Lab-Aids Correlations for
Florida State Academic Standards for Science
Course 2001010 Earth and Space Science

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This document is intended to show how the SEPUP *Issues and Science, 3rd edition* materials align with the Florida State Academic Standards for Science for the following Florida course: 2001010 Earth and Space Science.

ABOUT OUR PROGRAMS
Lab-Aids has maintained its home offices and operations in Ronkonkoma, NY, since 1963. We publish over 200 kits and core curriculum programs to support science teaching and learning, grades 6-12. All core curricula support an inquiry-driven pedagogy, with support for literacy skill development and with assessment programs that clearly show what students know and are able to do as a result of program use. All programs have extensive support for technology and feature comprehensive teacher support. For more information please visit www.lab-aids.com .

SEPUP
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This correlation is intended to show selected locations in the *Issues and Science, 3rd edition* units that support the Florida State Academic Standards for Science. It is not an exhaustive list; other locations may exist that are not listed here.

Middle School Suggested Scope and Sequence (this course highlighted)

Earth Science Units **Course:** 2001010	**Life Science Units** **Course:** 2000010	**Physical Science Units** **Course: 2003010**
Land, Water, and Human Interactions	Ecology	Chemistry of Materials
Geological Processes	Body Systems	Chemical Reactions
Earth's Resources	From Cells to Organisms	Energy
Weather and Climate	Reproduction	Force and Motion
Solar System and Beyond	Evolution	Fields and Interactions
	Biomedical Engineering	Waves

FLORIDA COURSE TITLE: Earth/Space Science
COURSE CODE: 2001010

BENCHMARK CODE	EARTH/SPACE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN MAJOR TOOL See the Student Book, Teacher Edition, and Teacher Resources books for activities referenced.
SC.6.E.6.1	Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition.	Land, Water, and Human Interactions 7, 12, 13
SC.6.E.6.2	Recognize that there are a variety of different landforms on Earth's surface such coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.	Land, Water, and Human Interactions 1, 10, 11, 12, 13, 14, 15, 16 Geological Processes 5, 10, 11 Focus Lesson: Local Geography and Natural Hazards
SC.6.E.7.1	Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system.	Geological Processes 14
SC.6.E.7.2	Investigate and apply how the cycling of water between the atmosphere a hydrosphere has an effect on weather patterns and climate.	Weather and Climate 10 Land, Water, and Human Interactions 8
SC.6.E.7.3	Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.	Weather and Climate 9, 10
SC.6.E.7.4	Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere.	Geological Processes 8 Weather and Climate 9, 14 Land, Water, and Human Interactions 8
SC.6.E.7.5	Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.	Weather and Climate 6, 7, 9, 10 Land, Water, and Human Interactions 8
SC.6.E.7.6	Differentiate between weather and climate.	Weather and Climate 3, 14
SC.6.E.7.7	Investigate how natural disasters have affected human life in Florida.	Land, Water, and Human Interactions 14 Weather and Climate 3

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		Focus Lesson: Local Geography and Natural Hazards
SC.6.E.7.8	Describe ways human beings protect themselves from hazardous weather and sun exposure.	Land, Water, and Human Interactions 14 Weather and Climate 3
SC.6.E.7.9	Describe how the composition and structure of the atmosphere protects life and insulates the planet.	Weather and Climate 15
SC.6.N.1.1	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation 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.	SEPUP's "Planning and Carrying Out Investigations (PCI)" activity types call for students to state hypotheses or predictions clearly, design a procedure, collect and analyze data, identify variables, and state and defend conclusions. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12 *Note:* PCI activities can be found throughout the IAS course. This citation mentions only a few examples.
SC.6.N.1.2	Explain why scientific investigations should be replicable.	Weather and Climate 6 See "Scientific inquiry" in Appendix A of all Student Books. See "What is Science?" Skills Sheet
SC.6.N.1.3	Explain the difference between an experiment and other types of scientific investigation and explain the relative benefits and limitations of each.	Weather and Climate 3, 11 SEPUP has laboratory type (Earth's Resources 3, 6, 8) as well as investigation (Geological Processes 2, 6, 9, 12, 15) and Problem Solving (Weather and Climate 4, 5, 7) activities that highlight the differences in each line of inquiry. See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books.

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		See "What is Science?" Skills Sheet
SC.6.N.1.4	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	SEPUP's "Planning and Carrying Out Investigations (PCI)" activity types call for students to state hypotheses or predictions clearly, design a procedure, collect and analyze data, identify variables, and state and defend conclusions. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12
SC.6.N.1.5	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	Weather and Climate 2, 3, 6, 12 Land, Water, and Human Interactions 8 Geological Processes 13 See "What is Science?" Skills Sheet
SC.6.N.2.1	Distinguish science from other activities involving thought.	Geological Processes 13 See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books. See "What is Science?" Skills Sheet
SC.6.N.2.2	Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered.	Geological Processes 13 Solar System and Beyond 1
SC.6.N.2.3	Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals.	Geological Processes 12, 13 Weather and Climate 9 Solar System and Beyond 1 See also "Science as a Human Endeavor," found on the SEPUP website.
SC.6.N.3.1	Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term	Geological Processes 13 Solar System and Beyond 1

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	theory in science is very different than how it is used in everyday life.	See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books. See "What is Science?" Skills Sheet
SC.6.N.3.2	Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws.	Solar System and Beyond 14, 15
SC.6.N.3.3	Give several examples of scientific laws.	Solar System and Beyond 14, 15
SC.6.N.3.4	Identify the role of models in the context of the sixth-grade science benchmarks.	Modeling and the use and construction of models are key components to all SEPUP curricula. One of SEPUP's 12 different activity types is "Modeling" and another is "Computer Simulation." Both focus on the use of different types of models in the science classroom. Examples: Land, Water, and Human Interactions 7, 8, 12; Geological Processes 5, 9, 10; Solar System and Beyond 3, 4, 7, 8, 11 Additional activities that involve the use of models and the literacy strategy, "Talking Drawings": Earth's Resources 7; Land, Water, and Human Interactions 8
SC.7.E.6.1	Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores.	Geological Processes 8, 14
SC.7.E.6.2	Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).	Geological Processes 5, 15 Land, Water, and Human Interactions 13
SC.7.E.6.3	Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating.	Earth's Resources 9

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SC.7.E.6.4	Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes.	Geological Processes 13, 10
SC.7.E.6.5	Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building.	Geological Processes 5, 9, 10, 11
SC.7.E.6.6	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	Land, Water, and Human Interactions 14 Geological Processes 1, 18
SC.7.E.6.7	Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions and create mountains and ocean basins.	Geological Processes 5, 8, 9, 10, 11, 14
SC.7.N.1.1	Define a problem from the seventh-grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation 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.	SEPUP's "Planning and Carrying Out Investigations (PCI)" activity types call for students to state hypotheses or predictions clearly, design a procedure, collect and analyze data, identify variables, and state and defend conclusions. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12 Examples from Life Science: Body Systems 7; Reproduction 7; From Cells to Organisms 3, 9, 13; Ecology 4, 5
SC.7.N.1.2	Differentiate replication (by others) from repetition (multiple trials).	Geological Processes 9, 10 Weather and Climate 6 See "Elements of Good Experimental Design," in the Student Book appendices and in the Teacher Resource book.

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SC.7.N.1.3	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	Students have multiple experiences with designing laboratory investigations and with using other learning modes, such as computer-based simulations. Examples: Weather and Climate 6, 11, 12; Earth's Resources 3; Solar System and Beyond 4; Geological Processes 9 See "Elements of Good Experimental Design," found in the Teacher Resources book. See "What is Science?" Skills Sheet
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	Weather and Climate 6, 12
SC.7.N.1.5	Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.	Geological Processes 12, 10 See "Science as a Human Endeavor," found on the SEPUP website, to review how different methods are used by different scientists and engineers pursuing scientific explanation. See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books and found in the Teacher Resources book. See "Crosscutting Concepts" found in Appendix G of all unit Student Books. See "What is Science?" Skills Sheet
SC.7.N.1.6	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	See "What is Science?" Skills Sheet

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SC.7.N.1.7	Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community.	Geological Processes 12, 13 See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books and found in the Teacher Resources book.
SC.7.N.2.1	Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered.	Geological Processes 12, 13 Solar System and Beyond 1 See Appendix A, "The Nature of Science and Engineering?" found in the Teacher Resources book. See "What is Science?" Skills Sheet
SC.7.N.3.1	Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them.	Solar System and Beyond 1, 14 See Appendix A, "The Nature of Science and Engineering" found in the Teacher Resources book.
SC.7.N.3.2	Identify the benefits and limitations of the use of scientific models.	SEPUP has specific activity types dealing with the development and use of models, and each time students create or use a model they are encouraged to consider the benefits and limitations of the models. Examples: Earth's Resources 9; Geological Processes 5; Land, Water and Human Interactions 12; ; Solar System and Beyond 8
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.	Solar System and Beyond 11
SC.8.E.5.2	Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars.	Solar System and Beyond 10

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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.	Solar System and Beyond 10, 11
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.	Solar System and Beyond 14, 15
SC.8.E.5.5	Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness).	Solar System and Beyond 10
SC.8.E.5.6	Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.	Focus Lesson: Sun Features and Earth
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.	Solar System and Beyond 11, 12
SC.8.E.5.8	Compare various historical models of the Solar System, including geocentric and heliocentric.	Focus Lesson: Models of the Solar System
SC.8.E.5.9	Explain the impact of objects in space on each other including: the Sun on the Earth including seasons and gravitational attraction, and the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body.	Solar System and Beyond 6, 7, 8, 15
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.	Solar System and Beyond 1 Geological Processes 6
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.	Solar System and Beyond 10

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SC.8.E.5.12	Summarize the effects of space exploration on the economy and culture of Florida.	Solar System and Beyond 1, 17 Focus Lesson: Florida and the Space Age
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.	SEPUP's "Planning and Carrying Out Investigations (PCI)" activity types call for students to state hypotheses or predictions clearly, design a procedure, collect and analyze data, identify variables, and state and defend conclusions. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12. Examples from Physical Science: Fields and Interactions 9; Force and Motion 4, 13; Waves 8, 9, 14; Energy 2, 8 See also "Keeping a Science Notebook," and Writing Frames for PCI, both found in the Teacher Resources book.
SC.8.N.1.2	Design and conduct a study using repeated trials and replication.	SEPUP's "Planning and Carrying Out Investigations (PCI)" activity types call for students to design a procedure, collect and analyze data using multiple trials, and identify variables, where appropriate. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12.
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.	See "Developing Communication Skills" Student Sheet, found in the Teacher Resources book, which contains examples of these, and other types of statements designed to encourage more scientific communication in class. Examples of where this can be used include: Weather and Climate 16; Land, Water, and Human Interactions 1, 16
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.	Solar System and Beyond 7

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		See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books and found in the Teacher Resources book. See "Scientific Inquiry," in the Teacher Resources book. See "What is Science?" Skills Sheet
SC.8.N.1.5	Analyze the methods used to develop a scientific explanation as seen in different fields of science.	Geological Processes 6, 7, 8, 10, 11, 12, 13, 14, 15 Crosscutting Concept are intentionally embedded in all units as a means to help students connect the different disciplines and to bridge phenomena across disciplines. See Appendix G "Crosscutting Concepts," found in the Teacher Resources book. See "What is Science?" Skills Sheet
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.	SEPUP's "Planning and Carrying Out Investigations (PCI)" and "Modeling" activity types call for students to state hypotheses or predictions clearly, design a procedure, collect and analyze data, identify variables, state and defend conclusions. Examples: Earth's Resources 3; Geological Processes 9; Weather and Climate 6, 12 See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books and found in the Teacher Resources book.
SC.8.N.2.1	Distinguish between scientific and pseudoscientific ideas.	See "What is Science?" Skills Sheet
SC.8.N.2.2	Discuss what characterizes science and its methods.	See "The Nature of Science and Engineering," found in Appendix A of all unit Student Books and found in the Teacher Resources book. See "What is Science?" Skills Sheet

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SC.8.N.3.1	Select models useful in relating the results of their own investigations.	SEPUP's "Modeling" activities ask students to develop their own model to represent their results and reflect on how it can be improved. Examples: Earth's Resources 5, 9; Geological Processes 5, 9; Land, Water, and Human Interactions 7, 12; Weather and Climate 8; Solar System and Beyond 3, 5, 8, 11
SC.8.N.3.2	Explain why theories may be modified but are rarely discarded.	Geological Processes 13 Solar System and Beyond 14 Earth's Resources 7 See also Appendix A, "The Nature of Science and Engineering," found in the Teacher Resources book. See "What is Science?" Skills Sheet
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.	Land, Water, and Human Interactions 14 Geological Processes 1 This can also be explored using the "Evidence and Tradeoffs" (ET) scoring guide. Examples: Geological Processes 1, 18; Land, Water, and Human Interactions 5, 14, 15 See also the discussion in "Evidence and Trade-offs: A Key Element of Decision Making in SEPUP," found in the Teacher Resources book and also found in Solar System and Beyond 17; Earth's Resources 6 See also Appendix A, "The Nature of Science and Engineering," found in the Teacher Resources book.
SC.8.N.4.2	Explain how political, social, and economic concerns can affect science, and vice versa.	Land, Water, and Human Interactions 14 Geological Processes 1

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		Students' ideas about tradeoffs – in this case the political and social implications of science-related policies -- are explored and can be assessed using the Evidence and Trade-Offs (ET) scoring guide, which is used throughout the units. See also Appendix A, "The Nature of Science and Engineering," and the discussion in "Evidence and Trade-offs: A Key Element of Decision Making in SEPUP," both found in the Teacher Resources book. Examples include Solar System and Beyond 17 and Earth's Resources 6.
MA.K12.MTR.1.1	Actively participate in effortful learning both individually and collectively.	Geological Processes 6, 7, 8, 9 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.
MA.K12.MTR.2.1	Demonstrate understanding by representing problems in multiple ways.	Geological Processes 2, 5, 6, 7, 8, 9, 10, 12 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.
MA.K12.MTR.3.1	Complete tasks with mathematical fluency.	Geological Processes 6, 7, 8, 9 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.
MA.K12.MTR.4.1	Engage in discussions that reflect on the mathematical thinking of self and others.	Geological Processes 6, 7, 8, 9 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.
MA.K12.MTR.5.1	Use patterns and structure to help understand and connect mathematical concepts.	Geological Processes 2, 5, 6, 7, 8, 9, 10, 12 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.

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MA.K12.MTR.6.1	Assess the reasonableness of solutions.	Embedded in the *Issues and Science* units are several opportunities for students to *Analyze and Interpret Data* and *Engineer Design Solutions.* Examples: Earth's Resources 3 Geological Processes 6, 7, 10, 14, 18 Land, Water, and Human Interactions 3, 4, 7, 12, 16 Solar System and Beyond 12, 13, 14 Weather and Climate 12
MA.K12.MTR.7.1	Apply mathematics to real-world contexts.	Geological Processes 6, 7, 8, 9 Note: There are many activities in the *Issues and Science* units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.	Embedded in the *Issues and Science* units are several opportunities for students to *Engage in Argument from Evidence* and make decisions with supporting *Evidence and Trade-Offs.* Examples: Earth's Resources 2, 3, 4, 6, 13 Geological Processes 1, 4, 11, 12, 18 Land, Water, and Human Interactions 4,5, 9, 14, 15, 16 Solar System and Beyond 1, 10, 17 Weather and Climate 4, 13, 16, 17
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.	The *Issues and Science* program offers many opportunities for students to read and comprehend grade-level complex texts. Examples: Earth's Resources 2, 7, 13 Geological Processes 4, 8, 11, 16 Land, Water, and Human Interactions 6, 9, 13, 14 Solar System and Beyond 9, 15 Weather and Climate 9, 10, 14 Readings are accompanied with embedded literacy strategies, helping students effectively comprehend the content. Examples of embedded

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		Literacy Strategies are: Anticipation Guide; Directed Activity Related to Text; Listen, Stop, Write; Stop to Think Questions; Three-level Reading Guide; Writing Frames and Reviews; Discussion Web; Intra-Acts; Walking Debates. See Appendix E in all Student Books for examples.
ELA.K12.EE.3.1	Make inferences to support comprehension.	Embedded in the *Issues and Science* units are several opportunities for students to *Analyze and Interpret Data* and *Construct Explanations.* These opportunities help students make inferences to support content and idea comprehension. Examples: Earth's Resources 3, 7, 9, 11, 12, 14 Geological Processes 3, 6, 7, 10, 13, 14, 16, 17, 18 Land, Water, and Human Interactions 3, 4, 13, 14 Solar System and Beyond 3, 7, 8, 12, 13, 14 Weather and Climate 7, 8, 9
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.	The *Issues and Science* units embed multiple opportunities for students to practice active listening skills within different situations. Students work collaboratively, using a 4-2-1 model of cooperative group work, on a daily basis. See Teacher Resource book " 4–2–1 Collaborative Learning Model." Specific activities are designed around student discussion, including the activities with *Talking it* Over as their instructional design. Specific examples include: Earth's Resources 14 Geological Processes 1, 18 Solar System and Beyond 1, 17 Weather and Climate 1, 17
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.	Appendix E, "Literacy Strategies," found in all unit Student Books, shows examples of embedded strategies that assist students with writing, reading, and communicating scientific ideas to produce quality work. See also the Teacher Resource book, "Literacy and Scientific Literacy."

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ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.	The *Issues and Science* units scoring guides that help students reach efficient levels of writing and speaking in science. The *Communicating Concepts and Ideas* scoring guide assesses students on how well they can communicate what they have learned about a phenomenon or problem, whether communicating that information in orally or in writing. Several opportunities are given to students to practice this communication. Examples: Land, Water, and Human Interactions 8, 12, 15, 16 Solar System and Beyond 12, 17
ELD.K12.ELL.SC.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.	SEPUP provides ELL students with rich opportunities for written and oral communication for social and instructional purposes at school. Student Book units have glossaries, and the Teacher Resources book has a compiled glossary showing where words are used over all units, useful for seeing the frequency of word use. This is accomplished through the use of the following strategies: ● All Student Book units are also presented in Spanish language format. ● Vocabulary is introduced with operational definitions that connect concepts to learning experiences. (See the Teacher Resources book.) ● 4-2-1 cooperative groupings encourage student interactions in an unthreatening environment (See explanation found in the Teacher Resources book.) ● Strategies for facilitating Group Discussion (See the Teacher Resources book). This includes informal, pair talk, and formal presentations. ● Discussion Webs which are found throughout the units and explained in the Teacher Resources book. ● Graphic organizers that help students think ahead about what they want to say about what they have done or read, for example, Geological Processes Student Sheet 18.3.

BENCHMARK CODE	EARTH/SPACE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN MAJOR TOOL See the Student Book, Teacher Edition, and Teacher Resources books for activities referenced.
		• Oral Presentations which are used throughout units. (See the explanation found in the Teacher Resources book). • Guidelines for formal oral communication (See explanation found in the Teacher Resources book). • Walking Debates are tools that allow students to express their opinions about issues by moving from one area of the room to another. This can be used with Discussion Web formats as well as other opportunities for students to share opinions or ideas. (See explanation found in the Teacher Resources book).
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.	SEPUP provides ELL students with rich opportunities for written and oral communication for social and instructional purposes at school. This is accomplished through the use of the following strategies: • The Student Books for all units are also presented in Spanish language format. • Vocabulary is introduced with operational definitions that connect concepts to learning experiences (See the Teacher Resources book). • 4-2-1 cooperative groupings encourage student interactions in an unthreatening environment (See the Teacher Resources book). • Strategies for facilitating Group Discussion which includes informal, pair talk, and formal presentations. (See the Teacher Resources book). • Discussion Webs are graphic organizers that help students think ahead about what they want to say about what they have done or read. (See the Teacher Resources book). Example: Geological Processes 18 • Oral Presentation are guidelines for formal oral communication. (See the Teacher Resources book). Example: Land, Water, and Human Interactions 16 • Walking Debates are tools that allow students to express their opinions about issues by moving from one area of the room to another. (See the Teacher Resources book).

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		Example: Earth's Resources 14
HE.6.C.1.3	Identify environmental factors that affect personal health.	Land, Water, and Human Interactions 14 Geological Processes 1