blue Level, Grades 4–5): 325 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 44-47 TE: 14

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SC.4.P.11.1	Recognize that heat flows from a hot object to a cold object and that heat flow may cause materials to change temperature.	SE: 90-94 TE: 90-94 ScienceSaurus (Blue Level, Grades 4–5): 261-262, 288-294 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 48-51 TE: 15
SC.4.P.11.2	Identify common materials that conduct heat well or poorly.	SE: 90-94 TE: 90-94 ScienceSaurus (Blue Level, Grades 4–5): 261-262, 288-294 Science & Engineering Leveled Readers: <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 48-51 TE: 15

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SC.4.P.12.1	Recognize that an object in motion always changes its position and may change its direction.	ScienceSaurus (Blue, Levels 4-5): 275-279, 384-385 Science & Engineering Leveled Readers: <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 52-55 TE: 16
SC.4.P.12.2	Investigate and describe that the speed of an object is determined by the distance it travels in a unit of time and that objects can move at different speeds.	ScienceSaurus (Blue, Levels 4-5): 276-278, 384-385 Science & Engineering Leveled Readers: <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 Florida Statewide Science Assessment (FSSA) Review and Practice: SE: 52-55 TE: 16
LAFS.4.RI.1.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	TE: 16, 26, 54, 56, 72, 78, 151, 179, 186, 190, 203, 219, 236, 264, 286, 315, 327, 354, 371, 381, 385, 397, 416, 417, 424, 433, 459, 503, 539, 550, 557, 558, 585, 600 ScienceSaurus (Blue, Levels 4-5): 16

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LAFS.4.RI.2.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	TE: 3, 67, 143, 231, 283, 351, 455, 525 ScienceSaurus (Blue, Levels 4-5): 436-437 Science & Engineering Levelled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 <i>What Is Matter?</i> (OL/ES); Teacher Guide: 25-29 <i>Sculpting with Physical Properties</i> (EN); Teacher Guide: 33-35 <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 <i>How Do We Generate and Use Electricity?</i> (OL/ES); Teacher Guide: 49-53 <i>Energy on Demand: Making Electricity</i> (EN); Teacher Guide: 57-59 <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83 <i>How Does the Water Cycle Affect Weather?</i> (OL/ES); Teacher Guide: 85-89 <i>Hurricane!</i> (EN); Teacher Guide: 93-95 <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 <i>A Sky Full of Stars</i> (EN); Teacher Guide: 105-107
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LAFS.4.RI.4.10	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 <i>What Is Matter?</i> (OL/ES); Teacher Guide: 25-29 <i>Sculpting with Physical Properties</i> (EN); Teacher Guide: 33-35 <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 <i>How Do We Generate and Use Electricity?</i> (OL/ES); Teacher Guide: 49-53 <i>Energy on Demand: Making Electricity</i> (EN); Teacher Guide: 57-59 <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83 <i>How Does the Water Cycle Affect Weather?</i> (OL/ES); Teacher Guide: 85-89 <i>Hurricane!</i> (EN); Teacher Guide: 93-95
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LAFS.4.SL.1.1	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. a. 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. b. Follow agreed-upon rules for discussions and carry out assigned role. c. 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. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	SE: 9 TE: 5, 15, 17, 19, 23, 25, 37, 38, 39, 41, 51, 55, 57, 69, 83, 84, 85, 89, 92, 94, 98, 102, 106, 109, 111, 115, 129, 133, 145, 163, 171, 187, 189, 197, 201, 205, 211, 212, 217, 218, 219, 221, 233, 236, 239, 241, 246, 251, 255, 273, 285, 287, 288, 290, 301, 303, 305, 307, 309, 315, 318, 321, 325, 328, 335, 339, 341, 353, 362, 375, 379, 388, 401, 405, 407, 409, 425, 429, 437, 443, 445, 457, 466, 474, 479, 483, 488, 490, 497, 507, 515, 530, 535, 536, 549, 557, 566, 569, 573, 597, 603, 604, 606, 607, 608, 617 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 <i>What Is Matter?</i> (OL/ES); Teacher Guide: 25-29 <i>Sculpting with Physical Properties</i> (EN); Teacher Guide: 33-35 <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 <i>How Do We Generate and Use Electricity?</i> (OL/ES); Teacher Guide: 49-53 <i>Energy on Demand: Making Electricity</i> (EN); Teacher Guide: 57-59 <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83
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LAFS.4.W.3.8	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.	SE: 54, 127, 363, 494 TE: 7, 17, 54, 71, 79, 97, 127, 361, 363, 461, 485, 494 Science & Engineering Leveled Readers: <i>How Do We Use Scientific Investigation and Reasoning?</i> (OL/ES); Teacher Guide: 1-5 <i>Wild Science: Learning from the Cheetah</i> (EN); Teacher Guide: 9-11 <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>City Water Tunnel 3</i> (EN); Teacher Guide: 21-23 <i>What Is Matter?</i> (OL/ES); Teacher Guide: 25-29 <i>Sculpting with Physical Properties</i> (EN); Teacher Guide: 33-35 <i>How Do We Use Forms of Energy?</i> (OL/ES); Teacher Guide: 37-41 <i>What Happens Under the Hood?</i> (EN); Teacher Guide: 45-47 <i>How Do We Generate and Use Electricity?</i> (OL/ES); Teacher Guide: 49-53 <i>Energy on Demand: Making Electricity</i> (EN); Teacher Guide: 57-59 <i>What Makes Objects Move?</i> (OL/ES); Teacher Guide: 61-65 <i>Rocket Science</i> (EN); Teacher Guide: 69-71 <i>Earth’s Changing Surface and Natural Resources</i> (OL/ES); Teacher Guide: 73-77 <i>Conserving Earth’s Resources</i> (EN); Teacher Guide: 81-83 <i>How Does the Water Cycle Affect Weather?</i> (OL/ES); Teacher Guide: 85-89 <i>Hurricane!</i> (EN); Teacher Guide: 93-95 <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 <i>A Sky Full of Stars</i> (EN); Teacher Guide: 105-107
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LAFS.4.W.3.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., “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].”). b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).	TE: 257, 264, 267, 476, 477, 508, 511, 512, 556 Science & Engineering Leveled Readers: <i>What Is the Engineering Process?</i> (OL/ES); Teacher Guide: 13-17 <i>What Is Matter?</i> (OL/ES); Teacher Guide: 25-29 <i>What Are Patterns in Space?</i> (OL/ES); Teacher Guide: 97-101 <i>How Do Plants and Animals Reproduce and Adapt?</i> (OL/ES); Teacher Guide: 121-125 <i>Exploring the Galapagos Islands</i> (EN); Teacher Guide: 129-131
MAFS.4.MD.1.1	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	SE: 123, 412-413 TE: 123, 185, 357, 412-413, 493 ScienceSaurus (Blue, Levels 4-5): 38-39, 42-46, 50, 408-410

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MAFS.4.MD.2.4	Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	ScienceSaurus (Blue, Levels 4-5): 65
ELD.K12.ELL.SC.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.	TE: 4B, 10, 22B, 26, 44B, 50, 67, 68B, 70, 74, 84, 88B, 91, 96, 110, 114B, 118, 126, 128, 143, 144B, 149, 153, 154, 170B, 175, 180, 186, 191, 200B, 206, 210, 214, 232B, 231, 236, 254B, 283, 284B, 287, 289, 304B, 308, 317, 324B, 328, 331, 351, 352B, 356, 360, 370, 378B, 382, 391, 393, 404B, 408, 410, 428B, 432, 455, 456B, 459, 465, 474, 482B, 484, 494, 500B, 510, 516, 525, 526B, 531, 532, 541, 548B, 550, 558, 572B, 579, 596B, 605
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.	TE: 4B, 10, 22B, 26, 44B, 50, 67, 68B, 70, 74, 84, 88B, 91, 96, 110, 114B, 118, 126, 128, 143, 144B, 149, 153, 154, 170B, 175, 180, 186, 191, 200B, 206, 210, 214, 232B, 231, 236, 254B, 283, 284B, 287, 289, 304B, 308, 317, 324B, 328, 331, 351, 352B, 356, 360, 370, 378B, 382, 391, 393, 404B, 408, 410, 428B, 432, 455, 456B, 459, 465, 474, 482B, 484, 494, 500B, 510, 516, 525, 526B, 531, 532, 541, 548B, 550, 558, 572B, 579, 596B, 605
HE.4.C.1.5	Identify the human body parts and organs that work together to form healthy body systems.	SE: 306-313, 314-318, 321-323, 326-329 TE: 306-313, 314-318, 321-323, 326-329 ScienceSaurus (Blue, Levels 4-5): 111-125