SRA Snapshots Video ScienceTM: Level A correlation to Kansas Science Education 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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. *Full inquiry* involves asking a simple question, completing an *investigation*, answering the question, and sharing the results with others.

1. The student asks questions that he/she can answer by investigating.

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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. *Full inquiry* involves asking a simple question, completing an *investigation*, answering the question, and sharing the results with others.

2. The student plans and conducts a simple 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, 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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as inquiry.

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

3. The student employs appropriate equipment, tools, and safety procedures to gather data.

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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. *Full inquiry* involves asking a simple question, completing an *investigation*, answering the question, and sharing the results with others.

4. The student begins developing the abilities to communicate, critique, analyze his/her own investigations, and interprets the work of other students.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

1. The student observes *properties* of objects and measures those properties using appropriate tools.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

2. The student describes and *classifies* objects by more than one property.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

3. The student observes and records how one object interacts with another object.

Chapter 8, Lesson 2, Video B, SE page 164; Video C, SE page 165; Critical Thinking, SE page 167; Lesson 3, Video A, SE page 171

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

4. The student recognizes and describes the differences between solids, liquids, and gases.

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 2: The student will describe the movement of objects.

1. The student moves objects by pushing, pulling, throwing, spinning, dropping, and rolling and describes the motion.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 2: The student will describe the movement of objects.

2. The student describes the change in position of objects when moved.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sounds.

1. The student identifies that the source of sound is vibrations.

Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sounds.

2. The student discriminates between sounds made by different objects.

Chapter 9, Lesson 1, Video C, SE page 181; Process Skill, SE page 183

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sound.

3. The student discriminates between various pitches.

Chapter 9, Lesson 1, Video C, SE page 181; Writing in Science, SE page 183; Process Skill, SE page 183

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

1. The student demonstrates that magnets attract and repel.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

2. The student designs a simple experiment to determine whether various objects will be attracted to magnets.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

3. The student constructs a simple circuit.

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

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

1. The student observes different organisms and compares and contrasts how similar functions are served by different structural characteristics.

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

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

2. The student compares basic needs of different organisms 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 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

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

3. The student discusses ways organisms use their senses to survive in their environments.

Chapter 3, Lesson 3, Video A, SE page 39; Video C, SE page 41

Chapter 3, Lesson 3, Video B, SE page 62

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 2: The student will observe and illustrate the life cycles of various organisms.

1. The student compares, contrasts, and asks questions about life cycles of various organisms.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

1. The student collects, observes properties, and classifies a variety of earth materials in his/her environment.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

2. The student experiments with a variety of soil types (clay, silt, sand, and loam).

Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

3. The student describes properties of water and process of the water cycle.

Chapter 5, Lesson 2, Video A, SE page 99; Video B, SE page 100

The Planet Earth, SE page 204

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

4. The student observes and records the properties of fossils and discusses what fossils are.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

1. The student observes the moon and stars.

Chapter 6, Lesson 1, Video C, SE page 115; Lesson 3, Video A, SE page 127; Process Skill, SE page 133

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

2. The student observes and compares the length of shadows.

Chapter 9, Lesson 1, Video A, SE page 191; Video A, TG page 163

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

3. The student discusses that the sun provides light and heat (electromagnetic radiation) to maintain the temperature of the earth.

Chapter 6, Lesson 1, Video A, SE page 113; Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 3: The student will develop skills necessary to describe changes in the earth and weather.

1. The student describes changes in the surface of the earth.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 3: The student will develop skills necessary to describe changes in the earth and weather.

2. The student observes, describes, and records daily and seasonal weather changes.

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

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 1: The student will work with a technology design.

1. The student identifies a simple design problem (designs a plan, implements the plan, evaluates the results, makes changes to improve the product, and communicates the results).

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

1. The student will understand that the design process produces knowledge that can be used to solve a problem and improve our world.

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

2. The student invents a product to solve problems.

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

3. The student works with others to solve problems.

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

4. The student develops an awareness that women and men of all ages, backgrounds, and ethnic groups engage in a variety of scientific and technological work.

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

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

5. The student investigates how scientists use tools to observe.

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

1. The student discusses the nutritional value of various foods and their contribution to health.

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

2. The student discusses that safety involves preventing injury by avoiding inappropriate risks and dangers.

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, Lesson 3, Video C, Se page 107; 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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

1. The student assumes some responsibility for his/her own health, and the health and well being of others.

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

1. The student defines pollution.

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

Chapter 4, Lesson 3, Video B, SE page 84

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

2. The student develops personal actions to solve pollution problems in and around the neighborhood.

Chapter 3, Lesson 3, Video C, SE page 62

Chapter 4, Lesson 3, Video A, SE page 83; Video C, SE page 85; Process Skill, SE page 87

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

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

3. The student practices reducing, reusing, and recycling.

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

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will experience some things about scientific inquiry and learn about people from history.

Benchmark 1: The student will develop an awareness that people practice science.

1. The student recognizes that students participate in science inquiry by asking questions.

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

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will experience some things about scientific inquiry and learn about people from history.

Benchmark 1: The student will develop an awareness that people practice science.

2. The student studies the lives of people who made 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

SRA Snapshots Video ScienceTM: Level B correlation to **Kansas Science Education Standards** Grade 4

SRA Snapshots Video ScienceTM 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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. Full inquiry involves asking a simple question, completing an investigation, answering the question, and sharing the results with others.

1. The student asks questions that he/she can answer by investigating.

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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. Full inquiry involves asking a simple question, completing an investigation, answering the question, and sharing the results with others.

2. The student plans and conducts a simple 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, 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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as inquiry.

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

3. The student employs appropriate equipment, tools, and safety procedures to gather data.

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

Standard 1: SCIENCE AS INQUIRY

Science As Inquiry: The student will experience science as full inquiry. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. *Full inquiry* involves asking a simple question, completing an *investigation*, answering the question, and sharing the results with others.

4. The student begins developing the abilities to communicate, critique, analyze his/her own investigations, and interprets the work of other students.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

1. The student observes *properties* of objects and measures those properties using appropriate tools.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

2. The student describes and *classifies* objects by more than one property.

Chapter 4, Lesson 2, Video A, SE page 81

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 3, Video B, SE page 150; Video C, SE page 151

Chapter 9, Lesson 1, Video B, SE page 180

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

3. The student observes and records how one object *interacts* with another object.

Chapter 7, Lesson 3, Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop the skills to describe objects.

4. The student recognizes and describes the differences between 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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 2: The student will describe the movement of objects.

1. The student moves objects by pushing, pulling, throwing, spinning, dropping, and rolling and describes the motion.

See Level A:

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

See also Level C:

Chapter 9, Lesson 2, Video A, SE page 187

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 2: The student will describe the movement of objects.

2. The student describes the change in position of objects when moved.

See Level A:

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

See also Level C:

Chapter 9, Lesson 2, Video A, SE page 187

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sounds.

1. The student identifies that the source of sound is vibrations.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sounds.

2. The student discriminates between sounds made by different objects.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sound.

3. The student discriminates between various pitches.

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

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

1. The student demonstrates that magnets attract and repel.

Chapter 9, Lesson 2, Video A, SE page 185

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

2. The student designs a simple experiment to determine whether various objects will be attracted to magnets.

Chapter 9, Lesson 2, Video A, SE page 185

Standard 2: PHYSICAL SCIENCE

Physical Science: The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism.

3. The student constructs a simple circuit.

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

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

1. The student observes different organisms and compares and contrasts how similar functions are served by different structural characteristics.

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

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

2. The student compares basic needs of different organisms in their environment.

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video B, SE page 18; Video C, SE page 19; Critical Thinking, SE page 21

Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 2, Video A, SE page 55

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

3. The student discusses ways organisms use their senses to survive in their environments.

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

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

Standard 3: LIFE SCIENCE

Life Science: The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 2: The student will observe and illustrate the life cycles of various organisms.

1. The student compares, contrasts, and asks questions about life cycles of various organisms.

Level B:

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

See also Level A:

Chapter 1, Lesson 3, Video B, SE page 18; Process Skill, SE page 21

See also Level C:

Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

1. The student collects, observes properties, and classifies a variety of earth materials in his/her environment.

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; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video A, SE page 97

Chapter 9, Lesson 2, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

2. The student experiments with a variety of soil types (clay, silt, sand, and loam).

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

3. The student describes properties of water and process of the water cycle.

Chapter 3, Lesson 2, Video A, SE page 55

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

Chapter 5, Lesson 1, Video A, SE page 91

The Water Cycle, SE page 204

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of earth materials.

4. The student observes and records the properties of fossils and discusses what fossils are.

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7

Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

1. The student observes the moon and stars.

Chapter 6, Lesson 1, Video A, SE page 113; Video C, SE page 115; Lesson 3, Video A, SE page 125; KnowZone, SE pages 120-131

Eclipses, SE page 205

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

2. The student observes and compares the length of shadows.

See Level A:

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

3. The student discusses that the sun provides light and heat (electromagnetic radiation) to maintain the temperature of the earth.

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

Chapter 5, Lesson 1, Video A, SE page 91; KnowZone, SE pages 102-103

Chapter 6, Lesson 1, Video A, SE page 113

Chapter 8, Lesson 2, Video A, SE page 163

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 3: The student will develop skills necessary to describe changes in the earth and weather.

1. The student describes changes in the surface of the earth.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will observe objects, materials, and changes in their environments, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 3: The student will develop skills necessary to describe changes in the earth and weather.

2. The student observes, describes, and records daily and seasonal weather changes.

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

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 1: The student will work with a technology design.

1. The student identifies a simple design problem (designs a plan, implements the plan, evaluates the results, makes changes to improve the product, and communicates the results).

Chapter 6, Lesson 1 Process Skill, SE page 117

Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

1. The student will understand that the design process produces knowledge that can be used to solve a problem and improve our world.

Chapter 6, Lesson 1 Process Skill, SE page 117

Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

2. The student invents a product to solve problems.

Chapter 6, Lesson 1 Process Skill, SE page 117

Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

3. The student works with others to solve problems.

Chapter 6, Lesson 1 Process Skill, SE page 117

Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

4. The student develops an awareness that women and men of all ages, backgrounds, and ethnic groups engage in a variety of scientific and technological work.

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

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

5. The student investigates how scientists use tools to observe.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

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, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Chapter 8, Lesson 3, Process Skill, SE page 175

The Metric System, SE pages 200-201

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

1. The student discusses the nutritional value of various foods and their contribution to health.

See Level A:

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

2. The student discusses that safety involves preventing injury by avoiding inappropriate risks and dangers.

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 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, Lesson 3, Video C, SE page 193; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

1. The student assumes some responsibility for his/her own health, and the health and well being of others.

See Level A:

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

1. The student defines pollution.

Chapter 2, Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 2, Process Skill, SE page 59; Lesson 3, Video C, SE page 63; Process Skill, SE page 65

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

2. The student develops personal actions to solve pollution problems in and around the neighborhood.

Chapter 2, Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 2, Process Skill, SE page 59; Lesson 3, Video C, SE page 63; Process Skill, SE page 65

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

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

3. The student practices reducing, reusing, and recycling.

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

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will experience some things about scientific inquiry and learn about people from history.

Benchmark 1: The student will develop an awareness that people practice science.

1. The student recognizes that students participate in science inquiry by asking questions.

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

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will experience some things about scientific inquiry and learn about people from history.

Benchmark 1: The student will develop an awareness that people practice science.

2. The student studies the lives of people who made scientific contributions.

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 Kansas Science Education 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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 1: The student will demonstrate abilities necessary to do the processes of scientific inquiry.

1. The student identifies questions that can be answered through scientific investigations.

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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 1: The student will demonstrate abilities necessary to do the processes of scientific inquiry.

2. The student designs and conducts scientific investigations safely using appropriate tools, mathematics, technology, and techniques to gather, analyze, and interpret 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, 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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 1: The student will demonstrate abilities necessary to do the processes of scientific inquiry.

3. The student identifies the relationship between evidence and logical conclusions.

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

Standard 1: SCIENCE AS INOUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 1: The student will demonstrate abilities necessary to do the processes of scientific inquiry.

4. The student communicates scientific procedures, results, and explanations.

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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 2: The student will apply different kinds of investigations to different kinds of questions.

1. The student develops questions and adapts (frames) the inquiry process to guide the appropriate type of 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, 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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 2: The student will apply different kinds of investigations to different kinds of questions.

2. The student differentiates between qualitative and quantitative data in an investigation.

Chapter 7, Lesson 3, Video C, SE page 151

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; Critical Thinking, SE page 167; Process Skill, SE page 167; KnowZone, SE pages 168-169; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Critical Thinking, SE page 183; KnowZone SE pages 184-185; 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; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 3: The student will analyze how science advances through the interaction of new ideas, scientific investigations, skepticism, and examinations of evidence of varied explanations.

1. The student after completing an investigation, generates alternative methods of investigation and/or further questions for inquiry.

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

Standard 1: SCIENCE AS INQUIRY

Science as Inquiry: The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 3: The student will analyze how science advances through the interaction of new ideas, scientific investigations, skepticism, and examinations of evidence of varied explanations.

2. The student evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by 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, 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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 1: The student will observe, compare, and classify properties of matter.

1. The student compares and classifies the states of matter; solids, liquids, gases, and plasma. boiling point, solubility, and density).

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 1: The student will observe, compare, and classify properties of matter.

2. The student compares and contrasts classes of matter; elements, compounds, and mixtures.

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 1: The student will observe, compare, and classify properties of matter.

3. The student identifies and communicates properties of matter including but not limited to, boiling point, solubility, and density.

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 2: The student will observe, measure, infer, and classify changes in properties of matter.

1. The student understands the relationship of atoms to elements and elements to compounds.

Chapter 7, Lesson 1, Video A, SE page 135; Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; KnowZone, SE page 140-141; Lesson 3, Process Skill, SE page 153

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 2: The student will observe, measure, infer, and classify changes in properties of matter.

2. The student measures and graphs the effects of temperature on matter.

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

Chapter 8, Lesson 2, Video C, SE page 165; Critical Thinking, SE page 167

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 3: The student will investigate motion and forces.

1. The student identifies the forces that act on an object (e.g., gravity and friction).

Chapter 9, Lesson 1, Video C, SE page 181; Lesson 3, Video B, SE page 194

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 3: The student will investigate motion and forces.

2. The student describes, measures, and represents data on a graph showing the motion of an object (position, direction of motion, speed).

Chapter 9, Lesson 1, Video A, SE page 179; KnowZone, SE pages 184-185; 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; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 3: The student will investigate motion and forces.

3. The student recognizes and describes examples of Newton's Laws of Motion.

Chapter 9, 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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 3: The student will investigate motion and forces.

4. The student investigates how simple machines multiply force at the expense of distance.

See Level A:

Chapter 7, 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

See also Level B:

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 4: The student will understand and demonstrate the transfer of energy.

1. The student understands the difference between potential and kinetic energy.

Chapter 8, Lesson 1, Video B, SE page 158; Critical Thinking, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 4: The student will understand and demonstrate the transfer of energy.

2. The student understands that when work is done energy may transform from one form to another, including mechanical, heat, light, sound, electrical, chemical, and nuclear energy, yet is conserved.

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 4: The student will understand and demonstrate the transfer of energy.

3. The student observes and communicates how light (electromagnetic) energy interacts with matter: transmitted, reflected, refracted, and absorbed).

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

Standard 2: PHYSCIAL SCIENCE

Physical Science: The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 4: The student will understand and demonstrate the transfer of energy.

4. The student understands that heat energy can be transferred from hot to cold by radiation, convection, and conduction.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 1: The student will model structures of organisms and relate functions to the structures.

1. The student will understand the cell theory; that all organisms are composed to one or more cells, cells are the basic unit of life, and that cells come from other cells.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 1: The student will model structures of organisms and relate functions to the structures.

2. The student relates the structure of cells, organs, tissues, organ systems, and whole organisms to their functions.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 1: The student will model structures of organisms and relate functions to the structures.

3. The student compares organisms composed of single cells with organisms that are multi-cellular.

Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 1: The student will model structures of organisms and relate functions to the structures.

4. The student concludes that breakdown in structure of function may be caused by disease, damage, heredity, or aging.

Chapter 1, Lesson 3, Video A, SE page 15; Critical Thinking, SE page 19; KnowZone, SE page 20-21

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 2: The student will understand the role of reproduction and heredity for all living things.

1. The student differentiates between asexual and sexual reproduction of organisms.

Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Critical Thinking, SE page 35; Process Skill, SE page 35

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 2: The student will understand the role of reproduction and heredity for all living things.

2. The student understand how heredity information of each cell is passed from one generation to the next.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 2: The student will understand the role of reproduction and heredity for all living things.

3. The student infers that the characteristics of an organism result from heredity and interactions with the environment.

Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; KnowZone, SE pages 36-37

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 3: The student will describe homeostasis, the regulation and balance of internal conditions in response to a changing external environment.

1. The student understands that internal and/or environmental conditions affect an organism's behavior and/or response in order to maintain and regulate stable internal conditions to survive in a continually changing environment.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 3: The student will describe homeostasis, the regulation and balance of internal conditions in response to a changing external environment.

2. The student recognizes that the survival of all organisms require the ingestion of materials, the intake and release of energy, growth, release of wastes and responses to environmental change.

Chapter 2, Lesson 1, Video C, SE page 27; Lesson 3, video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 4: The student will identify and relate interactions of populations of organisms within an ecosystem.

1. The student recognizes that all populations living together (biotic resources) and the physical factors (abiotic resources) with which they interact compose an ecosystem.

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 4: The student will identify and relate interactions of populations of organisms within an ecosystem.

2. The student understands how limiting factors determine the carrying capacity of an ecosystem.

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 3, Video B, SE page 62; Critical Thinking, SE page 65

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 4: The student will identify and relate interactions of populations of organisms within an ecosystem.

3. The student traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis-chemical energy) to consumers and decomposers in food webs.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 5: The student will observe the diversity of living things and relate their adaptations to their survival or extinction.

1. The student concludes that species of animals, plants, and microorganisms may look dissimilar on the outside but have similarities in internal structures, developmental characteristics, chemical processes, and genomes.

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

Standard 3: LIFE SCIENCE

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 5: The student will observe the diversity of living things and relate their adaptations to their survival or extinction.

2. The student understands that adaptations of organisms (changes in structure, function, or behavior that accumulate over successive generations) contribute to biological diversity.

Chapter 2, Lesson 1, Video C, SE page 27; Lesson 2, Video B, SE page 32; Video C, SE page 33

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Life Science: The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 5: The student will observe the diversity of living things and relate their adaptations to their survival or extinction.

3. The student associates extinction of a species with environmental changes and insufficient adaptive characteristics.

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

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 1. The student will understand that the structure of the earth system is continually changing due to earth's physical and chemical processes.

1. The student identifies properties of the solid earth, the oceans and fresh water, and the atmosphere.

Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Lesson 5, Video A, SE page 91; Video VB, SE page 94; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105 The Water Cycle, SE page 204

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 1. The student will understand that the structure of the earth system is continually changing due to earth's physical and chemical processes.

2. The student models earth's cycles, constructive and destructive processes, and weather systems.

Chapter 3, Lesson 1, Video C, SE page 49

Chapter 4, Lesson 1, Video C, SE page 71; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79 Chapter 5, Lesson 1, Video B, SE page 92; Lesson 2, Video B, SE page 98; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, Sep age 105

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 2. The student will understand past and present earth processes and their similarity.

1. The student understands that Earth processes observed today (including movement of lithospheric plates and changes in atmospheric conditions) are similar to those that occurred in the past; earth history is also influenced by occasional catastrophes, such as the impact of a comet or asteroid.

Chapter 4, Lesson 1, 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 A, SE page 83; Video B, SE page 84; Video C, SE page 85; Process Skill, SE page 87

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 3. The student will identify and classify stars, planets, and other solar system components.

1. The student compares and contrasts the characteristics of stars, planets, moons, comets, and asteroids.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 3. The student will identify and classify stars, planets, and other solar system components.

2. The student models spatial relationships of the earth/moon/planets/sun system to scale.

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 page 118-119

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 3. The student will identify and classify stars, planets, and other solar system components.

3. The student identifies past and present methods used to explore space.

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

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 4: The student will model motions and identify forces that explain earth phenomena.

1. The student demonstrates and models object/space/time relationships that explain phenomena such as the day, month, the year, seasons, phases of the moon, eclipses, and tides.

Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Critical Thinking, SE page 125; Process Skill, SE page 125

Earth in Space, SE page 205

Standard 4: EARTH AND SPACE SCIENCE

Earth and Space Science: The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 4: The student will model motions and identify forces that explain earth phenomena.

2. The student describes how the angle of incidence of solar energy striking earth's surface affects the amount of heat energy absorbed at earth's surface.

Chapter 6, Lesson 2, Video A, SE page 121; Process Skill, SE page 125

Earth in Space, SE page 205

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will demonstrate abilities of technological design and understandings about science and technology.

Benchmark 1: The student will demonstrate abilities of technical design.

1. The student identifies appropriate problems for technological design, designs a solution or product, implements the proposed design, evaluates the product, and communicates the process of technological design.

Chapter 9 LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will demonstrate abilities of technological design and understandings about science and technology.

Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.

1. The student compares the work of various types of scientists and engineers.

Chapter 4, Lesson 3, video C, SE page 85; Critical Thinking, SE page 87

Chapter 5, Lesson 1, Process Skill, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101

Chapter 6, Lesson 3, 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; Critical Thinking, SE page 175

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will demonstrate abilities of technological design and understandings about science and technology.

Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.

2. The student evaluates benefits, risks, limitations and trade-offs of technological solutions.

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

Chapter 4, Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87

Chapter 5, Lesson 2, Critical Thinking, SE page 101

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

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

Standard 5: SCIENCE AND TECHNOLOGY

Science and Technology: The student will demonstrate abilities of technological design and understandings about science and technology.

Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.

3. The student identifies contributions to science and technology by many people and many cultures.

Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129

Chapter 7, KnowZone, SE pages 140-141

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 1. The student will understand scientific knowledge relative to personal health.

1. The student identifies individual nutrition, exercise, and rest needs based on science and uses a scientific approach to thinking critically about personal health, lifestyle choices, risks and benefits.

See Level A:

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 2: The student will understand the impact of human activity on resources and environment.

1. The student investigates the effects of human activities on the environment and analyzes decisions based on the knowledge of benefits and risks.

Chapter 3, Lesson 3, Video B, SE page 62

Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 3: The student will understand that natural hazards are dynamic examples of earth processes which cause use to evaluate risks.

1. The student recognizes patterns of natural processes and/or human activities that may cause and/or contribute to natural hazards.

Chapter 1, KnowZone, SE pages 20-21

Chapter 4, Lesson 1, Video C, SE page 71; Process Skill, SE page 73

Chapter 5, Lesson 3, Video B, SE page 104; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Standard 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES

Science in Personal and Environmental Perspectives: The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 3: The student will understand that natural hazards are dynamic examples of earth processes which cause use to evaluate risks.

2. The student evaluates the risks and defines appropriate actions associated with the natural hazard.

Chapter 1, KnowZone, SE pages 20-21

Chapter 2, Lesson 3, Video C, SE page 41

Chapter 3, Lesson 3, Video B, SE page 62

Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Lesson 3,

Video B, SE page 104; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will examine and develop an understanding of science as a historic human endeavor.

Benchmark 1. The student will develop scientific habits of mind.

1. The student practices intellectual honesty, demonstrates skepticism appropriately, displays open-mindedness to new ideas, and bases decisions on evidence.

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

Standard 7: HISTORY AND NATURE OF SCIENCE

History and Nature of Science: The student will examine and develop an understanding of science as a historic human endeavor.

Benchmark 2: The student will research contributions to science throughout history.

1. The student recognizes that new knowledge leads to new questions and new discoveries, replicates historic experiments to understand principles of science, and relates contributions of men and women to the fields of science.

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