SRA Snapshots Video ScienceTM: Level A correlation to New Mexico Science Standards Grade 3

*SRA Snapshots Video Science*TM 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

1. Make new observations when discrepancies exist between two descriptions of the same object or phenomena to improve accuracy.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

2. Recognize the difference between data and opinion.

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

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

3. Use numerical data in describing and comparing objects, events, and measurements.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

4. Collect data in an investigation and analyze those data.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

5. Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants).

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, 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

B. Use scientific thinking and knowledge and communicate findings.

1. Use a variety of methods to display data and present findings.

Chapter 1, Lesson 2, Math in Science, SE page 13; Process Skill, SE page 13

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 5, Lesson 2, Process Skill, SE page 103; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

B. Use scientific thinking and knowledge and communicate findings.

2. Understand that predictions are based on observations, measurements, and cause-and-effect relationships.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

1. Use numerical data in describing and comparing objects, events, and measurements.

Chapter 1, Lesson 2, Math in Science, 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, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 87

Chapter 5, Lesson 2, Math in Science, SE page 103; Process Skill, SE page 103; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

2. Pose a question of interest and present observations and measurements with accuracy.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

3. Use various methods to display data and present findings and communicate results in accurate mathematic language.

Chapter 1, Lesson 2, Math in Science, SE page 13; Process Skill, SE page 13

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 5, Lesson 2, Process Skill, SE page 103; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

A. Recognize that matter had different forms and properties.

1. Identify and compare properties of pure substances and mixtures (e.g., sugar, fruit juice).

See Level B:

Chapter 7, Lesson 3, Video B, SE page 150

See also Level C:

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Recognize that matter had different forms and properties.

2. Separate mixtures based on properties (e.g., by size or by substance; rocks and sand, iron filings and sand, salt, and sand).

See Level C:

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Know that energy is needed to get things done and that energy has different forms.

1. Understand that light is a form of energy and can travel through a vacuum.

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Know that energy is needed to get things done and that energy has different forms.

2. Know that light travels in a straight line until it strikes an object and then it is reflected, refracted, or absorbed.

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Know that energy is needed to get things done and that energy has different forms.

3. Measure energy and energy changes (e.g., temperature changes).

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Know that energy is needed to get things done and that energy has different forms.

4. Construct charts or diagrams that relate variables associated with energy changes (e.g., melting of ice over time).

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

C. Identify forces and describe the motion of objects.

1. Recognize that magnets can produce motion by attracting some materials (e.g., steel) and have no effect on others (e.g., plastics).

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147

C. Identify forces and describe the motion of objects.

2. Describe how magnets have poles (N and S) and that like poles repel each other while unlike poles attract.

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

C. Identify forces and describe the motion of objects.

3. Observe that some forces produce motion without objects touching (e.g., magnetic force on nails).

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

C. Identify forces and describe the motion of objects.

4. Describe motion on different time scales (e.g., the slow motion of a plant turning toward light, the fast motion of a tuning fork).

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Video B, SE page 92; Critical Thinking, SE page 95

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; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, KnowZone, SE pages 140-141; 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, Video C, SE page 181; KnowZone, SE pages 184-185

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

1. Know that an adaptation in physical structure or behavior can improve an organism's chance for survival (e.g., horned toads, chameleons, cacti, mushrooms).

Chapter 2, 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

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

2. Observe that plants and animals have structures that serve different purposes (e.g., shape of animals' teeth).

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

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

3. Classify common animals according to their observable characteristics (e.g., body coverings, structure).

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Critical Thinking, SE page 13; Math in Science, SE page 13; KnowZone, SE pages 14-15

Classification, SE page 202

- A. Know that living things have diverse forms, structures, functions, and habitats.
- 4. Classify plants according to their characteristics (e.g., tree leaves, flowers, seeds).

Chapter 1, Lesson 2, Video C, SE page 11; Critical Thinking, SE page 13

Classification, SE page 202

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- B. Know that living things have similarities and differences and that living things change over time.
- 1. Identify how living things cause changes to the environments in which they live, and that some of these changes are detrimental to the organism and some are beneficial.

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- B. Know that living things have similarities and differences and that living things change over time.
- 2. Know that some kinds of organisms that once lived on Earth have become extinct (e.g., dinosaurs) and that others resemble those that are alive today (e.g., alligators, sharks).

Chapter 3, Lesson 3, Video C, SE page 63

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- C. Know the parts of the human body and their functions.
- 1. Know that bacteria and viruses are germs that affect the human body.

Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Critical Thinking, SE page 59; Process Skill, SE page 59

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- C. Know the parts of the human body and their functions.
- 2. Describe the nutrients needed by the human body.

Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Know the structure of the solar system and the objects in the universe.

1. Describe the objects in the solar system (e.g., sun, Earth and other planets, moon) and their features (e.g., size, temperature).

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; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; KnowZone, SE pages 124-125; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131; Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Earth in Space, SE pages 205

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Know the structure of the solar system and the objects in the universe.

2. Describe the relationships among the objects in the solar system (e.g., relative distances, orbital motions).

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; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; KnowZone, SE pages 124-125; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Earth in Space, SE pages 205

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Know the structure of the solar system and the objects in the universe.

3. Observe that the pattern of stars stays the same as they appear to move across the sky nightly.

Chapter 6, Lesson 3, Video A, SE page 127; Critical Thinking, SE page 129; Process Skill, SE page 129

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Know the structure of the solar system and the objects in the universe.

4. Observe that different constellations can be seen in different seasons.

Chapter 6, Lesson 3, Video A, SE page 127; Critical Thinking, SE page 129

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Know the structure of the solar system and the objects in the universe.

5. Know that telescopes enhance the appearance of some distant objects in the sky (e.g., the moon, planets).

Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Process Skill, SE page 131

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.

1. Know that Earth's features are constantly changes by a combination of slow and rapid processes that include the action of volcanoes, earthquakes, mountain building, biological changes, erosion, and weathering.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.

2. Know that fossils are evidence of earlier life and provide data about plants and animals that lived long ago.

Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.

3. Know that air takes up space, is colorless, tasteless, and odorless, and exerts a force.

Chapter 4, Lesson 3, Video A, SE page 83

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.
- 4. Identify how water exists in the air in different forms (e.g., in clouds and fog as tiny droplets; in rain, snow, and hail) and changes from one form to another through various processes (e.g., freezing/condensation, precipitation, evaporation).

Chapter 5, Lesson 2, Video B, SE page 100; Process Skill, SE page 103; Lesson 3, Video A, SE page 105

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 1. Describe how food packaging (e.g., airtight containers, data) and preparation (heating, cooling, salting, smoking, drying) extend food life and the safety of foods (e.g., elimination of bacteria).

This concept is not covered at this level.

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 2. Know that science produces information for the manufacture and recycling of materials (e.g., materials that can be recycled [aluminum, paper, plastic] and others that cannot [gasoline]).

Chapter 3, Lesson 3, Video A, SE page 61; Video C, SE page 63; Process Skill, SE page 65

Chapter 4, Lesson 2, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85

Chapter 5, Lesson 2, Video C, SE page 101

Chapter 9, Lesson 3, video C, SE page 195

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 3. Know that naturally occurring materials (e.g., wood, clay, cotton, animal skins) may be processed or combined with other materials to change their properties.

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84

Chapter 8, Lesson 3, Video B, SE page 172; Video C, SE page 173

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 4. Know that using poisons can reduce the damage to crops caused by rodents, weeds, and insects, but their use may harm other plants, animals, or the environment.

Chapter 3, Lesson 3, Video A, SE page 61

SRA Snapshots Video ScienceTM: Level B correlation to New Mexico Science Standards Grade 4

SRA Snapshots Video Science TM 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

1. Use instruments to perform investigations (e.g., timers, balances) and communicate findings.

Chapter 1, Lesson 1, Video A, SE page 3

Chapter 4, Lesson 2, Video C, SE page 77

Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 105-

107; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145

Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169

Chapter 9 KnowZone, SE pages 196-197

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

2. Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how the observation is interpreted.

Chapter 1, Lesson 2, Process Skill, SE page 13; Lesson 3, Process Skill, SE page 21; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Process Skill, SE page 29; 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; 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 1, Writing in Science, SE page 117; Process Skill, SE page 117; 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, Lesson 1, Video A, SE page 161; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

3. Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

4. Collect data in an investigation using multiple techniques, including control groups, and analyze those data to determine what other investigations could be conducted to validate findings.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

B. Use scientific thinking and knowledge and communicate findings.

1. Communicate ideas and present findings about scientific investigations that are open to critique from 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, 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

B. Use scientific thinking and knowledge and communicate findings.

2. Describe how scientific investigations may differ from one another (e.g., observations of nature, measurements of things changing over time).

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Process Skill, SE page 29; 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

B. Use scientific thinking and knowledge and communicate findings.

3. Understand how data are used to explain how a simple system functions (e.g., a thermometer to measure heat loss as water cools).

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, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; 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 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

1. Conduct multiple trials using simple mathematical techniques to make and test predictions.

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

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

2. Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.

Chapter 1, Lesson 1, Math in Science, SE page 7

Chapter 2, Lesson 1 Math in Science, SE page 29

Chapter 3, Lesson 3 Math in Science, SE page 65

Chapter 4, Lesson 1 Math in Science, SE page 73

Chapter 6 LabTime Hands-On Activity, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2 Math in Science, SE page 147

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

3. Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of the density of materials that will or will not float in water to the density of the water).

Chapter 1, Lesson 1. Math in Science, SE page 7; LabTime Hands-On Activity, TRB pages 15-17, TG page 30

Chapter 3, Lesson 3 Math in Science, SE page 65; LabTime Hands-On Activity, TRB pages 51-53, TG page 66

Chapter 4, Lesson 1 Math in Science, SE page 73; LabTime Hands-On Activity, TRB pages 69-71, TG page 84

Chapter 5 LabTime Hands-On Activity, TRB pages 87-89, TG page 102

Chapter 6 LabTime Hands-On Activity, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Math in Science, SE page

147; Process Skill, SE page 147; LabTime Hands-On Activity, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3 Math in Science, SE page 175

Chapter 9, Lesson 3 Math in Science, SE page 195

The Metric System, SE pages 200-201

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Recognize that matter had different forms and properties.

1. Know that changes to matter may be chemical or physical and when two or more substances are combined, a new substance may be formed with properties that are different from the original substances (e.g., white glue and boras, cornstarch and water, vinegar and baking soda).

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; LabTime Hands-On Activity, TRB pages 123-125, TG page 138

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Recognize that matter had different forms and properties.

2. Know that materials are made up of small particles (atoms and molecules) that are too small to see with the naked eye.

Chapter 7, Lesson 3, Video A, SE page 149; Critical Thinking, SE page 151

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Recognize that matter had different forms and properties.

3. Know that the mass of the same amount of material remains constant whether it is together, in parts, or in a different state.

Chapter 7, Lesson 2, Video B, SE page 144

- B. Know that energy is needed to get things done and that energy has different forms.
- 1. Identify the characteristics of several different forms of energy and describe how energy can be converted from one form to another (e.g., light to heat, motion to heat, electricity to heat, light, or motion).

Chapter 8, Lesson 1, Video A, SE page 157; Lesson 2, Video A, SE page 163; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Video A, SE page 179; Lesson 2, Video A, SE page 185; Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191; KnowZone, SE pages 196-197

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- B. Know that energy is needed to get things done and that energy has different forms.
- 2. Recognize that energy can be stored in many ways (e.g., potential energy in gravity or springs, chemical energy in batteries).

Chapter 7, Lesson 3, Video B, SE page 172

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- B. Know that energy is needed to get things done and that energy has different forms.
- 3. Describe how some waves move through materials (e.g., water, sound) and how others can move through a vacuum (e.g., x-ray, television, radio).

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Critical Thinking, SE page 161; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Process Skill, SE page 167; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- B. Know that energy is needed to get things done and that energy has different forms.
- 4. Demonstrate how electricity flows through a simple circuit (e.g., by constructing one).

Chapter 9, Lesson 1, Video C, SE page 181

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Identify forces and describe the motion of objects.
- 1. Know that energy can be carried from one place to another by waves (e.g., water waves, sound waves), by electric currents, and by moving objects.

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Critical Thinking, SE page 161; Process Skill, SE page 161; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

C. Identify forces and describe the motion of objects.

2. Describe the motion of an object by measuring its change of position over a period of time.

Level B:

Chapter 8, Lesson 3, Video A, SE page 171

See also Level A:

Chapter 7, Lesson 1, Video A, SE page 135

See also Level C:

Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

C. Identify forces and describe the motion of objects.

3. Describe that gravity exerts more force on objects with greater mass (e.g., it takes more force to hold up a heavy object than a lighter one).

Chapter 8, Lesson 3, Video A, SE page 171

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

C. Identify forces and describe the motion of objects.

4. Describe how some forces act on contact and other forces act at a distance (e.g., a person pushing a rock versus gravity acting on a rock).

Chapter 8, Lesson 3, Video A, SE page 171; Critical Thinking, SE page 175

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Lesson 2, Video A, SE page 185; Video B, SE page 186; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

1. Explain that different living organisms have distinctive structures and body systems that serve specific functions (e.g., walking, flying, swimming).

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; KnowZone, SE pages 14-15; Lesson 3, Video B, SE page 18; Video C, SE page 19

Chapter 2, KnowZone, SE pages 36-37

Chapter 3, Lesson 1, Video B, SE page 48; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 56

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

2. Know that humans and other living things have senses to help them detect stimuli, and that sensations (e.g., hunger) and stimuli (e.g., changes in the environment) influence the behavior of organisms.

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 2, Video C, SE page 11; KnowZone, SE pages 36-37

Chapter 1, Lesson 2, Video B, SE page 10

Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49

A. Know that living things have diverse forms, structures, functions, and habitats.

3. Describe how roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight (photosynthesis).

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19

Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

4. Describe the components of and relationships among organisms in a food chain (e.g., plants are the primary source of energy for living systems).

Chapter 2, 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; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Know that living things have diverse forms, structures, functions, and habitats.

5. Describe how all living things are made up of smaller units that are called cells.

Level B:

Chapter 1, Lesson 1, Video A, SE page 3

See also Level C:

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video A, SE page 15; Video B, SE page 16; Critical Thinking, SE page 19

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

B. Know that living things have similarities and differences and that living things change over time.

1. Know that in any particular environment some kinds of plants and animals survive well, some survive less well, and others cannot survive at all.

Chapter 1, Lesson 1, Video C, SE page 5

Chapter 2, Lesson 1, Video B, SE page 26

Chapter 3, Lesson 1, Video A, SE page 47; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57;

Critical Thinking, SE page 59; Process Skill, SE page 59

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

B. Know that living things have similarities and differences and that living things change over time.

2. Know that a change in physical structure or behavior can improve an organism's chance of survival (e.g., a chameleon changes color, a turtle pulls its head into its shell, a plant grows toward the light).

Chapter 1, Lesson 2, Video C, SE page 11; KnowZone, SE pages 14-15

Chapter 3, Lesson 1, Video B, SE page 48

- B. Know that living things have similarities and differences and that living things change over time.
- 3. Describe how some living organisms have developed characteristics from generation to generation to improve chances of survival (e.g., spines on cacti, long beaks on hummingbirds, good eyesight on hawks).

Chapter 1, Lesson 2, Video C, SE page 11; Lesson 3, Video B, SE page 18; 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

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

C. Know the parts of the human body and their functions.

1. Know that the human body has many parts that interact to function as systems (e.g., skeletal, muscular) and describe the parts and their specific functions in selected systems (e.g., the nose, lungs, and diaphragm in the respiratory system).

See Level C:

Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- C. Know the parts of the human body and their functions.
- 2. Recognize that the human body is organized from cells, to tissues, to organs, to systems, to the organism.

See Level C:

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Critical Thinking, SE page 13; Process Skill, SE page 13; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- A. Know the structure of the solar system and the objects in the universe.
- 1. Understand that the number of stars visible through a telescope is much greater than the number visible to the naked eye.

Chapter 6, Lesson 1, Video A, SE page 113; Lesson 3, Video A, SE page 125; Video B, 126; Video C, SE page 127: KnowZone, SE pages 130-131

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- A. Know the structure of the solar system and the objects in the universe.
- 2. Know that there are various types of telescopes that use different forms of light to observe distant objects in the sky.

Chapter 6, Lesson 3, Video A, SE page 125; Video B, 126; Video C, SE page 127; KnowZone, SE pages 130-131

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- A. Know the structure of the solar system and the objects in the universe.
- 3. Know that the pattern of stars (e.g., constellations) stays the same although they appear to move across the sky nightly due to Earth's rotation.

See Level A:

Chapter 6, Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.
- 1. Know that the properties of rocks and minerals reflect the processes that shaped them (e.g., igneous, metamorphic, and sedimentary rocks).

Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; Process Skill, SE page 85; KnowZone, SE page 86-87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.
- 2. Describe how weather patterns generally move from west to east in the United States.

Chapter 5, Lesson 1, Video B, SE page 92; Lesson 2, Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video B, SE page 114

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Know the structure and formation of Earth and its atmosphere and the processes that shape them.
- 3. Know that local weather information describes patterns of change over a period of time (e.g., temperature, precipitation symbols, cloud conditions, wind speed/direction).

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 and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 1. Know that science has identified substances called pollutants that get into the environment and can be harmful to living things.

Chapter 3, Lesson 3, Video C, SE page 63; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 5, Lesson 1, Video C, SE page 93

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 2. Know that, through science and technology, a wide variety of materials not appearing in nature have become available (e.g., steel, plastic, nylon, fiber optics).

Chapter 5, KnowZone, SE pages 102-103

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Describe how science influences decisions mane by individuals and societies.
- 3. Know that science has created ways to store and retrieve information (e.g., paper and ink, printing press, computers, CD-ROMs) but that these are not perfect (e.g., faulty programming, defective hardware).

This concept is not covered at this level.

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

A. Describe how science influences decisions mane by individuals and societies.

4. Know that both men and women of all races and social backgrounds choose science as a career.

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

SRA Snapshots Video ScienceTM: Level C correlation to New Mexico Science Standards Grade 5

*SRA Snapshots Video Science*TM 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

1. Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

2. Use appropriate technologies (e.g., calculators, computers, spring balances, scales, microscopes) to perform scientific tests and to collect and display data.

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

A. Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

3. Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.

Chapter 1, Lesson 1, Process Skill, SE page 7; 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, 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

4. Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific 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, 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

A. Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

5. Communicate the steps and results of a scientific investigation.

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

B. Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

1. Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).

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, 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 2, Process Skill, SE page 191

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

B. Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

2. Understand that scientific conclusions are subject to peer and public review.

Chapter 1, Lesson 3, Critical Thinking, SE page 19

Chapter 2, Lesson 2, Critical Thinking, SE page 35

Chapter 3, Lesson 1, Critical Thinking, SE page 51; Lesson 3, Critical Thinking, SE page 65

Chapter 4, Lesson 3, Critical Thinking, SE page 87

Chapter 5, Lesson 1, Critical Thinking, SE page 95

Chapter 7, Lesson 2, Critical Thinking, SE page 147

Chapter 8, Lesson 2, Critical Thinking, SE page 167; Lesson 3, Critical Thinking, SE page 175

Chapter 9, Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; , Critical Thinking, SE page 197

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical ideas, tools, and techniques to understand scientific knowledge.

1. Use appropriate units to make precise and varied measurements.

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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical ideas, tools, and techniques to understand scientific knowledge.

2. Use mathematical skills to analyze data.

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

C. Use mathematical ideas, tools, and techniques to understand scientific knowledge.

3. Make predictions based on analyses of data, observations, and explanations.

Chapter 1, 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, Lesson 1, Process Skill, SE page 51; 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 3, Process Skill, SE page 153; 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

Strand 1: Standard 1: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

C. Use mathematical ideas, tools, and techniques to understand scientific knowledge.

4. Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making measurements.

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

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Know the forms and properties of matter and how matter interacts.

1. Describe properties (e.g., relative volume, ability to flow) of the three states of matter.

Chapter 7, Lesson 1, Video A, SE page 135; Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 2, Video A, SE page 143; Video B, SE page 144; Process Skill, SE page 147

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Know the forms and properties of matter and how matter interacts.

2. Describe how matter changes from one phase to another (e.g., condensation, evaporation).

Chapter 7, Lesson 1, Video B, SE page 136

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Know the forms and properties of matter and how matter interacts.

3. Know that matter is made up of particles (atoms) that can combine to form molecules and that these particles are too small to see with the naked eye.

Chapter 7, Lesson 1, Video A, SE page 135; Critical Thinking, SE page 139; KnowZone, SE pages 140-141; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

The Periodic Table, SE pages 206-207

A. Know the forms and properties of matter and how matter interacts.

4. Know that the periodic table is a chart of the pure elements that make up all matter.

Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141

Periodic Table of the Elements, SE pages 206-207

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Know the forms and properties of matter and how matter interacts.

5. Describe the relative location and motion of the particles (atoms and molecules) in each state of matter.

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

A. Know the forms and properties of matter and how matter interacts.

6. Explain the relationship between temperature and the motion of particles in each state of matter.

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Explain the physical processes involved in the transfer, change, and conservation of energy.

1. Know that heat is transferred from hotter to cooler materials or regions until both reach the same temperature.

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

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Explain the physical processes involved in the transfer, change, and conservation of energy.

2. Know that heat is often produced as a by-product when one form of energy is converted to another form (e.g., when machines or organisms convert stored energy into motion).

Chapter 7, Lesson 2, Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 2, Video B, SE page 172; Video C, SE page 173

Chapter 9, Lesson 1, Video C, SE page 181

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

B. Explain the physical processes involved in the transfer, change, and conservation of energy.

3. Know that there are different forms of energy.

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

- B. Explain the physical processes involved in the transfer, change, and conservation of energy.
- 4. Describe how energy can be stored and converted to a different form of energy (e.g., springs, gravity) and know that machines and living things convert storied energy to motion and heat.

Chapter 1, Lesson 1, Video C, SE page 5

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Critical Thinking, SE page 161; Process Skill, SE page 161; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Describe and explain forces that produce motion in objects.
- 1. Understand how the rate of change of position is the velocity of an object in motion.

Chapter 9, Lesson 2, Video B, SE page 188; Critical Thinking, SE page 191; Process Skill, SE page 191

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Describe and explain forces that produce motion in objects.
- 2. Recognize that acceleration is the change in velocity with time.

Chapter 9, Lesson 2, Video C, SE page 189; Critical Thinking, SE page 191; Lesson 3, Critical Thinking, SE page 197

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Describe and explain forces that produce motion in objects.
- 3. Identify forces in nature (e.g., gravity, magnetism, electricity, friction).

Chapter 8, Lesson 1, Video A, SE page 157; Critical Thinking, SE page 161; Lesson 3, Video C, SE page 173 Chapter 9, Lesson 1, Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Describe and explain forces that produce motion in objects.
- 4. Understand that when a force (e.g., gravity, friction) acts on an object, the object speeds up, slows down, or goes in a different direction.

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 3, video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Content of Science: Standard 1: PHYSICAL SCIENCE: Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

- C. Describe and explain forces that produce motion in objects.
- 5. Identify simple machines and describe how they give advantage to users (e.g., levers, pulleys, wheels and axles, inclined planes, screws, wedges).

See Level A:

Chapter 8, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Writing in Science, SE page 153; Process Skill, SE page 153

See also Level B:

Chapter 8, Lesson 3, Video C, SE page 173; Math in Science, SE page 175; Process Skill, SE page 175

A. Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

1. Identify the components of habitats and ecosystems (producers, consumers, decomposers, predators).

Chapter 2, 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; Process Skill, SE page 51; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; Process Skill, SE page 57; KnowZone, SE pages 58-59

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

2. Understand how food webs depict relationships between different organisms.

Level C:

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51 Food Web, SE page 203

Energy Pyramid, SE page 203

See also Level B:

Chapter 1, 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

Food Web, SE page 203

Energy Pyramid, SE page 203

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

3. Know that changes in the environment can have different effects on different organisms (e.g., some organisms move, some survive, some reproduce, some die).

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

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

A. Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

4. Describe how human activity impacts the environment.

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

- B. Understand how traits are passed from one generation to the next and how species evolve.
- 1. Know that plants and animals have life cycles that include birth, growth and development, reproduction, and death and that these cycles differ for different organisms.

Level C:

Chapter 2, Lesson 2, Video A, SE page 31

See also Level A:

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

See also Level B:

Chapter 1, Lesson 3, Video C, SE page 19

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- B. Understand how traits are passed from one generation to the next and how species evolve.
- 2. Identify characteristics of an organism that are inherited from its parents (e.g., eye color in humans, flower color in plants) and other characteristics that are learned or result from interactions with the environment.

Chapter 2, Lesson 2, Video C, SE page 33

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- B. Understand how traits are passed from one generation to the next and how species evolve.
- 3. Understand that heredity is the process by which traits are passed from one generation to another.

Chapter 2, Lesson 2, Video B, SE page 32

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- C. Understand the structure of organisms and the function of cells in living systems.
- 1. Understand that all living organisms are composed of cells from one to many trillions, and that cells are usually only visible through a microscope.

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video A, SE page 15; Video B, SE page 16; Critical Thinking, SE page 19

Content of Science: Standard 2: LIFE SCIENCE: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

- C. Understand the structure of organisms and the function of cells in living systems.
- 2. Know that some organisms are made of a collection of similar cells that cooperate (e.g., algae) while other organisms are made of cells that are different in appearance and function (e.g., corn, birds).

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video A, SE page 15; Video B, SE page 16; Critical Thinking, SE page 19

C. Understand the structure of organisms and the function of cells in living systems.

3. Describe the relationships among cells, tissues, organs, organ systems, whole organisms, and ecosystems.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; Process Skill, SE page 7; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Critical Thinking, SE page 13; Process Skill, SE page 13; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17; Critical Thinking, SE page 19; Process Skill, SE page 19; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29; Lesson 2, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Lesson 3, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- A. Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.
- 1. Know that many objects in the universe are huge and are separated from one another by vast distances (e.g., many stars are larger than the sun but so distant that they look like points of light).

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- A. Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.
- 2. Understand that Earth is part of a larger solar system, which is part of an ever larger galaxy (Milky Way), which is one of many galaxies.

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

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

A. Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.

3. Know that there have been manned and unmanned journeys to space and to the moon.

Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

B. Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.

- 1. Understand that water and air relate to Earth's processes, including:
 - How the water cycle relates to weather
 - How clouds are made of tiny droplets of water, like fog or steam.

Chapter 4, Lesson 1, Video A, SE page 69

Chapter 5, Lesson 2, Video A, 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 B, SE page 104

The Water Cycle, SE page 204

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.
- 2. Know that air is a substance that surrounds Earth (atmosphere), takes up space, and moves, and that temperature fluctuations and other factors produce wind currents.

Chapter 5, Lesson 1, Video A, SE page 91; Video C, SE page 93; Critical Thinking, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.
- 3. Know that most of Earth's surface is covered by water, that most of that water is salt water in oceans, and that freshwater is found in rivers, lakes, underground sources, and glaciers.

Chapter 4, Lesson 1, Video A, SE page 69

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101

Content of Science: Standard 3: EARTH and SPACE SCIENCE: Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

- B. Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.
- 4. Recognize that the seasons are caused by Earth's motion around the sun and the tilt of Earth's axis of rotation.

Chapter 6, Lesson 2, Video A, SE page 121; Process Skill, SE page 125 Earth in Space, SE page 205

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Explain how scientific discoveries and inventions have changed individuals and societies.
- 1. Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).

Chapter 2, Lesson 1, Video C, SE page 27; Lesson 3, Critical Thinking, SE page 43

Chapter 3, Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65

Chapter 4, Lesson 2, Critical Thinking, SE page 81; Process Skill, SE page 81; Lesson 3, Video 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; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 3, Critical Thinking, SE page 131

Chapter 8, Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175

Science and Society: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by individuals and societies.

- A. Explain how scientific discoveries and inventions have changed individuals and societies.
- 2. Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).

Chapter 6, KnowZone, SE pages 118-119; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129 Chapter 7, KnowZone, SE pages 140-141