Houghton Mifflin Harcourt

Correlation to the Florida Course Description for M/J Comprehensive Science 3 Course Code 2002100

HMH Florida Science Grade 8
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2016-2017 STATE OF FLORIDA INSTRUCTIONAL MATERIALS ADOPTION
STANDARDS ALIGNMENT
COURSE STANDARDS/BENCHMARKS (Form IM7)

BID ID:	**3268**
SUBMISSION TITLE:	**HMH Florida Science: Grade 8 ©2019**
GRADE LEVEL:	**6–8**
COURSE TITLE:	**M/J Comprehensive Science 3**
COURSE CODE:	**2002100**
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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.8.E.5.1	Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance.	**SE:** Unit 2, Lesson 1, pp. 86–95 **TE:** Unit 2, Lesson 1, pp. 116–128 **Student Interactive Digital Curriculum:** Unit 2, Lesson 1, Structure of the Universe **Teacher Digital Management Center:** Unit 2, Lesson 1, Structure of the Universe **Lab (Lab Manual):** Unit 5 Field Lab: Making a Telescope **Virtual Lab(s):** Unit 2, Lesson 1: Distances in the Universe
SC.8.E.5.2	Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars.	**SE:** Unit 2, Lesson 1, pp. 86–95 **TE:** Unit 2, Lesson 1, pp. 116–128 **Student Interactive Digital Curriculum:** Unit 2, Lesson 1, Structure of the Universe **Teacher Digital Management Center:** Unit 2, Lesson 1, Structure of the Universe **Lab (Lab Manual):** Unit 2, Lesson 1 Quick Lab: Modeling Galaxies **Virtual Lab(s):** Unit 2, Lesson 1: Distances in the Universe

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SC.8.E.5.3	Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition.	**SE:** Unit 2, Lesson 1, pp. 86–95; Unit 3, Lesson 3, pp. 142–153; Unit 3, Lesson 4, pp. 154–167; Unit 3, Lesson 5, pp. 170–181; Unit 3, Lesson 6, pp. 184–197 **TE:** Unit 2, Lesson 1, pp. 116–128; Unit 3, Lesson 3, pp. 197–209; Unit 3, Lesson 4, pp. 210–225; Unit 3, Lesson 5, pp. 228–241; Unit 3, Lesson 6, pp. 244–259 **Student Interactive Digital Curriculum:** Unit 2, Lesson 1, Structure of the Universe; Unit 3, Lesson 3, The Sun; Unit 3, Lesson 4, The Terrestrial Planets; Unit 3, Lesson 5, The Gas Giant Planets; Unit 3, Lesson 6, Small Bodies in the Solar System **Teacher Digital Management Center:** Unit 2, Lesson 1, Structure of the Universe; Unit 3, Lesson 3, The Sun; Unit 3, Lesson 4, The Terrestrial Planets; Unit 3, Lesson 5, The Gas Giant Planets; Unit 3, Lesson 6, Small Bodies in the Solar System **Labs (Lab Manual):** Unit 3, Lesson 4 Quick Lab: Schoolyard Solar System; Unit 3, Lesson 2 Quick Lab: The Winds on Neptune; Unit 2 Exploration Lab: Exploring the Relationship Between Mass and Shape; Unit 2, Lesson 1 Quick Lab: Modeling the Expanding Universe; Unit 3, Lesson 6 Quick Lab: Orbits of Comets
SC.8.E.5.4	Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions.	**SE:** Unit 3, Lesson 2, pp. 128–141 **TE:** Unit 3, Lesson 2, pp. 180–194 **Student Interactive Digital Curriculum:** Unit 3, Lesson 2, Gravity and the Solar System **Teacher Digital Management Center:** Unit 3, Lesson 2, Gravity and the Solar System **Labs (Lab Manual):** Unit 3, Lesson 2 Quick Lab: Gravity's Effect; Unit 3, Lesson 2 Quick Lab: Orbital Ellipses
SC.8.E.5.5	Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness).	**SE:** Unit 2, Lesson 2, pp. 98–107 **TE:** Unit 2, Lesson 2, pp. 132–144 **Student Interactive Digital Curriculum:** Unit 2, Lesson 2, Stars **Teacher Digital Management Center:** Unit 2, Lesson 2, Stars **Labs (Lab Manual):** Unit 2, Lesson 2 Quick Lab: Modeling Star Magnitudes; Unit 2, Lesson 2 Quick Lab: Star Graphing; Unit 2, Lesson 2 Quick Lab: Using a Sky Map; Unit 2 Exploration Lab: Star Colors and Temperatures; Unit 2 Exploration Lab: Exploring the Relationship Between Mass and Shape **Virtual Lab(s):** Unit 2, Lesson 2: Using Color to Measure Temperature
SC.8.E.5.6	Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.	**SE:** Unit 3, Lesson 3, pp. 142–153 **TE:** Unit 3, Lesson 3, pp.196–209 **Student Interactive Digital Curriculum:** Unit 3, Lesson 3, The Sun **Teacher Digital Management Center:** Unit 3, Lesson 3, The Sun **Labs (Lab Manual):** Unit 3 Exploration Lab: Create a Model of the Sun; Unit 3, Lesson 3 Quick Lab: Model Solar Composition

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SC.8.E.5.7	Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions.	**SE:** Unit 3, Lesson 4, pp. 154–167; Unit 3, Lesson 5, pp. 170–181; Unit 3, Lesson 6, pp. 184–197 **TE:** Unit 3, Lesson 4, pp. 210–225; Unit 3, Lesson 5, pp. 228–241; Unit 3, Lesson 6, pp. 244–259 **Student Interactive Digital Curriculum:** Unit 3, Lesson 4, The Terrestrial Planets; Unit 3, Lesson 5, The Gas Giant Planets; Unit 3, Lesson 6, Small Bodies in the Solar System **Teacher Digital Management Center:** Unit 3, Lesson 4, The Terrestrial Planets; Unit 3, Lesson 5, The Gas Giant Planets; Unit 3, Lesson 6, Small Bodies in the Solar System **Labs (Lab Manual):** Unit 3 Exploration Lab: Weights on Different Celestial Bodies; Unit 3, Lesson 5 Quick Lab: The Winds on Neptune; Unit 3, Lesson 5 Quick Lab: Modeling Saturn's Rings; Unit 3, Lesson 6 Quick Lab: Modeling Crater Formation **Virtual Lab(s):** Unit 3, Lesson 4: Altering Planets
SC.8.E.5.8	Compare various historical models of the Solar System, including geocentric and heliocentric.	**SE:** Unit 3, Lesson 1, pp. 116–125 **TE:** Unit 3, Lesson 1, pp. 164–176 **Student Interactive Digital Curriculum:** Unit 3, Lesson 1, Historical Models of the Solar System **Teacher Digital Management Center:** Unit 3, Lesson 1, Historical Models of the Solar System **Labs (Lab Manual):** Unit 3, Lesson 1 Quick Lab: The Geocentric Model of the Solar System; Unit 3, Lesson 1 Quick Lab: The Heliocentric Model of the Solar System
SC.8.E.5.9	Explain the impact of objects in space on each other including: 1. the Sun on the Earth including seasons and gravitational attraction 2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body.	**SE:** Unit 4, Lesson 1, pp. 208–217; Unit 4, Lesson 2, pp. 218–227; Unit 4, Lesson 3, pp. 230–239 **TE:** Unit 4, Lesson 1, pp. 276–288; Unit 4, Lesson 2, pp. 290–303; Unit 4, Lesson 3, pp. 306–319 **Student Interactive Digital Curriculum:** Unit 4, Lesson 1, Earth's Days, Years, and Seasons; Unit 4, Lesson 2, Moon Phases and Eclipses; Unit 4, Lesson 3, Earth's Tides **Teacher Digital Management Center:** Unit 4, Lesson 1, Earth's Days, Years, and Seasons; Unit 4, Lesson 2, Moon Phases and Eclipses; Unit 4, Lesson 3, Earth's Tides **Labs (Lab Manual):** Unit 4, Lesson 1 Quick Lab: Earth's Rotation and Revolution; Unit 4, Lesson 1 Quick Lab: Seasons Model; Unit 4, Lesson 2 Quick Lab: Moon Phases; Unit 4, Lesson 2 Quick Lab: Lunar Eclipse; Unit 4, Lesson 3 Quick Lab: Tides and Beachers; Unit 4, Lesson 3 Quick Lab: Tidal Math; Unit 4 Exploration Lab: What the Moon Orbits **Virtual Lab(s):** Unit 4, Lesson 1: Seasons; Unit 4, Lesson 2: Spheres in Space
SC.8.E.5.10	Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.	**SE:** Unit 5, Lesson 1, pp. 252–265; Unit 5, Lesson 2, pp. 268–281 **TE:** Unit 5, Lesson 1, pp. 338–352; Unit 5, Lesson 2, pp. 356–370 **Student Interactive Digital Curriculum:** Unit 5, Lesson 1, Images from Space; Unit 5, Lesson 2, Technology for Space Exploration **Teacher Digital Management Center:** Unit 5, Lesson 1, Images from Space; Unit 5, Lesson 2, Technology for Space Exploration Many labs address this benchmark, including the following: **Labs (Lab Manual):** Unit 5 Field Lab: Build a Rocket; Unit 5 Field Lab: Making a Telescope; Unit 5, Lesson 2 Quick Lab: Splitting White Light **Virtual Lab(s):** Unit 5, Lesson 1: Observing Earth over Time; Unit 5, Lesson 2: Exploring with Space Probes

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SC.8.E.5.11	Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs.	**SE:** Unit 5, Lesson 1, pp. 252–265 **TE:** Unit 5, Lesson 1, pp. 338–352 **Student Interactive Digital Curriculum:** Unit 5, Lesson 1, Images from Space **Teacher Digital Management Center:** Unit 5, Lesson 1, Images from Space **Lab (Lab Manual):** Unit 5, Lesson 1 Quick Lab: Using Invisible Light **Virtual Lab(s):** Unit 5, Lesson 1: Observing Earth over Time
SC.8.E.5.12	Summarize the effects of space exploration on the economy and culture of Florida.	**SE:** Unit 5, Lesson 3, pp. 284–297 **TE:** Unit 5, Lesson 3, pp. 374–388 **Student Interactive Digital Curriculum:** Unit 5, Lesson 3, Space Exploration and Florida **Teacher Digital Management Center:** Unit 5, Lesson 3, Space Exploration and Florida **Labs (Lab Manual):** Unit 5, Lesson 3 Quick Lab: Florida Economics without NASA; Unit 5, Lesson 3 Quick Lab: Florida Culture without NASA
SC.8.L.18.1	Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen.	**SE:** Unit 7, Lesson 1, pp. 414–425 **TE:** Unit 7, Lesson 1, pp. 538–551 **Student Interactive Digital Curriculum:** Unit 7, Lesson 1, Photosynthesis and Cellular Respiration **Teacher Digital Management Center:** Unit 7, Lesson 1, Photosynthesis and Cellular Respiration **Lab (Lab Manual):** Unit 7, Lesson 1 Quick Lab: Reversing Equations **Virtual Lab(s):** Unit 1, Lesson 1: Observing Photosynthesis
SC.8.L.18.2	Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide.	**SE:** Unit 7, Lesson 1, pp. 414–425 **TE:** Unit 7, Lesson 1, pp. 538–551 **Student Interactive Digital Curriculum:** Unit 7, Lesson 1, Photosynthesis and Cellular Respiration **Teacher Digital Management Center:** Unit 7, Lesson 1, Photosynthesis and Cellular Respiration **Labs (Lab Manual):** Unit 7, Lesson 1 Quick Lab: Investigating Respiration with Chemical Indicators Lab; Unit 7, Lesson 1 Quick Lab: Making Compost
SC.8.L.18.3	Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.	**SE:** Unit 7, Lesson 2, pp. 428–439 **TE:** Unit 7, Lesson 2, pp. 554–567 **Student Interactive Digital Curriculum:** Unit 7, Lesson 2, Energy and Matter in Ecosystems **Teacher Digital Management Center:** Unit 7, Lesson 2, Energy and Matter in Ecosystems **Lab (Lab Manual):** Unit 7, Lesson 2 Quick Lab: Model the Carbon Cycle
SC.8.L.18.4	Cite evidence that living systems follow the Laws of Conservation of Mass and Energy.	**SE:** Unit 7, Lesson 2, pp. 428–439 **TE:** Unit 7, Lesson 2, pp. 554–567 **Student Interactive Digital Curriculum:** Unit 7, Lesson 2, Energy and Matter in Ecosystems **Teacher Digital Management Center:** Unit 7, Lesson 2, Energy and Matter in Ecosystems

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SC.8.N.1.1	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	**SE:** Unit 1, Lesson 3, pp. 26–37; Unit 1 STEM, pp. 74–77; Unit 2, Lesson 1, pp. 86–95; Unit 3 Think Science, pp. 126–127; Unit 3, Lesson 6, pp. 184-197; Unit 4, Lesson 3, pp. 230–239; Unit 6, Lesson 2, pp. 322–335; Unit 6, STEM, pp. 350–351; Unit 6, Lesson 4, 354–363; Unit 7, Lesson 1, pp. 414–425; Unit 7 Think Science, pp. 426–427; Unit 7, Lesson 2, pp. 428–439; Unit 7 STEM, pp. 440–443 **TE:** Unit 1, Lesson 3, pp. 42–55; Unit 1, Lesson STEM, pp. 100–103; Unit 2, Lesson 1, pp. 116–128; Unit 3, Think Science, pp. 178–179; Unit 3, Lesson 6, pp. 244–259; Unit 4, Lesson 3, pp. 306–319; Unit 6, Lesson 2, pp. ; Unit 6 STEM, pp. 460–463; Unit 6, Lesson 4, 464–476; Unit 7, Lesson 1, pp. 538–551; Unit 7 Think Science, pp. 552–553; Unit 7, Lesson 2, pp. 554–567; Unit 7 STEM, pp. 567–571 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, STEM: Analyzing Water Power; Unit 2, Lesson 1, Structure of the Universe; Unit 3 Think Science: Mean, Median, Mode, and Range; Unit 3, Lesson 6, Small Bodies in the Solar System; Unit 4, Lesson 3, Earth's Tides; Unit 6, Lesson 2, Properties of Matter; Unit 6 STEM: Engineering Design Process; Unit 6, Lesson 4, States of Matter; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration; Unit 7 Think Science: Interpreting Circle Graphs; Unit 7, Lesson 2, Energy and Ecosystems; Unit 7 STEM: Design an Ecosystem **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, STEM: Analyzing Water Power; Unit 2, Lesson 1, Structure of the Universe; Unit 3 Think Science: Mean, Median, Mode, and Range; Unit 3, Lesson 6, Small Bodies in the Solar System; Unit 4, Lesson 3, Earth's Tides; Unit 6, Lesson 2, Properties of Matter; Unit 6 STEM: Engineering Design Process; Unit 6, Lesson 4, States of Matter; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration; Unit 7 Think Science: Interpreting Circle Graphs; Unit 7, Lesson 2, Energy and Ecosystems; Unit 7 STEM: Design an Ecosystem Many labs address this benchmark, including the following: **Labs (Lab Manual):** Unit 1 Exploration Lab: Identifying Plant Needs; Unit 1, Lesson 3 Quick Lab: Growing Microorganisms; Unit 2 Exploration Lab: Exploring the Relationship Between Mass and Shape; Unit 2 Exploration Lab: Star Colors and Temperatures; Unit 2, Lesson 2 Quick Lab: Star Graphing; Unit 3, Lesson 2 Quick Lab: Gravity's Effect; Unit 4 Exploration Labs: What the Moon Orbits; Unit 6 Exploration Lab: Comparing Buoyancy; Unit 6 Exploration Lab: Identifying Unknown Samples; Unit 7 Exploration Lab: Conservation of Mass
SC.8.N.1.2	Design and conduct a study using repeated trials and replication.	**SE:** Unit 1, Lesson 3, pp. 26–37; Unit 4 STEM, pp. 24-–244 **TE:** Unit 1, Lesson 3, pp. 42–55; Unit 4 STEM, pp. 320–323 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigation; Unit 4 STEM: Harnessing Tidal Energy **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigation; Unit 4 STEM: Harnessing Tidal Energy **Lab (Lab Manual):** Unit 1, Lesson 3 Quick Lab: Growing Microorganisms; Unit 6 Exploration Lab: Change of Pace
SC.8.N.1.3	Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim.	**SE:** Unit 1, Lesson 2, pp. 16–25; Unit 4 STEM, pp. 240–244; Unit 5 Think Science, pp. 282–283 **TE:** Unit 1, Lesson 2, pp. 28–41; Unit 4 STEM, pp. 320–323; Unit 5 Think Science, pp. 372–373 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 4 STEM: Harnessing Tidal Energy; Unit 5 Think Science: Testing and Modifying Theories **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 4 STEM: Harnessing Tidal Energy; Unit 5 Think Science: Testing and Modifying Theories **Labs (Lab Manual):** Unit 1, Lesson Quick Lab: Does the Evidence Support the Explanation; Unit 1, Lesson 2 Quick Lab: Creating a Timeline of a Theory; Unit 6 Exploration Lab: Comparing Buoyancy **Virtual Lab(s):** Unit 1, Lesson 5: Scientists at Work

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SC.8.N.1.4	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	**SE:** Unit 1, Lesson 3, pp. 26–37; Unit 1 Think Science, pp. 38–39; Unit 3, Lesson 1, pp. 116–125; Unit 3, Lesson 2, 128–141 **TE:** Unit 1, Lesson 3, pp. 42–55; Unit 1 Think Science, pp. 56–57; Unit 3, Lesson 1, pp. 164–176; Unit 3, Lesson 2, 180–194 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations; Unit 1 Think Science: Supporting Hypotheses; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 3, Lesson 2, Gravity and the Solar System **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigations; Unit 1 Think Science: Supporting Hypotheses; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 3, Lesson 2, Gravity and the Solar System **Labs (Lab Manual):** Unit 1, Lesson 3 Quick Lab: Revising Your Hypothesis; Unit 6, Lesson 1 Quick Lab: How Much Mass **Virtual Lab(s):** Unit 1, Lesson 5: Scientists at Work; Unit 6, Lesson 3: Change of Pace
SC.8.N.1.5	Analyze the methods used to develop a scientific explanation as seen in different fields of science.	**SE:** Unit 1, Lesson 2, pp. 16–25; Unit 1, Lesson 3, pp. 26–37; Unit 1, Lesson 4, pp. 40–51; Unit 1, Lesson 6, pp. 62–73; Unit 1 STEM, pp. 73–77; Unit 2, Lesson 1, pp. 86–95; Unit 2 People in Science, pp. 96–97; Unit 3, Lesson 1, pp. 116–125; Unit 3, Lesson 2, pp. 128–141; Unit 3, Lesson 4, pp. 154–167; Unit 5, Lesson 2, pp. 268–281; Unit 6, Lesson 7, pp. 392–403 **TE:** Unit 1, Lesson 2, pp, 28–41; Unit 1, Lesson 3, pp. 42–55; Unit 1, Lesson 4, pp. 58–71; Unit 1, Lesson 6, pp. 86–99; Unit 1 STEM, pp. 100–103; Unit 2, Lesson 1, pp. 116–128; Unit 2 People in Science, pp. 130–131; Unit 3, Lesson 1, pp. 164–176; Unit 3, Lesson 2, pp. 180–194; Unit 3, Lesson 4, pp. 210–225; Unit 5, Lesson 2, pp. 356–370; Unit 6, Lesson 7, pp. 510–523 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 4, Representing Data; Unit 1, Lesson 6, The Engineering Design Process; Unit 1 STEM: Analyzing Water Power; Unit 2, Lesson 1, Structure of the Universe; Unit 2 People in Science: Hakeem Oluseyi; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 3, Lesson 2, Gravity and the Solar System; Unit 4, Lesson 4, The Terrestrial Planets; Unit 5, Lesson 2, Technology for Space Exploration; Unit 6, Lesson 7, The Periodic Table **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 4, Representing Data; Unit 1, Lesson 6, The Engineering Design Process; Unit 1 STEM: Analyzing Water Power; Unit 2, Lesson 1, Structure of the Universe; Unit 2 People in Science: Hakeem Oluseyi; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 3, Lesson 2, Gravity and the Solar System; Unit 4, Lesson 4, The Terrestrial Planets; Unit 5, Lesson 2, Technology for Space Exploration; Unit 6, Lesson 7, The Periodic Table Many labs address this benchmark, including the following: **Lab(s):** Unit 1, Lesson 2 Quick Lab: Does the Evidence Support the Explanation?; Unit 2, Lesson 2 Quick Lab: Using a Sky Map; Unit 2 Field Lab: Investigating Parallax; Unit 5 STEM/Field Lab: Making a Telescope; Unit 6 Exploration Lab: Identifying Unknown Samples; Unit 6, Lesson 5 Quick Lab: The pH Scale; Unit 6, Lesson 7 Quick Lab: rearranging the Periodic Table; Unit 7, Lesson 1 Quick Lab: reversing Equations; Unit 7, Lesson 1 Quick Lab: Investigating Respiration with Chemical Indicators **Virtual Lab(s):** Unit 1, Lesson 5: Scientists at Work

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SC.8.N.1.6	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	**SE:** Unit 1, Lesson 1, pp. 4–15; Unit 1 Lesson 3, pp. 26–37; Unit 1, Lesson 4, pp. 40–51; Unit 1, Lesson 6, pp. 62–73; Unit 1 STEM, pp. 73–77; Unit 2, Lesson 2, pp. 98–107; Unit 3, Lesson 1, pp. 116–125; Unit 3, Lesson 2, pp. 128–141; Unit 4 Think Science, pp. 228–229; Unit 6 Think Science, pp. 320–321; Unit 6, Lesson 3, pp. 338–349, Unit 6 STEM, pp. 350–353; **TE:** Unit 1, Lesson 1, pp. 14–27; Unit 1, Lesson 3, pp. 42–55; Unit 1, Lesson 4, pp. 58–71; Unit 1, Lesson 6, pp. 86–99; Unit 1 STEM, pp. 100–103; Unit 2, Lesson 2, pp. 132–144; Unit 3, Lesson 1, pp. 164–176; Unit 3, Lesson 2, pp. 180–194; Unit 4 Think Science, pp. 304–305; Unit 6 Think Science, pp. 426–427; Unit 6, Lesson 3, pp. 446–459; Unit 6 STEM, pp. 460–463 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 4, Representing Data; Unit 1, Lesson 6, The Engineering Design Process; Unit 1 STEM: Analyzing Water Power; Unit 2, Lesson 2, Stars; Unit 3, Lesson 1, Historical Models of the Solar System' Unit 3, Lesson 2, Gravity and Solar System; Unit 4 Think Science: Analyzing Methods of Scientific Explanation; Unit 6 Think Science: Determining Relevant Information; Unit 6, Lesson 3, Physical and Chemical Changes; Unit 6 STEM: Building an Insulated Cooler; **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 4, Representing Data; Unit 1, Lesson 6, The Engineering Design Process; Unit 1 STEM: Analyzing Water Power; Unit 2, Lesson 2, Stars; Unit 3, Lesson 1, Historical Models of the Solar System' Unit 3, Lesson 2, Gravity and Solar System; Unit 4 Think Science: Analyzing Methods of Scientific Explanation; Unit 6 Think Science: Determining Relevant Information; Unit 6, Lesson 3, Physical and Chemical Changes; Unit 6 STEM: Building an Insulated Cooler; **Lab(s):** Unit 1, Lesson 1 Quick Lab: Evaluate Scientific Investigations; Unit 1, Lesson 1 Quick Lab: Inventor Trading Cards; Unit 1, Lesson 3 Quick Lab: Revising Your Hypothesis; Unit 1, Lesson 4 Quick Lab: Atomic Model; Unit 1, Lesson 4 Quick Lab: Models of Types of Solids; Unit 3, Lesson 1 Quick Lab: The Geocentric Model of the Solar System; Unit 3, Lesson 2 Quick Lab: Orbital Ellipses; Unit 3, Lesson 6 Quick Lab: Orbits of Comets; Unit 4, Lesson 2 Quick Lab: Moon Phases; Unit 4, Lesson 2 Quick Lab: Lunar Eclipse; Unit 4, Lesson 3 Quick Lab: Tidal Math; Unit 7, Lesson 2 Quick Lab: Body Size and Temperature
SC.8.N.2.1	Distinguish between scientific and pseudoscientific ideas.	**SE:** Unit 1, Lesson 1, pp. 4–15; Unit 6 Think Science, pp. 320–321; Unit 6 Think Science, pp. 320–321 **TE:** Unit 1, Lesson 1, pp. 14–27; Unit 6 Think Science, pp. 426–427; Unit 6 Think Science, pp. 426–427 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 6 Think Science: Determining Relevant Information **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 6 Think Science: Determining Relevant Information **Labs (Lab Manual):** Unit 1 Exploration Lab: Science-Based Commercials; Unit 1, Lesson 1 Quick Lab: Evaluate Scientific Investigations
SC.8.N.2.2	Discuss what characterizes science and its methods.	**SE:** Unit 1, Lesson 1, pp. 4–15; Unit 3, Lesson 2, pp. 128–141; Unit 3 People in Science, pp. 168–169; Unit 4 Think Science, pp. 228–229 **TE:** Unit 1, Lesson 1, pp. 14–27; Unit 3, Lesson 2, pp. 180–194; Unit 3 People in Science, pp. 226–227; Unit 4 Think Science, pp. 304–305 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 3, Lesson 2, Gravity and the Solar System; Unit 3 People in Science: A. Wesley Ward; Unit 4 Think Science: Analyzing Methods of Scientific Explanation **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 3, Lesson 2, Gravity and the Solar System; Unit 3 People in Science: A. Wesley Ward; Unit 4 Think Science: Analyzing Methods of Scientific Explanation **Labs (Lab Manual):** Unit 1, Lesson 1 Quick Lab: Inventor Trading Cards; Unit 1 Exploration Lab: Science-Based Commercials; Unit 3, Lesson 1 Quick Lab: The Heliocentric Model of the Solar System; Unit 6, Lesson 2 Quick Lab: Will It Sink or Will It Float?; Unit 6, Lesson 3 Quick Lab: Physical or Chemical Change?; Unit 6, Lesson 3 Quick Lab: What's in a Change?; Unit 6, Lesson 6 Quick Lab: Atomic and Subatomic Particles; Unit 6, Lesson 7 Quick Lab: Recognizing Patterns; Unit 7, Lesson 1 Quick Lab: Making Compost

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SC.8.N.3.1	Select models useful in relating the results of their own investigations.	**SE:** Unit 1, Lesson 4, pp. 40–51; Unit 2, Lesson 1, pp. 86–95; Unit 2, Lesson 2, pp. 98–107; Unit 6, Lesson 4, pp. 354–363; Unit 7, Lesson 2, pp. 428–439 **TE:** Unit 1, Lesson 4, pp. 58–71; Unit 2, Lesson 1, pp. 116–128; Unit 2, Lesson 2, pp. 132–144; Unit 6, Lesson 4, pp. 464–476; Unit 7, Lesson 2, pp. 554–567 **Student Interactive Digital Curriculum:** Unit 1, Lesson 4, Representing Data; Unit 2, Lesson 1, Structure of the Universe; Unit 2, Lesson 2, Stars; Unit 6, Lesson 4, States of Matter; Unit 7, Lesson 2, Energy and Matter in Ecosystems **Teacher Digital Management Center:** Unit 1, Lesson 4, Representing Data; Unit 2, Lesson 1, Structure of the Universe; Unit 2, Lesson 2, Stars; Unit 6, Lesson 4, States of Matter; Unit 7, Lesson 2, Energy and Matter in Ecosystems **Labs (Lab Manual):** Unit 2, Lesson 1 Quick Lab: Modeling the Expanding Universe; Unit 2, Lesson 2 Quick Lab: Modeling Star Magnitudes; Unit 2 Exploration Lab: Star Colors and Temperatures; Unit 3 Exploration Lab: Weights on Different Celestial Bodies; Unit 3 Exploration Lab: Create a Model of the Sun; Unit 4 Exploration/STEM Lab: Why the Moon Orbits; Unit 5, Lesson 1 Quick Lab: A Model of the Expanding Universe **Virtual Lab(s):** Unit 2, Lesson 2: Using Color to Measure Temperature
SC.8.N.3.2	Explain why theories may be modified but are rarely discarded.	**SE:** Unit 1, Lesson 2, pp. 16–25; Unit 3, Lesson 1, pp. 116–125; Unit 5 Think Science, pp. 282–283 **TE:** Unit 1, Lesson 2, pp. 28–41; Unit 3, Lesson 1, pp. 164–176; Unit 5 Think Science, pp. 372–373 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 5 Think Science: Testing and Modifying Theories **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 5 Think Science: Testing and Modifying Theories **Lab (Lab Manual):** Unit 1, Lesson 2 Quick Lab: Creating a Timeline of a Theory **Virtual Lab(s):** Unit 1, Lesson 5: Scientists at Work
SC.8.N.4.1	Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.	**SE:** Unit 1, Lesson 5, pp. 52–61; Unit 3 Focus on Florida, pp. 182–183; Unit 5 People in Science, pp. 266–267; Unit 5, Lesson 2, pp. 268–281; Unit 5, Lesson 3, pp. 284–297; Unit 6 People in Science, pp. 336–337; **TE:** Unit 1, Lesson 5, pp. 72–84; Unit 3 Focus on Florida, pp. 242–243; Unit 5 People in Science, pp. 354–355; Unit 5, Lesson 2, pp. 356–370; Unit 5 , Lesson 3, pp. 374–388; Unit 6 People in Science, pp. 444–445 **Student Interactive Digital Curriculum:** Unit 1, Lesson 5, Science and Society; Unit 3 Focus on Florida: Florida Stargazing; Unit 5 People in Science: Sandra Faber; Unit 5, Lesson 2, Technology for Space Exploration; Unit 5, Lesson 3, Space Exploration and Florida; Unit 6 People in Science: Shirley Ann Jackson **Teacher Digital Management Center:** Unit 1, Lesson 5, Science and Society; Unit 3 Focus on Florida: Florida Stargazing; Unit 5 People in Science: Sandra Faber; Unit 5, Lesson 2, Technology for Space Exploration; Unit 5, Lesson 3, Space Exploration and Florida; Unit 6 People in Science: Shirley Ann Jackson **Lab(s):** Unit 1, Lesson 5 Quick Lab: Science in the News; Unit 5, Lesson 3 Quick Lab: Florida Economics without NASA **Virtual Lab(s):** Unit #, Lesson #: Title of Virtual Lab; Unit #, Lesson #: Title of Virtual Lab

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SC.8.N.4.2	Explain how political, social, and economic concerns can affect science, and vice versa.	**SE:** Unit 1, Lesson 5, pp. 52–61; Unit 3 Focus on Florida, pp. 182–183; Unit 5, Lesson 1, pp. 252–265; Unit 5, Lesson 2, pp. 268–281; Unit 5, Lesson 3, 284–297; Unit 6 People in Science, pp. 336–337 **TE:** Unit 1, Lesson 5, pp. 72–84; Unit 3 Focus on Florida, pp .242–243; Unit 5, Lesson 1, pp. 338–352; Unit 5, Lesson 2, pp. 356–370; Unit 5, Lesson 3, 374–388; Unit 6 People in Science, pp. 428–442 **Student Interactive Digital Curriculum:** Unit 1, Lesson 5, Science and Society; Unit 3, Focus on Florida: Florida Stargazing; Unit 5, Lesson 1, Images from Space; Unit 5, Lesson 2, Technology for Space Exploration; Unit 5, Lesson 3, Space Exploration and Florida; Unit 6 People in Science: Shirley Ann Jackson **Teacher Digital Management Center:** Unit 1, Lesson 5, Science and Society; Unit 3, Focus on Florida: Florida Stargazing; Unit 5, Lesson 1, Images from Space; Unit 5, Lesson 2, Technology for Space Exploration; Unit 5, Lesson 3, Space Exploration and Florida; Unit 6 People in Science: Shirley Ann Jackson **Lab(s):** Unit 1, Lesson 5 Quick Lab: The Science of Product Design; Unit 1, Lesson 6 Quick Lab: Designing a Consumer Product; Unit 5, Lesson 3 Quick Lab: Florida Economics without NASA
SC.8.P.8.1	Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.	**SE:** Unit 6, Lesson 4, pp. 354–363 **TE:** Unit 6, Lesson 4, pp. 464–476 **Student Interactive Digital Curriculum:** Unit 6, Lesson 4, States of Matter **Teacher Digital Management Center:** Unit 6, Lesson 4, States of Matter **Labs (Lab Manual):** Unit 6, Lesson 4 Quick Lab: Boiling Water Without Heating It; Unit 6, Lesson 4 Quick Lab: Bottle of Vapor; Unit 6, Lesson 4 Quick Lab: Changing Volumes
SC.8.P.8.2	Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass.	**SE:** Unit 6, Lesson 1, pp. 306–319 **TE:** Unit 6, Lesson 1, pp. 410–424 **Student Interactive Digital Curriculum:** Unit 6, Lesson 1, Introduction to Matter **Teacher Digital Management Center:** Unit 6, Lesson 1, Introduction to Matter **Labs (Lab Manual):** Unit 6, Lesson 1 Quick Lab: Mass and Weight; Unit 6, Lesson 1 Quick Lab: How Much Mass?
SC.8.P.8.3	Explore and describe the densities of various materials through measurement of their masses and volumes.	**SE:** Unit 6, Lesson 1, pp. 306–319 **TE:** Unit 6, Lesson 1, pp. 410–424 **Student Interactive Digital Curriculum:** Unit 6, Lesson 1, Introduction to Matter **Teacher Digital Management Center:** Unit 6, Lesson 1, Introduction to Matter **Lab (Lab Manual):** Unit 6 Exploration Lab: Comparing Buoyancy
SC.8.P.8.4	Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.	**SE:** Unit 6, Lesson 2, pp. 322–335 **TE:** Unit 6, Lesson 2, pp. 428–442 **Student Interactive Digital Curriculum:** Unit 6, Lesson 2,Properties of Matter **Teacher Digital Management Center:** Unit 6, Lesson 2, Properties of Matter **Labs (Lab Manual):** Unit 6 Exploration Lab: Identifying Unknown Samples; Unit 6, Lesson 2 Quick Lab: Will It Sink or Float?; Unit 6, Lesson 2 Quick Lab: Natural vs. Synthetic Fibers; Unit 6, Lesson 2 Quick Lab: Growing Crystals **Virtual Lab(s):** Unit 6, Lesson 2: Determining Density

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SC.8.P.8.5	Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.	**SE:** Unit 6, Lesson 5, pp. 364–377 **TE:** Unit 6, Lesson 5, pp. 478–492 **Student Interactive Digital Curriculum:** Unit 6, Lesson 5, Pure Substances and Mixtures **Teacher Digital Management Center:** Unit 6, Lesson 5, Pure Substances and Mixtures **Lab (Lab Manual):** Unit 6, Lesson 5 Quick Lab: Comparing Two Elements
SC.8.P.8.6	Recognize that elements are grouped in the periodic table according to similarities of their properties.	**SE:** Unit 6, Lesson 7, pp. 392–403 **TE:** Unit 6, Lesson 7, pp. 510–523 **Student Interactive Digital Curriculum:** Unit 6, Lesson 7, The Periodic Table **Teacher Digital Management Center:** Unit 6, Lesson 7, The Periodic Table **Labs (Lab Manual):** Unit 6, Lesson 7 Quick Lab: Predicting Properties; Unit 6, Lesson 7 Quick Lab: Rearranging the Periodic Table; Unit 6, Lesson 7 Quick Lab: Recognizing Patterns
SC.8.P.8.7	Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).	**SE:** Unit 6, Lesson 6, pp. 378–389 **TE:** Unit 6, Lesson 6, pp. 496–507 **Student Interactive Digital Curriculum:** Unit 6, Lesson 6, The Atom **Teacher Digital Management Center:** Unit 6, Lesson 6, The Atom **Labs (Lab Manual):** Unit 6, Lesson 6 Quick Lab: Atoms and Subatomic Particles; Unit 6, Lesson 6 Quick Lab: A Model Atom
SC.8.P.8.8	Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts.	**SE:** Unit 6, Lesson 5, pp. 364–377 **TE:** Unit 6, Lesson 5, pp. 478–492 **Student Interactive Digital Curriculum:** Unit 6, Lesson 5, Pure Substances and Mixtures **Teacher Digital Management Center:** Unit 6, Lesson 5, Pure Substances and Mixtures **Lab (Lab Manual):** Unit 6, Lesson 5 Quick Lab: The pH Scale
SC.8.P.8.9	Distinguish among mixtures (including solutions) and pure substances.	**SE:** Unit 6, Lesson 5, pp. 364–377; Unit 6 Focus on Florida, pp. 390–391 **TE:** Unit 6, Lesson 5, pp. 478–492; Unit 6 Focus on Florida, pp. 508–509 **Student Interactive Digital Curriculum:** Unit 6, Lesson 5, Pure Substances and Mixtures; Unit 6 Focus on Florida: Mixtures in Florida **Teacher Digital Management Center:** Unit 6, Lesson 5, Pure Substances and Mixtures; Unit 6 Focus on Florida: Mixtures in Florida
SC.8.P.9.1	Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes.	**SE:** Unit 6, Lesson 3, pp. 338–349 **TE:** Unit 6, Lesson 3, pp. 446–459 **Student Interactive Digital Curriculum:** Unit 6, Lesson 3, Physical and Chemical Changes **Teacher Digital Management Center:** Unit 6, Lesson 3, Physical and Chemical Changes **Lab (Lab Manual):** Unit 6, Lesson 3 Quick Lab: What's in a Change? **Virtual Lab(s):** Unit 6, Lesson 3: Change of Pace

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SC.8.P.9.2	Differentiate between physical changes and chemical changes.	**SE:** Unit 6, Lesson 3, pp. 338–349 **TE:** Unit 6, Lesson 3, pp. 446–459 **Student Interactive Digital Curriculum:** Unit 6, Lesson 3, Physical and Chemical Changes **Teacher Digital Management Center:** Unit 6, Lesson 3, Physical and Chemical Changes **Labs (Lab Manual):** Unit 6, Lesson 3 Quick Lab: Physical or Chemical Change?; Unit 6, Lesson 3 Quick Lab: Properties of Combined Substances
SC.8.P.9.3	Investigate and describe how temperature influences chemical changes.	**SE:** Unit 6, Lesson 3, pp. 338–349 **TE:** Unit 6, Lesson 3, pp. 446–459 **Student Interactive Digital Curriculum:** Unit 6, Lesson 3, Physical and Chemical Changes **Teacher Digital Management Center:** Unit 6, Lesson 3, Physical and Chemical Changes **Virtual Lab(s):** Unit 6, Lesson 3: Change of Pace
LAFS.68.RST.1.1	Cite specific textual evidence to support analysis of science and technical texts.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 2, Lesson 1, p. 89; Unit 3, Lesson 1, p. 119; Unit 6, Lesson 2, p. 326; Unit 6, Lesson 3 STEM, pp. 350–353 **TE:** Unit 2, Lesson 1, p. 125; Unit 3, Lesson 1, p. 173; Unit 6, Lesson 2, p. 438; Unit 6, Lesson 3 STEM, pp. 460–463 **Student Interactive Digital Curriculum:** Unit 2, Lesson 1, Structure of the Universe; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 6, Lesson 2, Properties of Matter; Unit 6, Lesson 3 Stem: Building an Insulated Cooler **Teacher Digital Management Center:** Unit 2, Lesson 1, Structure of the Universe; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 6, Lesson 2, Properties of Matter; Unit 6, Lesson 3 Stem: Building an Insulated Cooler
LAFS.68.RST.1.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.	This standard is covered throughout the program. The following are some of the many examples: **TE:** Unit 1, Lesson 1, p. 23; Unit 3, Lesson 2, p. 193; Unit 5, Lesson 1, p. 347; Unit 5, Lesson 3, p. 385 **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 3, Lesson 2, Gravity and the Solar System; Unit 5, Lesson 1, Images from Space; Unit 5, Lesson 3, Space Exploration and Florida
LAFS.68.RST.1.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 4, Lesson 3 STEM, pp. 240–243 **TE:** Unit 1 Lesson 1, p. 17; Unit 4, Lesson 3 STEM, pp. 320–323; Unit 6, Lesson 4, p. 466 **Student Interactive Digital Curriculum:** Unit 4, Lesson 3 STEM: Harnessing Tidal Energy **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 4, Lesson 3 STEM: Harnessing Tidal Energy; Unit 6, Lesson 4, States of Matter
LAFS.68.RST.2.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 1, p. 5; Unit 3, Lesson 1, p. 117; Unit 6, Lesson 1, p. 307; Unit 7, Lesson 2, p. 429 **TE:** Unit 1, Lesson 1, p. 22; Unit 3, Lesson 1, p. 172; Unit 6, Lesson 1, p. 418; Unit 7, Lesson 2, p. 562 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 3, Lesson 1, Gravity and the Solar System; Unit 7, Lesson 2, Energy and Matter in Ecosystems **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 3, Lesson 1, Gravity and the Solar System; Unit 7, Lesson 2, Energy and Matter in Ecosystems

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LAFS.68.RST.2.5	Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.	**TE:** Unit 3, Lesson 3, p. 205; Unit 5, Lesson 1 People in Science, p. 355; Unit 6, Lesson 6 Focus on Florida, p. 509; Unit 7, Lesson 1, p. 547 **Teacher Digital Management Center:** Unit 3, Lesson 3, The Sun; Unit 5, Lesson 1 People in Science: Sandra Faber; Unit 6, Lesson 6 Focus on Florida: Mixtures in Florida; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration
LAFS.68.RST.2.6	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	**TE:** Unit 1, Lesson 1, p. 21 (see Alternative Assessment "Analysis" task); Unit 2, Lesson 1 (Alternative Assessment), p. 123 Within the Lab Manual are Quick Labs, STEM Labs, and Exploration Labs students can use to analyze the author's purpose. For example: **Unit 1, Lesson 2 Quick Lab:** *Create a Time Line of a Theory*
LAFS.68.RST.3.7	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 1, p. 14; Unit 1, Lesson 4, pp. 40–51; Unit 5, Lesson 3, pp. 294–295 **TE:** Unit 1, Lesson 1, p. 27; Unit 1, Lesson 4, pp. 66–71; Unit 5, Lesson 3, p. 387 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 1, Lesson 4, Representing Data; Unit 5, Lesson 3, Space Exploration and Florida **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?; Unit 1, Lesson 4, Representing Data; Unit 5, Lesson 3, Space Exploration and Florida
LAFS.68.RST.3.8	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.	**SE:** Unit 1, Lesson 1, p. 7, 8, 13; Unit 1, Lesson 4, p. 50 **TE:** Unit 1, Lesson 1, p. 23, 24, 26 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 1, Lesson 4, Representing Data **Teacher Digital Management Center:** Unit 1, Lesson 1, What is Science?
LAFS.68.RST.3.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	**SE:** Unit 1, Lesson 3, p. 35 **TE:** Unit 1, Lesson 3, p. 54 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigations
LAFS.68.RST.4.10	By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 2, p. 22; Unit 1, Lesson 3, p. 32 ("Think Outside the Book") **TE:** Unit 1, Lesson 2, p. 22; Unit 1, Lesson 3, p. 53 ("Think Outside the Book"); Unit 1, Lesson 2, p. 33

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LAFS.68.WHST.1.1	Write arguments focused on *discipline-specific content.* a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 3 Citizen Science, p. 115; Unit 4, Lesson 3 STEM, pp. 240–243; Unit 7, Lesson 2 STEM, pp. 440–443 **TE:** Unit 3 Citizen Science, p. 163; Unit 4, Lesson 3 STEM, pp. 320–323; Unit 7, Lesson 2 STEM, pp. 568–571 **Student Interactive Digital Curriculum:** Unit 3 Citizen Science: Solar Systems Discoveries; Unit 4, Lesson 3 STEM: Harnessing Tidal Energy; Unit 7, Lesson 2 STEM: Design an Ecosystem **Teacher Digital Management Center:** Unit 3 Citizen Science: Solar Systems Discoveries; Unit 4, Lesson 3 STEM: Harnessing Tidal Energy; Unit 7, Lesson 2 STEM: Design an Ecosystem
LAFS.68.WHST.1.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	This practice is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 6, p. 69; Unit 3, Lesson 1, p. 118; Unit 3, Lesson 6, p. 193 **TE:** Unit 1, Lesson 6, p. 97; Unit 3, Lesson 1, pp. 172-173; Unit 3, Lesson 6, p. 256 **Student Interactive Digital Curriculum:** Unit 1, Lesson 6, The Engineering Design; Unit 3, Lesson 1, Historical Models of the Solar System **Teacher Digital Management Center:** Unit 1, Lesson 6, The Engineering Design; Unit 3, Lesson 1, Historical Models of the Solar System

LAFS.68.WHST.2.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 3, p. 28; Unit 6, Lesson 3, p. 342;Unit 6, Lesson 4, p. 361; Unit 7, Lesson 1, p. 419 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations; Unit 6, Lesson 3, Physical and Chemical Changes; Unit 6, Lesson 4 States of Matter; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration
LAFS.68.WHST.2.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	**SE:** Unit 1, Lesson 2, pp. 22–23 **TE:** Unit 1, Lesson 2, p. 39 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge
LAFS.68.WHST.2.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 2, p. 22; Unit 6, Lesson 4, p. 361 **TE:** Unit 3, Lesson 5 Focus on Florida, p. 242; Unit 4, Lesson 2 Think Science, p. 304; Unit 5, Lesson 1 People in Science, p. 354; Unit 6, Lesson 4, p. 475 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 6, Lesson 4, States of Matter **Teacher Digital Management Center:** Unit 3, Lesson 5 Focus on Florida: Florida Stargazing; Unit 4, Lesson 2 Think Science: Analyzing Methods of Scientific Explanation; Unit 5, Lesson 1, People in Science: Sandra Faber; Unit 6, Lesson 4, States of Matter
LAFS.68.WHST.3.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 2, p. 22; Unit 1, Lesson 3, p. 32; Unit 3, Lesson 5, p. 177; Unit 6, Lesson 4, p. 361 **TE:** Unit 1, Lesson 2, p. 39; Unit 1, Lesson 3, p. 53; Unit 3, Lesson 5, p. 239; Unit 6, Lesson 4, p. 475 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 1, Lesson 3, Scientific Investigations; Unit 3, Lesson 5, The Gas Giant Planets; Unit 6, Lesson 4, States of Matter **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 1, Lesson 3, Scientific Investigations; Unit 3, Lesson 5, The Gas Giant Planets; Unit 6, Lesson 4, States of Matter
LAFS.68.WHST.3.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 3, p. 35; Unit 1, Lesson 5, p. 53; Unit 3, Lesson 1, p. 118; Unit 6, Lesson 4, p. 361 **TE:** Unit 1, Lesson 3, p. 54; Unit 1, Lesson 5, p. 80; Unit 3, Lesson 1, p. 173; Unit 6, Lesson 4, p. 475 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 5, Science and Society; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 6, Lesson 4, States of Matter **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 5, Science and Society; Unit 3, Lesson 1, Historical Models of the Solar System; Unit 6, Lesson 4, States of Matter
LAFS.68.WHST.3.9	Draw evidence from informational texts to support analysis reflection, and research.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 2, p. 21; Unit 4, Lesson 2, p. 221; Unit 5, Lesson 1, p. 257; Unit 7, Lesson 1, p. 423 **TE:** Unit 1, Lesson 2, p. 38; Unit 4, Lesson 2, p. 299; Unit 5, Lesson 1, p. 348; Unit 7, Lesson 1, p. 550 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 4, Lesson 2, Moon Phases and Eclipses; Unit 5, Lesson 1, Images from Space; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 4, Lesson 2, Moon Phases and Eclipses; Unit 5, Lesson 1, Images from Space; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration

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LAFS.68.WHST.4.10	Write routinely over extended time frames (time for 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.	This standard is covered throughout the program. The following are some of the many examples: SE: Unit 1, Lesson 2, p. 21; Unit 3, Lesson 5 Focus on Florida, p. 183; Unit 6, Lesson 3, p. 341; Unit 7 Citizen Science, p. 412 TE: Unit 1, Lesson 2, p. 38; Unit 3, Lesson 5 Focus on Florida, p. 243; Unit 6, Lesson 3, p. 455; Unit 7 Citizen Science, p. 537 **Student Interactive Digital Curriculum:** Unit 1, Lesson 2, Scientific Knowledge; Unit 3, Lesson 5 Focus on Florida: Florida Stargazing; Unit 6, Lesson 3, Physical and Chemical Changes; Unit 7 Citizen Science: It's Alive! **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 3, Lesson 5 Focus on Florida: Florida Stargazing; Unit 6, Lesson 3, Physical and Chemical Changes; Unit 7 Citizen Science: It's Alive!
LAFS.8.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 3, p. 27; Unit 1, Lesson 6, p. 63; Unit 2, Lesson 2, p. 105; Unit 6, Lesson 1, pp. 316–317 **TE:** Unit 1, Lesson 3, p. 50; Unit 1, Lesson 6, p. 94; Unit 2, Lesson 2, p. 143; Unit 6, Lesson 1, p. 423 **Student Interactive Digital Curriculum:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 6, The Engineering Design Process; Unit 2, Lesson 2, Stars; Unit 6, Lesson 1, Introductions to Matter **Teacher Digital Management Center:** Unit 1, Lesson 3, Scientific Investigations; Unit 1, Lesson 6, The Engineering Design Process; Unit 2, Lesson 2, Stars; Unit 6, Lesson 1, Introductions to Matter
LAFS.8.SL.1.2	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.	Within the Lab Manual are Quick Labs, STEM Labs, and Exploration Labs students can use to analyze the purpose. The following are some of the many examples: **SE:** Unit 1, Lesson 2, p. 22; Unit 1, Lesson 3, p. 32 ("Think Outside the Book") **TE:** Unit 1, Lesson 2, p. 22; Unit 1, Lesson 3, p. 53 ("Think Outside the Book"); Unit 1, Lesson 2, p. 33
LAFS.8.SL.1.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.	This standard is covered throughout the program. The following are some of the many examples: **SE:** Unit 1, Lesson 1, p. 13; Unit 4, Lesson 2, p. 221; Unit 6, Lesson 4, p. 361; Unit 7, Lesson 1, p. 421 **Student Interactive Digital Curriculum:** Unit 1, Lesson 1, What is Science?; Unit 4, Lesson 2, Moon Phases and Eclipses; Unit 6, Lesson 4, States of Matter; Unit 7, Lesson 1, Photosynthesis and Cellular Respiration

2016-2017 STATE OF FLORIDA INSTRUCTIONAL MATERIALS ADOPTION
STANDARDS ALIGNMENT
COURSE STANDARDS/BENCHMARKS (Form IM7)

LAFS.8.SL.2.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	This standard is covered throughout the program. The following are some of the many examples: **TE:** Unit 1, Lesson 2, p. 39; Unit 2, Lesson 1 People in Science, p. 130; Unit 3, Lesson 4 People in Science, p. 226; Unit 5, Lesson 1 People in Science, p. 354; Unit 6, Lesson 6 Focus on Florida, p. 508 **Teacher Digital Management Center:** Unit 1, Lesson 2, Scientific Knowledge; Unit 2, Lesson 1 People in Science: Hakeem Oluseyi; Unit 3, Lesson 4 People in Science: A. Wesley Ward; Unit 5, Lesson 1 People in Science: Sandra Faber; Unit 6, Lesson 6 Focus in Florida: Mixtures in Florida
LAFS.8.SL.2.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	This standard is covered throughout the program. The following are some of the many examples: **TE:** Unit 3, Lesson 4 People in Science, p. 226; Unit 4, Lesson 2 Think Science, p. 304; Unit 6, Lesson 2 People in Science, p. 444; Unit 7, Lesson 2 STEM, p. 571 **Teacher Digital Management Center:** Unit 3, Lesson 4 People in Science: A. Wesley Ward; Unit 4, Lesson 2 Think Science: Analyzing Methods of Scientific Explanation; Unit 6, Lesson 2 People in Science: Shirley Ann Jackson; Unit 7, Lesson 2 STEM: Design an Ecosystem
MAFS.8.F.2.5	Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	**SE:** Unit 1, Lesson 4, pp. 42–47 **TE:** Unit 1, Lesson 4, pp. 67–69 **Student Interactive Digital Curriculum:** Unit 1, Lesson 4, Representing Data **Teacher Digital Management Center:** Unit 1, Lesson 4, Representing Data
MAFS.8.G.3.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	**SE:** Unit 6, Lesson 1, pp. 312–313 **TE:** Unit 6, Lesson 1, p. 421 **Student Interactive Digital Curriculum:** Unit 6, Lesson 1, Introduction to Matter **Teacher Digital Management Center:** Unit 6, Lesson 1, Introduction to Matter
ELD.K12.ELL.SC.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.	In the English Language Learners activities in every lesson, students communicate information, ideas, and concepts in the content area of Science. See, for example, the following: **TE:** Unit 1, Lesson 5, p. 77; Unit 2, Lesson 1, p. 121; Unit 3, Lesson 6, p. 249; Unit 6, Lesson 4, p. 469 **Teacher Digital Management Center:** Unit 1, Lesson 5, Science and Society; Unit 2, Lesson 1, Structure of the Universe; Unit 3, Lesson 6, Small bodies in the Solar System; Unit 6, Lesson 4, States of Matter
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.	In the English Language Learners activities in every lesson, students communicate information, ideas, and concepts in the content area of Science. See, for example, the following: **TE:** Unit 1, Lesson 6 STEM, p. 103; Unit 4, Lesson 3 STEM, p. 323; Unit 6, Lesson 3 STEM, p. 463; Unit 7, Lesson 2 STEM, p. 571 **Teacher Digital Management Center:** Unit 1, Lesson 6 STEM: Analyzing Water Power; Unit 4, Lesson 3 STEM: Harnessing Tidal Power; Unit 6, Lesson 3 STEM: Building an Insulated Cooler; Unit 7, Lesson 2 STEM: Design an Ecosystem