



**Lab-Aids Correlations for
Florida State Academic Standards for Science
Course 2000010 Life Science**

*Lisa Kelp, Vice President Learning and Development Lab-Aids
Din Seaver, Curriculum Developer and Project Manager, Lab-Aids*

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: 2000010 Life 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

Materials from the Science Education for Public Understanding Program (SEPUP) are developed at the Lawrence Hall of Science, at the University of California, Berkeley, and distributed nationally by LAB-AIDS, Inc. Since 1987, development of SEPUP materials has been supported by grants from the National Science Foundation and other public and private sources. SEPUP programs include student books, equipment kits, teacher materials, and online digital content, and are available as full year courses, or separately, as 17 units, each taking 3-8 weeks to complete, as listed below.

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	Biomedical Engineering	Chemistry of Materials
Geological Processes	Body Systems	Chemical Reactions
Earth's Resources	Ecology	Energy
Weather and Climate	From Cells to Organisms	Force and Motion
Solar System and Beyond	Evolution	Fields and Interactions
	Reproduction	Waves



FLORIDA COURSE TITLE: Life Science

COURSE CODE: 2000010

Please note: Direct links to the lessons will not work if you have the Adobe Acrobat extension in your browser.

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
SC.6.L.14.1	Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.	Body Systems 2, TE, 3 From Cells to Organisms 6, TE
SC.6.L.14.2	Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multicellular), all cells come from preexisting cells, and cells are the basic unit of life.	From Cells to Organisms 4, TE, 6
SC.6.L.14.3	Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing.	From Cells to Organisms 5, TE, 6
SC.6.L.14.4	Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.	From Cells to Organisms 6, TE, 7
SC.6.L.14.5	Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis.	Body Systems 2, TE, 3, 4, 7, 8, 10, 12
SC.6.L.14.6	Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.	From Cells to Organisms 1, TE, 2, 3, 4, 9, 14
SC.6.L.15.1	Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.	Evolution 7, TE, 8, 11, 12

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
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, state and defend conclusions. Examples: Ecology 4, 5 ; From Cells to Organisms 3, 9, 13 ; Reproduction 7 <i>Note:</i> 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.	Evolution 2, TE, 4 From Cells to Organisms 14, TE 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.	SEPUP has laboratory type (Body Systems 6, 7, 9, 10) as well as investigation (Biomedical Engineering 1, 2, 7) and Problem Solving (Reproduction 5) 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. 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 design a procedure, collect and analyze data, identify variables, state and defend explanations and conclusions. Examples: Ecology 4, 5 ; From Cells to Organisms 3, 9, 13 ; Reproduction 7

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
SC.6.N.1.5	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	Ecology 4, TE, 5 From Cells to Organisms 13, TE Reproduction 7, TE See “What is Science?” Skills Sheet
SC.6.N.2.1	Distinguish science from other activities involving thought.	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.	Biomedical Engineering 3, TE, 6 Body Systems 1, TE Evolution 3, TE From Cells to Organisms 2, TE, 4
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.	Biomedical Engineering 6, TE Evolution 3, TE Reproduction 6, TE See “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 theory in science is very different than how it is used in everyday life.	Evolution 3, TE From Cells to Organisms 4, TE Body Systems 1, TE See “The Nature of Science and Engineering” in Student Book Appendix A . See “What is Science?” Skills Sheet

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
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.	Evolution 9, TE From Cells to Organisms 4, TE
SC.6.N.3.3	Give several examples of scientific laws.	Evolution 9, TE For Physical Science examples see: Force and Motion 9, TE, 11 ; Energy 5, TE, 6
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: Biomedical Engineering 4, TE, 5, 8, 9 ; Body Systems 2, TE, 5, 12 ; Ecology 3, TE, 12 In addition, other activities also involve the use of models and “Talking Drawings.” See From Cells to Organisms 6.
SC.7.L.15.1	Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species.	Evolution 11, TE, 12
SC.7.L.15.2	Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms.	Evolution 2, TE, 3, 4, 7
SC.7.L.15.3	Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species.	Evolution 11, TE, 12

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
SC.7.L.16.1	Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.	Reproduction 2 , TE , 4, 6, 7, 8, 9
SC.7.L.16.2	Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees.	Reproduction 4 , TE , 5
SC.7.L.16.3	Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis.	Reproduction 3 , TE ; Focus Lesson: Mitosis and Meiosis
SC.7.L.16.4	Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society, and the environment.	Reproduction 1 , TE , 3, 7
SC.7.L.17.1	Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.	Ecology 7 , TE , 8, 11, 13
SC.7.L.17.2	Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.	Ecology 1 , TE , 2, 6, 11
SC.7.L.17.3	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	Ecology 1 , TE , 2, 15
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,	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, state and defend conclusions. While all units contain PCI activities, this citation names a few examples:

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
	interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	Body Systems 7, TE Reproduction 7, TE From Cells to Organisms 3, TE , 9, 13 Ecology 4, TE , 5
SC.7.N.1.2	Differentiate replication (by others) from repetition (multiple trials).	Body Systems 7, TE 13 Reproduction 4, TE , 7 See “ Elements of Good Experimental Design, ” in the Student Book appendices and in the Teacher Resource book.
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 and investigations. From Cells to Organisms 4, TE , 7 Reproduction 2, TE Body Systems 7, TE See “ What is Science? ” Skills Sheet See “Elements of Good Experimental Design,” found in the Teacher Resources book.
SC.7.N.1.4	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	Body Systems 7, TE , 13 From Cells to Organisms 4, TE Reproduction 7, TE Ecology 1, TE , 6, 10 Evolution 4, TE See “Interpreting Graphs,” and “Keeping a Science Notebook” found in the Teacher Resources book.

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
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.	<p>From Cells to Organisms 4, TE, 14 Evolution 3, TE</p> <p>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.</p> <p>See “The Nature of Science and Engineering,” found in Appendix A of all unit Student Books and found in the Teacher Resources book.</p> <p>See “Crosscutting Concepts” found in Appendix G of all unit Student Books.</p> <p>See “What is Science?” Skills Sheet</p>
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.	<p>From Cells to Organisms 4, TE, 14 Evolution 3, TE</p> <p>See “What is Science?” Skills Sheet</p>
SC.7.N.1.7	Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community.	<p>From Cells to Organisms 4, TE Reproduction 6, TE Evolution 3, TE, 7</p> <p>See Appendix A, “The Nature of Science and Engineering?” found in the Teacher Resources book.</p>
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.	<p>From Cells to Organisms 4, TE Reproduction 6, TE Evolution 3, TE, 7</p>

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
		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.	From Cells to Organisms 4, TE Evolution 3, TE 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: Body Systems 2, TE , 4, 5, 12; Ecology 8, TE , 11, 12; Evolution 2, TE , 4, 5; From Cells to Organisms 8, TE , 11; Reproduction 2, TE , 12; Biomedical Engineering 8, TE
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.	From Cells to Organisms 6, TE , 12, 13
SC.8.L.18.2	Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide.	From Cells to Organisms 5, TE
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.	Ecology 8, TE , 11
SC.8.L.18.4	Cite evidence that living systems follow the Law of Conservation of Mass and Energy.	Ecology 8, TE , 11

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
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.	<p>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.</p> <p>Examples: Body Systems 7, TE; Reproduction 7, TE; Ecology 4, TE, 5 From Cells to Organisms 3, TE, 9, 13;</p> <p>See also “Keeping a Science Notebook,” and Writing Frames for PCI, both found in the Teacher Resources book.</p>
SC.8.N.1.2	Design and conduct a study using repeated trials and replication.	<p>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.</p> <p>Examples: Body Systems 7, TE, 9; Ecology 5, TE; From Cells to Organisms 13, TE</p>
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.	<p>See “Developing Communication Skills” Student Sheet, found in the Teacher Resources book, which contains examples and prompts of these and other types of statements designed to encourage more scientific communication in class.</p> <p>Examples of where this can be used: Body Systems 2, and Ecology 10.</p>
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.	<p>Evolution 10, TE Reproduction 2, TE From Cells to Organisms 4, TE, 15</p> <p>See “The Nature of Science and Engineering,” found in Appendix A</p>

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
		<p>of all unit Student Books and found in the Teacher Resources book.</p> <p>See “Scientific Inquiry,” in the Teacher Resources book.</p> <p>See “What is Science?” Skills Sheet</p>
SC.8.N.1.5	Analyze the methods used to develop a scientific explanation as seen in different fields of science.	<p>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.</p> <p>See “What is Science?” Skills Sheet</p>
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.	<p>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.</p> <p>Examples: Ecology 4, TE, 5; From Cells to Organisms 13, TE; Reproduction 7, TE.</p> <p>See “The Nature of Science and Engineering,” found in Appendix A of all unit Student Books and found in the Teacher Resources book.</p>
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.

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
		See “What is Science?” Skills Sheet
SC.8.N.3.1	Select models useful in relating the results of their own investigations.	SEPUP modeling activities ask students to develop their own model to represent their results and reflect on how it can be improved. Examples: Biomedical Engineering 8, TE ; Body Systems 4, TE , 5; Ecology 12, TE ; Evolution 5, TE ; From Cells to Organisms 8, TE , 11; Reproduction 9, TE , 13.
SC.8.N.3.2	Explain why theories may be modified but are rarely discarded.	From Cells to Organisms 4, TE Evolution 3, TE See Appendix A , “The Nature of Science and Engineering,” found in the Teacher Edition. 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.	Biomedical Engineering 6, TE Body Systems 1, TE , 13 Ecology 1, TE , 15 Evolution 14, TE , 16 This can also be explored using the “Evidence and Tradeoffs” (ET) scoring guide. Examples: Reproduction 1, TE , 14; From Cells to Organisms 1, TE , 2, 15. See also the discussion in “Evidence and Trade-Offs: A Key Element of Decision Making in SEPUP” found in the Teacher Resources book.

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
		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.	<p>Biomedical Engineering 6, TE Body Systems 1, TE, 13 Ecology 1, TE, 15 Evolution 14, TE, 16</p> <p>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.</p> <p>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</p>
MA.K12.MTR.1.1	Actively participate in effortful learning both individually and collectively.	<p>Biomedical Engineering 1, TE, 2, 3, 4, 5, 7, 9</p> <p>Note: There are many activities in the <i>Issues and Science</i> units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.</p>
MA.K12.MTR.2.1	Demonstrate understanding by representing problems in multiple ways.	<p>Evolution 1, TE, 2, 4, 5, 6, 8, 11, 14</p> <p>Note: There are many activities in the <i>Issues and Science</i> units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.</p>
MA.K12.MTR.3.1	Complete tasks with mathematical fluency.	<p>Evolution 1, TE, 2, 4, 5, 6, 10, 11, 14</p> <p>Note: There are many activities in the <i>Issues and Science</i> units in this grade level that address this benchmark, but for this correlation we have limited our citations to a single unit.</p>

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
MA.K12.MTR.4.1	Engage in discussions that reflect on the mathematical thinking of self and others.	Evolution 1, TE , 2, 4, 5, 6, 10, 11, 14 Note: There are many activities in the <i>Issues and Science</i> 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.	Evolution 1, TE , 2, 4, 5, 6, 10, 11, 14 Note: There are many activities in the <i>Issues and Science</i> 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.6.1	Assess the reasonableness of solutions.	Embedded in the <i>Issues and Science</i> units are several opportunities for students to <i>Analyze and Interpret Data</i> and <i>Engineer Design Solutions</i> . Examples: Biomedical Engineering 4, TE , 5, 9 Body Systems 7, TE , 9, 13 Ecology 3, TE , 6, 9, 15 Evolution 2, TE , 9, 11, 13 From Cells to Organisms 1, TE , 5, 7 Reproduction 7, TE
MA.K12.MTR.7.1	Apply mathematics to real-world contexts.	Evolution 1, TE , 2, 4, 5, 6, 10, 11, 14 Note: There are many activities in the <i>Issues and Science</i> 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 <i>Issues and Science</i> units are several opportunities for students to <i>Engage in Argument from Evidence</i> and make decisions with supporting <i>Evidence and Trade-Offs</i> . Examples: Biomedical Engineering 5, TE , 6, 7 Body Systems 1, TE , 12, 13, 14 Ecology 1, TE , 5, 6, 14, 15 Evolution 10, TE , 14, 16 From Cells to Organisms 1, TE , 2, 15 Reproduction 1, TE , 4, 10, 11, 14

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.	<p>The <i>Issues and Science</i> program offers many opportunities for students to read and comprehend grade-level complex texts.</p> <p>Biomedical Engineering 3, TE, 6 Body Systems 4, TE, 8, 11 Ecology 1, TE 8 Evolution 3, TE, 8, 15 From Cells to Organisms 4, TE, 6, 10 Reproduction 3, TE, 6, 8</p> <p>Readings are accompanied with embedded literacy strategies, helping students effectively comprehend the content. Examples of embedded 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.</p>
ELA.K12.EE.3.1	Make inferences to support comprehension.	<p>Embedded in the <i>Issues and Science</i> units are several opportunities for students to <i>Analyze and Interpret Data</i> and <i>Construct Explanations</i>. These opportunities help students make inferences to support content and idea comprehension. Examples:</p> <p>Biomedical Engineering 3, TE Body Systems 4, TE, 7, 8, 9, 11, 13 Ecology 2, TE, 3, 6, 7, 8, 9, 10, 13 Evolution 2, TE, 3, 4, 6, 7, 9, 11, 12, 13, 15 From Cells to Organisms 1, TE, 4, 5, 7, 9, 10, 11, 12, 13 Reproduction 3, TE, 4, 6, 7, 9</p>
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.	<p>The <i>Issues and Science</i> 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</p>

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
		book “4–2–1 Collaborative Learning Model.” Specific activities are designed around student discussion, including the activities with <i>Talking it Over</i> as their instructional design. Specific examples include: Body Systems 14, TE Ecology 1, TE, 15 Evolution 14, TE Reproduction 14, TE
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.” Body Systems, Reproduction
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.	The <i>Issues and Science</i> units scoring guides that help students reach efficient levels of writing and speaking in science. The <i>Communicating Concepts and Ideas</i> 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: Biomedical Engineering 2, TE, 3 Ecology 2, TE, 16 Evolution 8, TE, 16, 17 Reproduction 14, TE
HE.6.C.1.8	Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors.	Biomedical Engineering 7, TE
HE.7.C.1.3	Analyze how environmental factors affect personal health.	Reproduction 7, TE Evolution 6, TE

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
HE.7.C.1.7	Describe how heredity can affect personal health.	Reproduction 1, TE Evolution 6, TE
ELD.K12.ELL.SC.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.	<p>SEPUP provides EL 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:</p> <ul style="list-style-type: none"> • 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). • Oral Presentation provides guidelines for formal oral communication. (See 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. (See the Teacher Resources book). Example: Evolution 14, TE.

BENCHMARK CODE	LIFE SCIENCE BENCHMARK	LESSON(S) WHERE BENCHMARK IS DIRECTLY ADDRESSED IN- DEPTH IN MAJOR TOOL Please see the Student Edition, Teacher Edition (TE), and Teacher Resources books.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.	<p>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:</p> <ul style="list-style-type: none"> • 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). • Oral Presentation are guidelines for formal oral communication. (See 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. (See the Teacher Resources book). Example: Evolution 14, TE.