SRA Snapshots Video Science™: Level A
correlation to
Delaware Science Standards
Grade 3

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
1. Understand that: Scientific investigations, whether conducted by students or scientists, involve asking a question about the natural world.
Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
2. Understand that: Generate questions and predictions using observations and exploration about the natural world.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
3. Understand that: The purpose of accurate observations and data collection is to provide evidence. Scientists use tools to enhance their senses in order to obtain more evidence.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
4. Understand that: Scientists use observations from investigations and knowledge that is already known to develop an explanation.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
5. Understand that: The purpose of communicating with others is to share evidence and conclusions. Scientists communicate their results of their investigations with others.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 2, Process Skill, SE page 167; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
6. Understand that: The use of mathematics, reading, writing, and technology are important in conducting scientific inquires.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 2, Process Skill, SE page 59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Science, Technology, and Society
1. People have invented new technologies to solve problems.
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Math in Science, SE page 59 **Chapter 4, Lesson 1, Process Skill, SE page 73** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, 105** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 8, KnowZone, SE pages 168-169**

Science Standard 1: Nature and Application of Science and Technology
Strand: Science, Technology, and Society
2. Tools are useful in science to help gather data for observations and measurements and provide a safe means of conducting an investigation.
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57 **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105** **Chapter 6, KnowZone, SE page 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129; Process Skill, SE page 131** **Chapter 7, LabTime Hands-On Activity, TRB pages 123-125; TG page 138** **Chapter 8, Lesson 1, Video C, SE page 187; LabTime Hands-On Activity. TRB ages 141-143, TG page 156**

Science Standard 1: Nature and Application of Science and Technology
Strand: History and Context of Science
1. People from all parts of the world practice science and make many important scientific contributions.
Chapter 3, Lesson 2 Process Skill, SE page 59 **Chapter 4, KnowZone, SE pages 80-81** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151** **Chapter 8, KnowZone, SE pages 168-169** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page SE page 188; Video C, SE page 189**

Science Standard 1: Nature and Application of Science and Technology
Strand: History and Context of Science
2. Much has been learned about the natural world but there is still much to understand.
Chapter 3, Lesson 2, Process Skill, SE page 59 **Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; Lesson 3, Critical Thinking, SE page 87** **Chapter 5, Lesson 3, Video B, SE page 106; Video C, SE page 107; Process Skill, SE page 109** **Chapter 6, KnowZone, SE pages 124-125; Lesson 2, Video A, SE page 118; Video B, SE page 1 20; Critical thinking, SE page 123; Lesson 3, Video B, SE page 128; Video C, SE page 129**

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
1. Materials can be described and classified according to the following physical properties: size, shape, mass, texture, color, and material composition. Students can observe materials' physical properties by using tools that include rulers, balances, thermometers, and hand lenses.
Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
2. Materials exist in one of three states—solid, liquid, or gas. Solids and liquids have easily observable properties and may change from one form to the other.
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
3. Physical properties of materials can be changed by exposure to water, heat, light, or by cutting, mixing, and grinding.
Chapter 8, Lesson 2, Video A, SE page 163; Process Skill, SE page 167

Science Standard 2: Materials and Their Properties
Strand: Material Technology
1. The properties of materials influence their use. Some materials are more suitable for making a particular product or device.
Chapter 4, Lesson 3, Video A, SE page 83 **Chapter 8, Lesson 1, Video B, SE page 156; Critical Thinking, SE page 161; Process Skill, SE page 161**

Science Standard 2: Materials and Their Properties
Strand: Material Technology
2. Technology has created new materials that can help people solve problems.
Chapter 3, Lesson 2, Video A, SE page 55 **Chapter 5, KnowZone, SE pages 96-97** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
1. The Sun is a source of energy that lights and warms the Earth.
Chapter 6, Lesson 2, Video A, SE page 119

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
2. Objects that move (i.e., moving air, moving water) have energy because of their motion.
Chapter 7, Lesson 1, Video A, SE page 135

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
3. Heat energy is a form of energy that makes things warmer.
Chapter 8, Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
4. Electrical energy is a form of energy that is used to operate many of our tools and appliances.
Chapter 9, Lesson 2, Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
1. The position of an object gives its location relative to where you are (e.g., above, below, in front of, or behind). The motion of an object describes how its position is changing. Pushing or pulling on an object can change its position or motion.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
2. When balanced forces act on an object, it will remain at rest, but if unbalanced forces act on the object it will begin to move.
Chapter 7, Lesson 1, Video A, SE page 135

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
3. Energy of a moving object can be transferred to other objects (i.e., the energy of moving water can be used to turn a waterwheel).
Chapter 7, Lesson 1, Video A, SE page 135

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
4. Transferring heat energy to an object will make it feel warmer by raising its temperature and it may cause a change in the object's physical properties.
Chapter 8, Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
1. When light hits an object, the light energy can become heat energy.
Chapter 9, Lesson 1, Video A, SE page 179; Lesson 2, Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Standard 3: Energy and Its Effects
Strand: The Production, Consumption, and Application of Energy
1. Moving air, moving water, and sunlight contain energy that can be put to our use.
Chapter 9, Lesson 3, Video C, SE page 195; Critical Thinking, SE page 197

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
1. The shape of the Earth is similar to a sphere.
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
2. From Earth many objects may be seen in the sky including the Sun, the Moon, stars, and man-made objects.
Chapter 6, Lesson 1, Video A, SE page 113; Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
3. The Sun and Moon appear to move slowly across the sky.
Chapter 6, Lesson 1, Video A, SE page 113; Video C, SE page 115; Critical Thinking, SE page 117; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
4. The pattern of day and night repeats every 24 hours. The sun can only be seen in the daytime.
Chapter 6, Lesson 1, Video A, SE page 113; Process Skill, SE page 117

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
5. The Moon can be observed sometimes at night and sometimes during the day.
Chapter 6, Lesson 1, Video C, SE page 115

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
6. The appearance of the Moon changes in a cycle that takes about a month.
Chapter 6, Lesson 1, Video C, SE page 115

Science Standard 4: Earth in Space
Strand: Technology and Applications
1. Binoculars allow people to observe objects in the sky from Earth.
Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Process Skill, SE page 131

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
1. Components of Earth's system include minerals, rocks, soil, water and air. These materials can be observed, sorted, and/or classified based on their physical properties.
Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; Lesson 3, Video A, SE page 83; Video B, SE page 84 **Chapter 5, Lesson 1, Video A, SE page 91; Lesson 2, Video A, SE page 99** **Chapter 9, Lesson 3, Video C, SE page 195**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
2. Water can exist as a solid, liquid, or gas and in different forms such as rain, snow, or ice.
Chapter 5, Lesson 2, Video B, SE page 100; Process Skill, SE page 103; Lesson 3, Video A, SE page 105

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
3. Sand, clay, and humus have distinct properties and are components of soil.
Chapter 4, Lesson 2, Video C, SE page 77; Process Skill , SE page 79

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
4. A soil's composition varies from environment to environment.
Chapter 4, Lesson 2, Video C, SE page 77; Process Skill , SE page 79

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
5. Soil types can be identified by testing for grain size and composition.
Chapter 4, Lesson 2, Video C, SE page 77; Process Skill , SE page 79

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
6. Rocks are natural combinations of minerals. Minerals can be classified according to their physical properties (i.e., luster, color and hardness).
Chapter 4, Lesson 2, Video A, SE page 75

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
1. Weather influences plants, animals and human activity.
Chapter 2, Lesson 3, Video C, SE page 41 **Chapter 5, Lesson 3, Video B, SE page 106; Video C, SE page 107; Writing in Science, SE page 109; Process Skill, SE page 109** **Chapter 6, Lesson 1, Video B, SE page 114**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
2. People who work or play outdoors often dress and base their activities on the speed of the wind and the temperature of the air.
Chapter 5, Lesson 3, Video B, SE page 106; Process Skill, SE page 109 **Chapter 6, Lesson 1, Video B, SE page 114**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
3. Water from rain, lakes and underground, is needed by plants, animals and people for their everyday activities.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 2, Video A, SE page 39** **Chapter 3, Lesson 1, Video A, SE page 47** **Chapter 5, Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; Critical Thinking, SE page 103**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
4. Clouds are shaped by winds and are made of small water droplets or ice crystals. Cloud shapes can be used to help forecast weather.
Chapter 5, Lesson 2, Video B, SE page 100

Science Standard 5: Earth's Dynamic Systems
Strand: Technology and Applications
1. Earth materials can be observed and described using simple tools (e.g., hand lens and balances).
Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77 **Chapter 7, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159**

Science Standard 5: Earth's Dynamic Systems
Strand: Technology and Applications
2. Weather can be observed, measured and described through the use of simple tools such as a thermometer, rain gauge, and wind vane.
Chapter 5, KnowZone, SE pages 96-97; Lesson 2, Process Skill, SE page 103; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
1. Plants and animals are similar to and different from each other in observable structures and behavior. These characteristics distinguish them from each other and from nonliving things.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Critical Thinking, SE page 21; Process Skill, SE page 21

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
2. Each plant and animal has different structures that serve different functions in growth, survival and reproduction.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video C, SE page 19 **Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
3. In animals the skeletal-muscular system provides structure, support and enables movement.
Chapter 3. Lesson 1, Video C, SE page 49

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
1. Plants and animals are living things. All living things have basic needs for survival including air, water, food (nutrients), space, shelter, and light.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 3, Video A, SE page 39** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, Se pages 52-53**

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
2. In addition to basic needs for survival, living things have needs specific to the organism such as temperature range and food requirement.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7 **Chapter 2, Lesson 1, Video B, SE page 26; KnowZone, SE pages 36-37** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Science Standard 6: Life Processes
Strand: Regulation and Behavior
1. Senses help humans and other organisms detect internal and external cues.
Chapter 2, Lesson 3, Video A, SE page 39; Video C, SE page 41 **Chapter 3, Lesson 3, Video B, SE page 62** **Chapter 8, Lesson 1, Video B, SE page 158**

Science Standard 6: Life Processes
Strand: Regulation and Behavior
2. The brain receives signals from parts of the body via the senses. In response, the brain sends signals to parts of the body to influence reactions.
This concept is not covered at this level.

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
1. Technology expands the range of human senses.
Chapter 3, Lesson 2, Video A, SE page 55 **Chapter 6, KnowZone, SE pages 126-127; Lesson 3, Video B, SE page 128; Video C, SE page 129**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
2. Humans use devices and specialized equipment to ensure safety and to improve their quality of life (e.g., goggles, glasses, hearing aids, and wheelchairs).
Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85 **Chapter 5, KnowZone, SE pages 96097; Lesson 3, Video A, SE page 105,** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson , Critical Thinking, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video C, SE page 145; Critical Thinking, SE page 147; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153** **Chapter 8, KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
3. The ability of an organism to meet its needs for survival is dependent upon its environment. Manipulation of the environment can positively or negatively affect the well being of various organisms that live there.
Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video C, SE page 27; Critical Thinking, SE page 29; Lesson 2, Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Video B, SE page 84; Video C, SE page 85** **Chapter 5, Lesson 2, Video C, SE page 101; Critical Thinking, SE page 103** **Chapter 9, Lesson 3, Video C, SE page 195**

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
1. The offspring of some plants and animals resemble the parents (i.e., a tree seedling resembles a mature tree).
Chapter 1, Lesson 3, SE page 19

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
2. The offspring of some plants and animals do not resemble the parents. Similarities between parents and their offspring become more apparent as their life cycle continues (i.e., caterpillars become butterflies).
Chapter 1, Lesson 3, SE page 19

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
3. All plants and animals go through a life cycle of birth, growth, development, reproduction, and death. This cycle is predictable and describable, but differs from organism to organism.
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

Science Standard 7: Diversity and Continuity of Living Things
Strand: Diversity and Evolution
1. Many different kinds of plants and animals live throughout the world. These plants and animals can be grouped according to the characteristics they share.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Math in Science, SE page 13 Classification, SE page 202

Science Standard 7: Diversity and Continuity of Living Things
Strand: Technology Applications
1. People use the variety of plants and animals found throughout the world for food, clothing, and shelter (e.g., silk for clothing, wood for building shelters).
Chapter 1, Lesson 3, Video C, SE page 19 **Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51**

Science Standard 8: Ecology
Strand: Interactions within the Environment
1. All interconnectedness exists among the living and nonliving parts of an ecosystem. This interconnectedness can be observed by the changes made by plants and animals in their environment.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48**

Science Standard 8: Ecology
Strand: Interactions within the Environment
2. Plants and animals need enough space and resources to survive. Overcrowding leads to an increased need for resources.
Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Process Skill, SE page 29; Lesson 3, Video A, SE page 39**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
1. All animals depend on plants. Some animals eat plants for food. Other animals eat animals that have eaten plants.
Chapter 2, Lesson 2, Video A, 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Energy Transfer, SE page 203**

Science Standard 8: Ecology
Strand: Human Impact
1. Many natural resources are limited. The amount available can be made to last longer by decreasing the use of some resources or by reusing or recycling certain materials.
Chapter 4, Lesson 3, Video C, SE page 85

SRA Snapshots Video Science™: Level B
correlation to
Delaware Science Standards
Grade 4

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
1. Understand that: Scientific investigations involve asking a focused scientific question. Investigations differ depending upon the question being asked.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
2. Understand that: Fair test design supports the validity of the investigation. Sometimes it is not possible to know everything that will have an effect on the investigation or control all conditions.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
3. Understand that: The purpose of accurate data collection is to provide evidence to compare with the prediction.
Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
4. Understand that: The body of scientific knowledge grows as scientists ask questions, conduct investigations, develop explanations and compare results with what is already known.
Chapter 1, Lesson 1, Process Skill, SE page 7 **Chapter 2, Lesson 3, Process Skill, SE page 43** **Chapter 3, Lesson 3, Critical Thinking, SE page 65** **Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73** **Chapter 5, KnowZone, SE pages 102-103** **Chapter 6, Lesson 2, Video C, SE page 121; Lesson 3. Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; Process Skill, SE page 129** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 9, Lesson 3, Video B, SE page 192**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
5. Understand that: The purpose of communicating is to share and justify evidence. Scientists communicate their results to others, including the details that allow others to replicate the results.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 3, Process Skill, SE page 109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
6. Understand that: The use of mathematics, reading, writing, and technology are important in conducting scientific inquires.
Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 21; Words in Science, SE page 21; Process Skill, SE page 21 **Chapter 2, Lesson 1, Critical Thinking, SE page 29; Math in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Writing in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43** **Chapter 3, Lesson 1, Critical Thinking, SE page 51; Words in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 59; Writing in Science, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Math in Science, SE page 65; Process Skill, SE page 65** **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 79; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Critical Thinking, SE page 85; Writing in Science, SE page 85; Process Skill, SE page 85** **Chapter 5, Lesson 1, Critical Thinking, SE page 95; Words in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 101; Writing in Science, SE page 101; Process Skill, SE page 101; Lesson 3, Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109** **Chapter 6, Lesson 1, Critical Thinking, SE page 117; Writing in Science, SE page 117; Process Skill, SE page 107; Lesson 2, Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; Lesson 3, Critical Thinking, SE page 129; Math in Science, SE page 129; Process Skill, SE page 129** **Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147 ; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153** **Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Writing in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175** **Chapter 9, Lesson 1, Critical Thinking, SE page 183; Words in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 189; Writing in Science, SE page 189; Process Skill, SE page 189; Lesson 3, Critical Thinking, SE page 195; Math in Science, SE page 195; Process Skill, SE page 195**

Science Standard 1: Nature and Application of Science and Technology
Strand: Science, Technology, and Society
1. Science and technology are related. Technology provides the tools needed for science to investigate questions and may provide solutions to society's problems, wants, or needs. Not all technological solutions are effective, uniformly beneficial, or equally available to everyone.
Chapter 4, Lesson 3, Video B, SE page 82; Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 27; KnowZone, SE pages 130-131** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video C, SE page 173** **Chapter 9, Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Science Standard 1: Nature and Application of Science and Technology
Strand: History and Context of Science
1. Contributions by individuals have been essential in advancing the body of scientific knowledge.
Chapter 4, Lesson 2, Video C, SE page 77 **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Math in Science, SE page 129; KnowZone, SE pages 130-131** **Chapter 7, Lesson 3, Video A, SE page 149** **Chapter 8 KnowZone, SE pages 168-169** **Chapter 9 KnowZone, SE pages 196-197**

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
1. Observable physical properties can be used to classify materials. These physical properties may include solubility, mass, magnetism, and electrical conductivity. Tools such as graduated cylinders, balances, rulers, magnifiers, simple circuits, and magnets are used to study the physical properties.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
2. Heating and cooling of materials may produce changes in the state of solids, liquids and gases.
Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video C, SE page 151

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
1. Most materials are physical mixtures. Physical mixtures can be composed of different kinds of materials, each having distinct physical properties. These physical properties can be used to separate, sort, and group the materials of the mixture.
Chapter 7, Lesson 3, Video B, SE page 150

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
2. Mixtures can consist of different combinations of solids and/or liquids. The characteristics of these resulting mixtures depend on the relative amounts and properties of the components.
Chapter 7, Lesson 3, Video B, SE page 150

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
3. Physical properties can be used to separate mixtures through techniques such as filtration and evaporation.
Chapter 7, Lesson 3, Video B, SE page 150

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
4. When a solid is dissolved in a liquid, a solution is formed that can be separated through the process of evaporation.
Chapter 7, Lesson 3, Video B, SE page 150

Science Standard 2: Materials and Their Properties
Strand: Conservation of Matter
1. The mass of an object remains unchanged when broken into parts. The sum of the parts equals the whole.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Lesson 2, Video B, SE page 144

Science Standard 2: Materials and Their Properties
Strand: Material Technology
1. Many materials can be recycled and used again (sometimes in different forms).
Chapter 1, Lesson 1, Video C, SE page 5 **Chapter 2, Lesson 2, Critical Thinking, SE page 29; Lesson 3, Video C, SE page 41; Process Skill, SE page 43** **Chapter 3, Lesson 2, Critical Thinking, SE page 59; Lesson 3, Video C, SE page 63; Critical thinking, SE page 65; Process Skill, SE page 65** **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 9, Lesson 3, video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195**

Science Standard 2: Materials and Their Properties
Strand: Material Technology
2. Technology has created new materials that can help people solve problems.
Chapter 6, KnowZone, SE pages 130-131 **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, KnowZone, SE pages 168-169**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
1. Energy from the sun includes visible light, which consists of a combination of different colored light, and components that are not visible, which include infrared and ultraviolet light waves.
Chapter 5, KnowZone, SE pages 102-103 **Chapter 8, Lesson 2, Video A, SE page 163** **Electromagnetic Energy, SE pages 206-207**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
2. The energy of a moving object depends on its speed. Faster moving objects have more energy than slower moving objects.
Chapter 8, Lesson 1, Video C, SE page 159

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
3. Energy can be stored in an elastic material when it is stretched.
Chapter 8, Lesson 3, Video B, SE page 172

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
4. Sound is a form of energy that is produced by vibrating objects, and can be described by its pitch and its loudness (volume). Sound travels faster through some substances than others.
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB Pages 141-143; TG Page 156

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
5. Heat energy raises the object's temperature or changes the state of the object (i.e., solid to liquid, liquid to gas).
See Level A: **Chapter 8, Lesson 3, Video A, , SE page 171; Video B, SE page 172; Video C, SE page 173** **See also Level C:** **Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
6. The energy obtained from electrical outlets is electrical energy that was produced at an electrical power plant. Electrical energy can be generated and then transmitted over great distances. Batteries are portable sources of electrical energy.
Chapter 8, Lesson 3, Video B, SE page 172 **Chapter 9, Lesson 1, Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Lesson 2, Video C, SE page 187; Critical Thinking, SE page 189; Process Skill, SE page 189; Lesson 3, Video A, SE page 191**

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
1. Force is any push or pull exerted by one object on another. Some forces (e.g., magnetic forces and gravity) can make things move without touching them.
Chapter 8, Lesson 3, Video A, SE page 171; Video C, SE page 173; Critical Thinking, SE page 175

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
2. The speeds of two or more objects can be compared (i.e., faster, slower) by measuring the distance traveled in a given unit of time, or by measuring the time needed to travel a fixed distance.
Chapter 9, KnowZone, SE pages 184-185; Lesson 2, Video B, SE page 188; Critical Thinking, SE page 191; Process Skill, SE page 191

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
3. A force must be applied to change the speed of a moving object or change its direction of motion. Larger forces will create greater changes in an object's speed in a given unit of time.
Chapter 8, Lesson 3, Video A, SE page 171; Critical Thinking, SE page 175

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
4. Pushing and pulling forces can be used to transfer energy from one object to another.
Chapter 8, Lesson 3, Video A, SE page 171; Video C, SE page 173; Critical Thinking, SE page 175

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
5. The transfer of heat energy may produce changes in the state of a substance.
Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
6. The energy of electricity is transferred to electrical devices through simple closed circuits (simple series of simple parallel circuits).
Chapter 9, Lesson 1, Video C, SE page 181

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
7. Some materials allow electricity to flow freely (conductors), while other materials inhibit the flow of electricity (insulators).
Chapter 9, Lesson 1, Video B, SE page 180

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
8. Some materials are magnetic and be pushed or pulled by other magnets.
Chapter 9, Lesson 2, Video A, SE page 185

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
1. When light strikes an object, the light can reflect off of its surface or pass into the object. The light that passes into the object can pass through it or be absorbed by the material that makes up the object. Light usually refracts when passing from one material into another.
Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
2. When light is absorbed by a material, most of its energy is changed (transformed) into heat energy. Heat energy can also be produced by electrical and mechanical machines and by one object rubbing against another object.
Chapter 6, Lesson 1, Video A, SE page 113; Critical Thinking, SE page 117 **Chapter 8, Lesson 2, Video B, SE page 164; Critical Thinking, SE page 167; Process Skill, SE page 167** **Chapter 9, Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191**

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
3. Electrical energy in circuits can be changed (transformed) into light, heat, sound, and the energy of motion.
Chapter 9, Lesson 1, Video C, SE page 181; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Standard 3: Energy and Its Effects
Strand: The Production, Consumption, and Application of Energy
1. The production of most of the energy that we use in out daily lives comes from energy stored in natural resources. The quantity of these resources is limited, so it is important to conserve our natural resources by using them wisely.
Chapter 3, Lesson 2, Video C, SE page 63; Critical Thinking, SE page 65 **Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
1. The apparent path of the Sun, as seen from Earth, is from east to west. Over the course of a day, half of the Earth Is always illuminated by the Sun causing day, and the half not illuminated by the Sun experiences nighttime.
Chapter 6, Lesson 1, Video B, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
2. The cycle from day to night is caused by the Earth's rotation. Earth undergoes one complete rotation about every 24 hours.
Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE page 117

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
3. The moon orbits the Earth. The appearance of the Moon changes as it moves through its orbit. These changes are called phases.
Chapter 6, Lesson 1, Video C, SE page 115

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
4. The Sun is much larger than the Moon. Although the Moon is closer to Earth than the Sun, the two appear to be the same size when viewed from Earth. This is because objects appear smaller as the distance from the viewer increases.
Chapter 6, Lesson 1, Video A, SE page 113

Science Standard 4: Earth in Space
Strand: The Solar System
1. Earth is one of the planets in our Solar System that orbits the Sun. The Sun we see during the day is our nearest star. Stars we see at night lie outside our Solar System.
Chapter 6, Lesson 1, Video A, SE page 113; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Science Standard 4: Earth in Space
Strand: Technology and Applications
1. Humanity's view of the Solar System has expanded as a result of our exploration of outer space. The Hubble telescope gives us a better view of the many planets than the view we have from the Earth. Robot probes, sent to planets, send back close-up pictures of their surfaces.
Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; KnowZone, SE pages 130-131

Science Standard 4: Earth in Space
Strand: Technology and Applications
2. Terrestrial telescopes allow people to observe objects in the sky from Earth.
Chapter 6, Lesson 3, Video A, SE page 125; Video B, 126; Video C, SE page 127: KnowZone, SE pages 130-131

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
1. Water exists in three states (solid, liquid, and gas) that are dependent upon the surrounding temperature.
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
2. Rocks and minerals are broken down over time to clay and sand particles. These particles combine with plant remains and living organisms to form soil.
See Level A: **Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79** **See also Level C:** **Chapter 4, Lesson 3, Video C, SE page 85**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
3. The ability of water to pass through soil depends on the relative amounts of clay and sand in the soil.
See Level A: **Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79** **See also Level C:** **Chapter 4, Lesson 3, Video C, SE page 85**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
4. A soil's composition varies from environment to environment.
See Level A: **Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79** **See also Level C:** **Chapter 4, Lesson 3, Video C, SE page 85**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
1. Earth is a dynamic system resulting from interactions among the geosphere, hydrosphere, atmosphere, and biosphere.
Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77 **Chapter 5, Lesson 1, Video A, SE page 92; Video B, SE page 92; Critical Thinking, SE page 95; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; KnowZone, SE pages 102-103**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
2. Water reshapes Earth's land surface by eroding rock and soil in some areas and depositing them in other areas.
Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
3. The flow of water can be affected by human activities, ground cover and the slope of the land.
Chapter 1, Lesson 3, Critical Thinking, SE page 21 **Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
4. Water in rivers and streams transports materials. As a general rule, when a stream enters a larger body of water, less massive materials in suspension will travel farther than more massive materials before settling.
Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
5. The surface of Earth changes constantly. Some of these changes happen slowly and are difficult to detect on a daily basis. Other changes happen quickly and result from events (i.e., major storms and volcanoes).
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
6. Weather changes daily and seasonally. Weather in Delaware may change little from day to day, but can vary greatly when storm systems move into the area.
Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
7. Some weather events, such as snowstorms or tornadoes are more likely to occur at different times of the year.
Chapter 5, Lesson 1, Video A, SE page 91; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 109; Process Skill, SE page 109

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
8. Local weather at any point in times varies at different locations around the world.
Chapter 5, Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Standard 5: Earth's Dynamic Systems
Strand: Technology and Applications
1. Some satellites allow scientists to observe, over time, large-scale changes in the geosphere as well as the development of short term weather events.
Chapter 5, Lesson 2, Video C, SE page 99 **Chapter 6, Lesson 3, Video C, SE page 127**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
1. Structures that function for similar purposes in living things may have different appearances.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Critical Thinking, SE page 13; KnowZone, SE pages 14-15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, KnowZone, SE pages 36-37**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
2. The digestive system has major structures that function to break down food for use in the body. The major parts of the digestive system include the mouth, esophagus, stomach, small intestine, and large intestine.
See Level C: **Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
3. Organisms can be grouped based on similarities and differences in their structures and functions. These may include characteristics such as appendages, roots and leaves of plants, or the presence or lack of a backbone.
Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
1. Plants need the Sun's energy to grow and survive.
Chapter 1, Lesson 3, Video B, SE page 18; Video C, SE page 19 **Chapter 2, Lesson 2, Video A, SE page 31**

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
2. Animals need food to provide materials and energy for life which they derive directly or indirectly from plants.
Chapter 1, Lesson 1, Video A, SE page 3 **Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41**

Science Standard 6: Life Processes
Strand: Regulation and Behavior
1. An organism displays behaviors in response to internal cues, such as hunger, and external cues, such as light, temperature, or interaction with living things.
Chapter 1, Lesson 2, Video B, SE page 10 **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49**

Science Standard 6: Life Processes
Strand: Regulation and Behavior
2. There are similarities and differences in how organisms respond to internal and external cues. These behaviors may include strategies for acquiring food, building shelters, or evading predators.
Chapter 1, Lesson 2, Video B, SE page 10 **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
1. The development of safety devices has helped in the prevention of injuries.
Chapter 5, KnowZone, SE pages 102-103 **Chapter 8, Lesson 3, Critical Thinking, SE page 175** **Chapter 9, Lesson 1, Video B, SE page 180; Critical Thinking, SE page 183; Lesson 2, Critical Thinking, SE page 189; Lesson 3, Video C, SE page 193**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
2. Short term and long term studies are used to determine the effects of environmental changes (natural and man-made) on the health of the organisms within that environment.
Chapter 2, Lesson 2, Critical Thinking, SE page 35; Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65**

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
1. Physical characteristics are passed on from parent to offspring. Organisms with two parents inherit characteristics of both.
Chapter 1, Lesson 2, Video B, SE page 10

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
2. An organism's physical appearance can change without the change being passed on to its offspring (e.g., dyed hair, loss of a claw).
This concept is not covered at this level.

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
3. Most plants go through a life cycle of germination, growth, development, reproduction, and death.
Chapter 1, Lesson 3, Video A, SE page 17

Science Standard 7: Diversity and Continuity of Living Things
Strand: Diversity and Evolution
1. Organisms of the same type vary in appearance. These variations may provide an advantage in reproduction and survival.
See Level A: **Chapter 1, Lesson 3, SE page 19**

Science Standard 7: Diversity and Continuity of Living Things
Strand: Technology Applications
1. Through the use of biotechnology, scientists engineer plants and manipulate growing conditions to meet human needs and wants (e.g., fruits without seeds, hydroponics).
This concept is not covered at this level.

Science Standard 8: Ecology
Strand: Interactions within the Environment
1. People depend on living and nonliving resources to satisfy their need for food, shelter, and fuel.
Chapter 4, Lesson 2, Video B, SE page 76; Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; KnowZone, SE pages 86-87 **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video A, SE page 97** **Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195**

Science Standard 8: Ecology
Strand: Interactions within the Environment
2. All living organisms interact with the living and nonliving parts of their surroundings to meet their needs for survival. These interactions lead to a constant exchange of matter.
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; Lesson **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51**

Science Standard 8: Ecology
Strand: Interactions within the Environment
3. Adaptations in organisms enable them to live and reproduce in certain environments. Those organisms that are best suited for a particular environment have adaptations that allow them to compete for available resources and cope with the physical conditions of their immediate surroundings.
Chapter 1, Lesson 2, Video C, SE page 11; KnowZone, SE pages 14-15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, KnowZone, SE pages 36-37** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video B, SE page 56**

Science Standard 8: Ecology
Strand: Interactions within the Environment
4. Changes in an organism's environment may be either beneficial or harmful. Organisms may be affected by other organisms, by various physical factors (e.g., rainfall, temperature), by physical forces (e.g., storms, earthquakes), and by daily, seasonal, and annual cycles.
Chapter 2, Lesson 1, Video B, SE page 26; Lesson 2, Critical Thinking, SE page 25; Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Science Standard 8: Ecology
Strand: Interactions within the Environment
5. In order to survive, populations within an ecosystem require a balance of resources.
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Critical Thinking, SE page 29; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Critical Thinking, SE page 51; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Process Skill, SE page 65**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
1. Plants need energy from the Sun, water and nutrients for growth and survival.
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
2. Animals eat plants or other animals that have eaten plants. Animals obtain energy and materials for body repair and growth from food.
Chapter 2, Lesson 1, Video B, SE page 26; Lesson 3, Video C, SE page 41 **Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
3. Dead plants and animals are broken down by decomposers.
Chapter 2, Lesson 2, Video C, SE page 33; Process Skill, SE page 35

Science Standard 8: Ecology
Strand: Human Impact
1. Human activities may cause pollution of air, water and soil.
Chapter 2, Lesson 3, Video C, SE page 41; Critical thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 2, Critical Thinking, SE page 59; Lesson 3, Video C, SE page 63; Process Skill, SE page 65** **Chapter 5, Lesson 1, Video C, SE page 93; KnowZone, SE pages 102-103** **Chapter 9, Lesson 3, Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195**

Science Standard 8: Ecology
Strand: Human Impact
2. Different technologies are used to access resources to meet human wants and needs. In many cases the environment is affected and resources become limited. Some activities may include burning of fossil fuels, logging, building of highway, shopping centers, and dams, introduction of one species to control another species, spraying of insects, as well as some aspects of farming.
Chapter 2, Lesson 3, Video C, SE page 41; Critical thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 2, Critical Thinking, SE page 59; Lesson 3, Video C, SE page 63; Process Skill, SE page 65** **Chapter 5, Lesson 1, Video C, SE page 93; KnowZone, SE pages 102-103** **Chapter 9, Lesson 3, Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195**

SRA Snapshots Video Science™: Level C
correlation to
Delaware Science Standards
Grade 5

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
1. Understand that: Scientific investigations involve asking a focused scientific question. Investigations differ depending upon the question being asked.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
2. Understand that: Fair test design supports the validity of the investigation. Sometimes it is not possible to know everything that will have an effect on the investigation or control all conditions.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
3. Understand that: The purpose of accurate data collection is to provide evidence to compare with the prediction.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
4. Understand that: The body of scientific knowledge grows as scientists ask questions, conduct investigations, develop explanations and compare results with what is already known.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
5. Understand that: The purpose of communicating is to share and justify evidence. Scientists communicate their results to others, including the details that allow others to replicate the results.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 1: Nature and Application of Science and Technology
Strand: Understandings and Abilities of Scientific Inquiry
6. Understand that: The use of mathematics, reading, writing, and technology are important in conducting scientific inquires.
Chapter 1, Lesson 1 Math in Science, SE page 7 **Chapter 2, Lesson 2 Math in Science, SE page 35** **Chapter 4, Lesson 1 Math in Science, SE page 73** **Chapter 5, Lesson 2 Math in Science, SE page 101** **Chapter 7, Lesson 2 Math in Science, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3 Math in Science, SE page 175; Process Skill, SE page 175** **The Metric System, SE pages 200-201**

Science Standard 1: Nature and Application of Science and Technology
Strand: Science, Technology, and Society
1. Science and technology are related. Technology provides the tools needed for science to investigate questions and may provide solutions to society's problems, wants, or needs. Not all technological solutions are effective, uniformly beneficial, or equally available to everyone.
Chapter 1, Lesson 3, Critical Thinking, SE page 19 **Chapter 2, Lesson 2, Critical Thinking, SE page 57** **Chapter 3, Lesson 3, Video C, SE page 62; Video C, SE page 63** **Chapter 4, Lesson 3, Vide C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173**

Science Standard 1: Nature and Application of Science and Technology
Strand: History and Context of Science
1. Contributions by individuals have been essential in advancing the body of scientific knowledge.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2 Process Skill, SE page 191**

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
1. Observable physical properties can be used to classify materials. These physical properties may include solubility, mass, magnetism, and electrical conductivity. Tools such as graduated cylinders, balances, rulers, magnifiers, simple circuits, and magnets are used to study the physical properties.
Chapter 1, LabTime Hands-On Activity 1, TRB page 15, TG page 30 **Chapter 5, Lesson 3, Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB page 87, TG page 102** **Chapter 7, Lesson 2, Video C, SE page 165; LabTime Hands-On Activity 7, TRB page 123, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB page 141, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191** **The Metric System, SE page 200-201**

Science Standard 2: Materials and Their Properties
Strand: Properties and Structure of Materials
2. Heating and cooling of materials may produce changes in the state of solids, liquids and gases.
Chapter 7, Lesson 1, Video B, SE page 136; Video C, SE page 137; Lesson 2, Video A, SE page 143; Video C, SE page 145; Critical Thinking, SE page 147

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
1. Most materials are physical mixtures. Physical mixtures can be composed of different kinds of materials, each having distinct physical properties. These physical properties can be used to separate, sort, and group the materials of the mixture.
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
2. Mixtures can consist of different combinations of solids and/or liquids. The characteristics of these resulting mixtures depend on the relative amounts and properties of the components.
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
3. Physical properties can be used to separate mixtures through techniques such as filtration and evaporation.
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Science Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
4. When a solid is dissolved in a liquid, a solution is formed that can be separated through the process of evaporation.
Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Science Standard 2: Materials and Their Properties
Strand: Conservation of Matter
1. The mass of an object remains unchanged when broken into parts. The sum of the parts equals the whole.
Chapter 7, Lesson 2, Video B, SE page 144

Science Standard 2: Materials and Their Properties
Strand: Material Technology
1. Many materials can be recycled and used again (sometimes in different forms).
Chapter 3, Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65 **Chapter 4, Lesson 3, Video C, SE page 85** **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101**

Science Standard 2: Materials and Their Properties
Strand: Material Technology
2. Technology has created new materials that can help people solve problems.
Chapter 3, KnowZone, SE pages 58-59 **Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 9, Lesson 3, Critical Thinking, SE page 197**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
1. Energy from the sun includes visible light, which consists of a combination of different colored light, and components that are not visible, which include infrared and ultraviolet light waves.
See Level B: **Chapter 5, KnowZone, SE pages 102-103** **Chapter 8, Lesson 2, Video A, SE page 163** **Electromagnetic Energy, SE pages 206-207**

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
2. The energy of a moving object depends on its speed. Faster moving objects have more energy than slower moving objects.
Chapter 9, KnowZone, SE pages 184-185; Lesson 2, Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191; Lesson 3, Video B, SE page 194

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
3. Energy can be stored in an elastic material when it is stretched.
Chapter 8, Lesson 1, Process Skill, SE page 161

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
4. Sound is a form of energy that is produced by vibrating objects, and can be described by its pitch and its loudness (volume). Sound travels faster through some substances than others.
Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Process Skill, SE page 167

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
5. Heat energy raises the object's temperature or changes the state of the object (i.e., solid to liquid, liquid to gas).
Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Critical Thinking, SE page 167; Process Skill, SE page 167

Science Standard 3: Energy and Its Effects
Strand: The Forms and Sources of Energy
6. The energy obtained from electrical outlets is electrical energy that was produced at an electrical power plant. Electrical energy can be generated and then transmitted over great distances. Batteries care portable sources of electrical energy.
Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
1. Force is any push or pull exerted by one object on another. Some forces (e.g., magnetic forces and gravity) can make things move without touching them.
Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 2, Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Ski,, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
2. The speeds of two or more objects can be compared (i.e., faster, slower) by measuring the distance traveled in a given unit of time, or by measuring the time needed to travel a fixed distance.
Chapter 9, KnowZone, SE pages 184-185; Lesson 2, Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
3. A force must be applied to change the speed of a moving object or change its direction of motion. Larger forces will create greater changes in an object's speed in a given unit of time.
Chapter 9, Lesson 1, Video A, SE page 179; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
4. Pushing and pulling forces can be used to transfer energy from one object to another.
Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Ski,, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
5. The transfer of heat energy may produce changes in the state of a substance.
Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Critical Thinking, SE page 167; Process Skill, SE page 167

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
6. The energy of electricity is transferred to electrical devices through simple closed circuits (simple series of simple parallel circuits).
Level C: **Chapter 9, Lesson 1, Video A, SE page 171; Video B, SE page 172** **See also Level B:** **Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183**

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
7. Some materials allow electricity to flow freely (conductors), while other materials inhibit the flow of electricity (insulators).
See Level B: **Chapter 9, Lesson 1, Video B, SE page 180**

Science Standard 3: Energy and Its Effects
Strand: Forces and the Transfer of Energy
8. Some materials are magnetic and be pushed or pulled by other magnets.
See Level B: **Chapter 9, Lesson 2, Video A, SE page 185; Video B, SE page 186; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
1. When light strikes an object, the light can reflect off of its surface or pass into the object. The light that passes into the object can pass through it or be absorbed by the material that makes up the object. Light usually refracts when passing from one material into another.
See Level A: **Chapter 9, Lesson 1, Video A, SE page 179; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174** **See also Level B:** **Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165**

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
2. When light is absorbed by a material, most of its energy is changed (transformed) into heat energy. Heat energy can also be produced by electrical and mechanical machines and by one object rubbing against another object.
See Level B: **Chapter 8, Lesson 2, Video B, SE page 164; Process Skill, SE page 167; KnowZone, SE pages 168-169** **Chapter 9, Lesson 3, Video B, SE page 192**

Science Standard 3: Energy and Its Effects
Strand: Energy Interacting with Materials: The Transformation and Conservation of Energy
3. Electrical energy in circuits can be changed (transformed) into light, heat, sound, and the energy of motion.
Level C: **Chapter 9, Lesson 1, Video A, SE page 171; Video B, SE page 172** **See also Level B:** **Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183**

Science Standard 3: Energy and Its Effects
Strand: The Production, Consumption, and Application of Energy
1. The production of most of the energy that we use in out daily lives comes from energy stored in natural resources. The quantity of these resources is limited, so it is important to conserve our natural resources by using them wisely.
Chapter 4, Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87 **Chapter 8, Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
1. The apparent path of the Sun, as seen from Earth, is from east to west. Over the course of a day, half of the Earth Is always illuminated by the Sun causing day, and the half not illuminated by the Sun experiences nighttime.
Chapter 6, Lesson 2, Video A, SE page 121

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
2. The cycle from day to night is caused by the Earth's rotation. Earth undergoes one complete rotation about every 24 hours.
Chapter 6, Lesson 2, Video A, SE page 121

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
3. The moon orbits the Earth. The appearance of the Moon changes as it moves through its orbit. These changes are called phases.
Chapter 6, Lesson 2, Video C, SE page 123

Science Standard 4: Earth in Space
Strand: The Earth/Moon/Sun System
4. The Sun is much larger than the Moon. Although the Moon is closer to Earth than the Sun, the two appear to be the same size when viewed from Earth. This is because objects appear smaller as the distance from the viewer increases.
Chapter 6, Lesson 1, Video A, SE page 113; Lesson 2, Video B, SE page 122

Science Standard 4: Earth in Space
Strand: The Solar System
1. Earth is one of the planets in our Solar System that orbits the Sun. The Sun we see during the day is our nearest star. Stars we see at night lie outside our Solar System.
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; KnowZone, SE pages 118-119

Science Standard 4: Earth in Space
Strand: Technology and Applications
1. Humanity's view of the Solar System has expanded as a result of our exploration of outer space. The Hubble telescope gives us a better view of the many planets than the view we have from the Earth. Robot probes, sent to planets, send back close-up pictures of their surfaces.
Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131

Science Standard 4: Earth in Space
Strand: Technology and Applications
2. Terrestrial telescopes allow people to observe objects in the sky from Earth.
Level C: **Chapter 6, Lesson 2, Video B, SE page 128** **See also Level B:** **Chapter 6, Lesson 3, video A, SE page 125**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
1. Water exists in three states (solid, liquid, and gas) that are dependent upon the surrounding temperature.
Chapter 5, Lesson 2, Video B, SE page 98

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
2. Rocks and minerals are broken down over time to clay and sand particles. These particles combine with plant remains and living organisms to form soil.
Level C: **Chapter 4, Lesson 3, Video C, SE page 85** **See also Level A:** **Chapter 4, Lesson 2, Video C, SE page 77; Critical Thinking, SE page 79; Process Skill, SE page 79**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
3. The ability of water to pass through soil depends on the relative amounts of clay and sand in the soil.
Level C: **Chapter 4, Lesson 3, Video C, SE page 85** **See also Level A:** **Chapter 4, Lesson 2, Video C, SE page 77; Critical Thinking, SE page 79; Process Skill, SE page 79**

Science Standard 5: Earth's Dynamic Systems
Strand: Components of Earth
4. A soil's composition varies from environment to environment.
Level C: **Chapter 4, Lesson 3, Video C, SE page 85** **See also Level A:** **Chapter 4, Lesson 2, Video C, SE page 77; Critical Thinking, SE page 79; Process Skill, SE page 79**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
1. Earth is a dynamic system resulting from interactions among the geosphere, hydrosphere, atmosphere, and biosphere.
Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Critical Thinking SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87; Process Skill, SE page 87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; Process Skill, SE page 107; KnowZone, SE pages 108-109**

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
2. Water reshapes Earth's land surface by eroding rock and soil in some areas and depositing them in other areas.
Chapter 4, Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Process Skill, SE page 87

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
3. The flow of water can be affected by human activities, ground cover and the slope of the land.
Chapter 4, Lesson 2, Video B, SE page 78

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
4. Water in rivers and streams transports materials. As a general rule, when a stream enters a larger body of water, less massive materials in suspension will travel farther than more massive materials before settling.
Chapter 4, Lesson 2, Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
5. The surface of Earth changes constantly. Some of these changes happen slowly and are difficult to detect on a daily basis. Other changes happen quickly and result from events (i.e., major storms and volcanoes).
Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Writing in Science, SE page 87; Process Skill, SE page 87

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
6. Weather changes daily and seasonally. Weather in Delaware may change little from day to day, but can vary greatly when storm systems move into the area.
Chapter 4, Lesson 3, Video A, SE page 103; Video B, SE page 104; Process Skill, SE page 107

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
7. Some weather events, such as snowstorms or tornadoes are more likely to occur at different times of the year.
Chapter 5, Lesson 2, Video B, SE page 98; Lesson 3, Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Science Standard 5: Earth's Dynamic Systems
Strand: Interactions Throughout Earth's Systems
8. Local weather at any point in times varies at different locations around the world.
Chapter 4, Lesson 3, Video A, SE page 103; Video B, SE page 104; Process Skill, SE page 107

Science Standard 5: Earth's Dynamic Systems
Strand: Technology and Applications
1. Some satellites allow scientists to observe, over time, large-scale changes in the geosphere as well as the development of short term weather events.
Chapter 5, Lesson 2, Video A, SE page 103 **Chapter 6, Lesson 3, Video B, SE page 128**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
1. Structures that function for similar purposes in living things may have different appearances.
Chapter 1, Lesson 2, Video A< SE page 9; Video C, SE page 11 **Chapter 2, Lesson 1, Video B, SE page 26; Process Skill, SE page 29; Lesson 2, Video B, SE page 32** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
2. The digestive system has major structures that function to break down food for use in the body. The major parts of the digestive system include the mouth, esophagus, stomach, small intestine, and large intestine.
Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17

Science Standard 6: Life Processes
Strand: Structure/Function Relationship
3. Organisms can be grouped based on similarities and differences in their structures and functions. These may include characteristics such as appendages, roots and leaves of plants, or the presence or lack of a backbone.
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Critical Thinking, SE page 29; Process Skill, SE page 29

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
1. Plants need the Sun's energy to grow and survive.
Level C: **Chapter 1, Lesson 2, Video A, SE page 9** **Chapter 7, Lesson 3, Video A, SE page 149** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48**

Science Standard 6: Life Processes
Strand: Matter and Energy Transformations
2. Animals need food to provide materials and energy for life which they derive directly or indirectly from plants.
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **Food Web, SE page 203** **Energy Pyramid, SE page 203** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Food Web, SE page 203** **Energy Pyramid, SE page 203**

Science Standard 6: Life Processes
Strand: Regulation and Behavior
1. An organism displays behaviors in response to internal cues, such as hunger, and external cues, such as light, temperature, or interaction with living things.
Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; KnowZone, SE pages 36-37; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Science Standard 6: Life Processes
Strand: Regulation and Behavior
2. There are similarities and differences in how organisms respond to internal and external cues. These behaviors may include strategies for acquiring food, building shelters, or evading predators.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11 **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Video B, SE page 48; Lesson 2, Video A, SE page 52; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
1. The development of safety devices has helped in the prevention of injuries.
Chapter 4, Lesson 1, Critical Thinking, SE page 65 **Chapter 5, Lesson 3, Video A, SE page 103; Critical Thinking, SE page 107** **Chapter 8, Lesson 1, Video A, SE page 163; Critical Thinking, SE page 167** **Chapter 9, Lesson 1, Critical Thinking, SE page 183; Lesson 3, Critical Thinking, SE page 197**

Science Standard 6: Life Processes
Strand: Life Processes and Technology Application
2. Short term and long term studies are used to determine the effects of environmental changes (natural and man-made) on the health of the organisms within that environment.
Chapter 2, Lesson 1, Video C, SE page 27; Critical Thinking, SE page 29; Lesson 2, Critical Thinking, SE page 43 **Chapter 3, Lesson 1, Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 157; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65**

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
1. Physical characteristics are passed on from parent to offspring. Organisms with two parents inherit characteristics of both.
Chapter 2, Lesson 2, Video B, SE page 32

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
2. An organism's physical appearance can change without the change being passed on to its offspring (e.g., dyed hair, loss of a claw).
This concept is not covered at this level.

Science Standard 7: Diversity and Continuity of Living Things
Strand: Reproduction, Heredity and Development
3. Most plants go through a life cycle of germination, growth, development, reproduction, and death.
Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37

Science Standard 7: Diversity and Continuity of Living Things
Strand: Diversity and Evolution
1. Organisms of the same type vary in appearance. These variations may provide an advantage in reproduction and survival.
See Level A: **Chapter 1, Lesson 3, SE page 19**

Science Standard 7: Diversity and Continuity of Living Things
Strand: Technology Applications
1. Through the use of biotechnology, scientists engineer plants and manipulate growing conditions to meet human needs and wants (e.g., fruits without seeds, hydroponics).
This concept is not covered at this level.

Science Standard 8: Ecology
Strand: Interactions within the Environment
1. People depend on living and nonliving resources to satisfy their need for food, shelter, and fuel.
Chapter 3, Lesson 1, Video C, SE page 49; KnowZone, SE page 58-59; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65 **Chapter 4, Lesson 3, Video C, SE page 85** **Chapter 5, Lesson 1, Video A, SE page 91; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 1, Video A, SE page 157; Lesson 3, Video C, SE page 173**

Science Standard 8: Ecology
Strand: Interactions within the Environment
2. All living organisms interact with the living and nonliving parts of their surroundings to meet their needs fro survival. These interactions lead to a constant exchange of matter.
Chapter 1, Lesson 1, Video B, SE page 4 **Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Lesson 3, Video A, SE page 61; Video B, SE page 62; Critical Thinking, SE page 65; Process Skill, SE page 65**

Science Standard 8: Ecology
Strand: Interactions within the Environment
3. Adaptations in organisms enable them to live and reproduce in certain environments. Those organisms that are best suited for a particular environment have adaptations that allow them to compete for available resources and cope with the physical conditions of their immediate surroundings.
Chapter 2, Lesson 2, Video B, SE page 32; video C, SE page 33; Critical Thinking, SE page 35; KnowZone, SE pages 36-37 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Science Standard 8: Ecology
Strand: Interactions within the Environment
4. Changes in an organism's environment may be either beneficial or harmful. Organisms may be affected by other organisms, by various physical factors (e.g., rainfall, temperature), by physical forces (e.g., storms, earthquakes), and by daily, seasonal, and annual cycles.
Chapter 2, Lesson 1, Video C, SE page 27; KnowZone, SE pages 36-37 **Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62**

Science Standard 8: Ecology
Strand: Interactions within the Environment
5. In order to survive, populations within an ecosystem require a balance of resources.
Level C: **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51: Lesson 3, Video A, SE page 61; Video B, SE page 62; Critical Thinking, SE page 65** **See also Level A:** **Chapter 2, Lesson 2, Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video B, SE page 62** **See also Level B:** **Chapter 2, Lesson 1, Video C, SE page 26; Critical Thinking, SE page 29** **Chapter 3, Lesson 3, Video B, SE page 62**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
1. Plants need energy from the Sun, water and nutrients for growth and survival.
Level C: **Chapter 1, Lesson 2, Video A, SE page 9** **Chapter 7, Lesson 3, Video A, SE page 149** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
2. Animals eat plants or other animals that have eaten plants. Animals obtain energy and materials for body repair and growth from food.
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **Food Web, SE page 203** **Energy Pyramid, SE page 203** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Food Web, SE page 203** **Energy Pyramid, SE page 203**

Science Standard 8: Ecology
Strand: Energy Flow and Material Cycles in the Environment
3. Dead plants and animals are broken down by decomposers.
Level C: **Chapter 1, KnowZone, SE pages 20-21** **Chapter 3, Lesson 1, Video C, SE page 49** **See also Level B:** **Chapter 2, Lesson 2, Video C, SE page 33; Process Skill, SE page 35**

Science Standard 8: Ecology
Strand: Human Impact
1. Human activities may cause pollution of air, water and soil.
Chapter 3, Lesson 3, Video B, SE page 62 **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102**

Science Standard 8: Ecology
Strand: Human Impact
2. Different technologies are used to access resources to meet human wants and needs. In many cases the environment is affected and resources become limited. Some activities may include burning of fossil fuels, logging, building of highway, shopping centers, and dams, introduction of one species to control another species, spraying of insects, as well as some aspects of farming.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 2, Video A, SE page 77; Video B, SE page 78** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 7, Lesson 3, Video B, SE page 150** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**