SRA Snapshots Video ScienceTM: Level A correlation to New Hampshire Science Framework 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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.1 Explain how water exists in the atmosphere in different forms and describe how it changes from one form to another through various processes, such as freezing, condensation, precipitation, and evaporation.

Chapter 5, Lesson 2, Video B, SE page 100

The Planet Earth, SE page 204

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.2 Explain that air surrounds the Earth, it takes up space, and it moves around as wind.

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

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.3 Based on data collected from daily weather observations, describe weather changes or weather patterns. 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

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.4 Explain how the use of scientific tools helps to extend senses and gather data about weather (i.e., weather/wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks/rulers: snow depth; rain gauges: rain amount in inches).

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 107

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.1 Describe Earth materials such as gases found in the atmosphere, rocks, soils, and water in it liquid and solid states.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.2 Describe rock as being composed of different combinations of minerals.

Chapter 4, Lesson 2, Video A, SE page 75

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.3 Given information about Earth materials, explain how their characteristics lend themselves to specific uses.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.4 Given certain Earth materials (soils, rocks, or minerals) use physical properties to sort, classify, and/or describe them.

Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; Critical Thinking, SE page 79; Process Skill, SE page 79; KnowZone, SE pages 80-81

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

3. FOSSILS

S(ESS1)-4-3.1 Recognize and explain that fossils offer evidence of plants, animals, and the nature of environments that existed long ago.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

4. OBSERVATION OF THE EARTH FROM SPACE

S(ESS1)-4-4.1 Recognize features of the Earth as viewed by astronauts in orbit and as transmitted by scientific instruments on satellites and spacecraft.

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105 Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video C, SE page 129

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-4-5.1 Identify and describe processes that affect the features of the Earth's surface, including weathering, erosion, deposition of sediment.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-4-5.2 Explain how wind, water, or ice shape and reshape the Earth's surface.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.1 Explain that smaller rocks come from the breaking and weathering of larger rocks and bedrock. Chapter 4, Lesson 1, Video B, SE page 70; Lesson 2, Video A, SE page 75; Video C, SE page 77

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.2 Distinguish between the three categories or rocks, metamorphic, igneous, and sedimentary, and describe the processes that create them.

Chapter 4, Lesson 2, Video A, SE page 75

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.3 Identify minerals by their physical properties, such as color, texture, and cleavage, and describe simple tests used in the identification process.

Chapter 4, Lesson 2, Video A, SE page 75

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.4 Use results from an experiment to draw conclusions about how water interacts with earth materials (e.g., percolation, erosion, frost heaves).

Chapter 4, Lesson 1, Video B, SE page 70; Critical Thinking, SE page 73; Lesson 2, Video C, SE page 77 Chapter 5, Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

7. WATER

S(ESS1)-4-7.1 Recognize and describe the Earth's surface as mostly covered by water.

Chapter 5, Lesson 2, Video A, SE page 99

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

7. WATER

S(ESS1)-4-7.2 Explain that most of Earth's water is salt water, which is found in the oceans, and that fresh water is found in rivers, lakes, underground sources, and glaciers.

Chapter 5, Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

1. EARTH, SUN AND MOON

S(ESS2)-4-1.1 Explain that night and day are caused by the Earth's rotation on its axis and that the Earth rotates approximately once every 24 hours.

Chapter 6, Lesson 1, Video A, SE page 113; Process Skill, SE page 117

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

1. EARTH, SUN AND MOON

S(ESS2)-4-1.2 Describe the Sun as a star.

Chapter 6, Lesson 2, Video A, SE page 119

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships. 2. ENERGY

S(ESS2)-4-2.1 Recognize the Sun provides light and heat necessary to maintain the temperature on the Earth. Chapter 6, Lesson 2, Video A, SE page 119

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships. 3. SOLAR SYSTEM

S(ESS2)-4-3.1 Recognize the Moon orbits the Earth.

Chapter 6, Lesson 1, Video C, SE page 115; Lesson 3, Process Skill, SE page 131

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

3. SOLAR SYSTEM

S(ESS2)-4-3.2 Recognize the Earth is one of a number of planets that orbit the Sun.

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

4. VIEW FROM EARTH

S(ESS2)-4-4.1 Recognize that although star patterns seen in the sky appear to move slowly each night from east to west they actually remain the same, and explain why different stars can be seen during different seasons.

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

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

4. VIEW FROM EARTH

S(ESS2)-4-4.2 Explain why the planets look like stars, and why, over a period of time, they appear to wander among the constellations.

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

1. SIZE AND SCALE

S(ESS3)-4-1.1 Recognize that astronomical objects in space are massive is size and are separated from one another by vast distances.

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Critical Thinking, SE page 123; Writing in Science, SE page 123; KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

1. SIZE AND SCALE

S(ESS3)-4-1.2 Explain that telescopes magnify the size of distant objects and significantly increase the number of these objects that can be viewed from Earth.

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

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

2. STARS AND GALAXIES

S(ESS3)-4-2.1 Recognize and describe the stars, like the Sun, as spherical in nature.

Chapter 6, Lesson 3, Video A, SE page 127Chapter 2,

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

2. STARS AND GALAXIES

S(ESS3)-4-2.2 Recognize that stars come in different colors, and that the Sun is a yellow star.

Chapter 6, Lesson 3, Video A, SE page 127Chapter 2,

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(ESS4)-4-1.1 Recognize that man uses various mechanical devices to record changes in weather and the Earth.

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, video A, SE pages 105; Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 109

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(ESS4)-4-2.1 Demonstrate the use of simple instruments including thermometers, windsocks, meter sticks, rain gauges to collect weather data.

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, video A, SE pages 105; Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 109

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.1 Distinguish between and provide examples of materials that can be recycled/reused and those that cannot.

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

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.2 Provide examples of technology that have changed the environment and explain whether the effect had a positive or negative impact.

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

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

Chapter 4, Lesson 3, Video B, SE page 84; Video C, SE page 85; Process Skill, SE page 87

Chapter 5, Lesson 2, Video C, SE page 101; Critical Thinking, SE page 103

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.3 Explain how to dispose of waste so that it does not harm the environment.

Chapter 3, Lesson 3, Video A, SE page 61; Critical Thinking, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 2, Video B, SE page 84; Video C, SE page 85 Chapter 5, Lesson 2, Critical Thinking, SE page 103

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. ENVIRONEMNTAL CHANGE

S(ESS4)-4-4.1 Recognize there are pros and cons to using different types of energy, such as solar energy and fossils fuels, and compare the differences.

Chapter 4, Lesson 2, Video B, SE page 84; Video C, SE page 85; Critical Thinking, SE page 87 Chapter 9, Lesson 3, Video C, SE page 195; Critical Thinking, SE page 197

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

5. CAREER TECHNICAL EDUCATION CONNECTIONS

S(ESS4)-4-5.1 Identify some jobs/careers that require knowledge and use of Earth science content and/or skills.

Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 2, Video B, SE page 76; KnowZone, SE pages 80-81 Chapter 5, KnowZone, SE pages 80-81; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 109; Process Skill, SE page 109

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-4-1.1 Recognize and identify the various ways in which living things can be grouped.

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Critical Thinking, SE page 21; Process Skill, SE page 21

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-4-1.2 Sort/classify different living things using similar and different characteristics. Describe why organisms belong to each group or cite evidence about how they are alike or not alike.

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Math in Science, SE page 13 Classification, SE page 202

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.1 Recognize that living organisms have certain structures and systems that perform specific functions, facilitating survival, growth and reproduction.

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video C, SE page 19 Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.2 Identify and describe the function of the plant structures responsible for food production, water transport, support, reproduction, growth and protection.

Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video C, SE page 11; Lesson 3, Video C, SE page 19 Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.3 Identify and explain how the physical structures of an organism (plants or animals) allow it to survive in its habitat/environment (e.g., roots for water; nose to smell fire).

Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.4 Identify the basic needs of plants and animals in order to stay alive (i.e., water, air, food, space).

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.1 Distinguish between plant and animal characteristics that are inherited. Such as eye color in humans and the shapes of leaves in plants, and those that are affected by their environments, such as grass turning brown due to lack of water. **Chapter 2, Lesson 3, Video B, SE page 40; Video C, SE page 41**

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.2 Recognize that living organisms have life cycles, which include birth, growth and development, reproduction, and death; and explain how these life cycles vary for different 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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.3 Describe the reproductive process of plants, explaining that some plants grow from seed, while others grow from the parts of other plants.

Chapter 1, Lesson 2, Video C, SE page 11; Lesson 3, Video C, SE page 19; Critical Thinking, SE page 21

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.4 Predict, sequence, or compare the life stages of organisms—plants and animals (e.g., put images of life stages in sequence, and compare two 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

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-4-1.1 Describe how the nature of an organism's environment, such as the availability of a food source, the quantity and variety of other species present, and the physical characteristics of the environment, affect the organism's patterns of behavior. Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video C, SE page 41; Process Skill, SE page 43

Chapter 2, KnowZone, SE pages 30-37; Lesson 3, video A, SE page 39; video C, SE page 41; Process Skiii, SE page 4

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-4-1.2 Describe the interaction of living organisms with nonliving things.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Process Skill, SE page 7; 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; Video C< SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 2; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-4-2.1 Recognize that the transfer of energy through food is necessary for all living organisms and describe the organization of food webs.

Chapter 2, Lesson 2, Video A, 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Energy Transfer, SE page 203

> SRA Snapshots Video ScienceTM: Level A correlation to New Hampshire Science Framework Grade 3, page 9

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-4-2.2 Recognize that energy is needed for all organisms to stay alive and grow or identify where a plant or animal gets its energy.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7 Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Lesson 3, Video A, SE page 39 Chapter 3, Lesson 1, Video A, SE page 47; Video C, SE page 49; Critical Thinking, SE page 51

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-4-3.1 Recognize that plants and animals interact with one another in various ways besides providing food, such as seed dispersal or pollination.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Process Skill, SE page 7; 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; Video C< SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 2; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-4-3.2 Describe ways plants and animals depend on each other (e.g., shelter, nesting, food).

Chapter 1, Lesson 3, Critical Thinking, SE page 21

Chapter 2, Lesson 1, Video A, SE page 25; Critical Thinking, SE page 29; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35 Chapter 3, Lesson 3, Critical Thinking, SE page 65

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.1 Provide examples of how environmental changes can cause different effects on different organisms. Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.2 Provide examples of how an organism's inherited characteristics can adapt and change over time in response to changes in the environment.

Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.3 Using information (data or scenario), explain how changes in the environment can cause organisms to respond (e.g., survive there and reproduce, move away, die).

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

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

2. EVOLUTION

S(LS3)-4-2.1 Compare information about fossils to living organisms and other fossils to determine any similarities and differences.

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

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-4-3.1 Recognize that individuals of the same species differ in their characteristics, and explain that sometimes these differences give individuals an advantage in survival and reproduction.

Chapter 1, Lesson 3, SE page 19

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-4-3.2 Recognize that for any particular environment, some kinds of animals and plants survive well, some less well, and some cannot survive at all.

Chapter 2, Lesson 1, Video C, SE page 27; Critical Thinking, SE page 29; Lesson 2, Critical Thinking, SE page 35; Process Skill, SE page 35; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39 Chapter 3, Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-4-1.1 Recognizes that an individual organism's behavior is affected by internal cues, such as hunger and thirst; and describe how an organism uses it s senses to understand and respond to these cues.

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

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-4-1.2 Recognize that an individual organism's behavior is influenced by external cues, such as seasonal change, and describe how an organism might react, such as migrating or hibernating.

Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms. 1. BEHAVIOR

S(LS4)-4-1.3 Recognize behaviors that may be unsafe or unhealthy for themselves and others.

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.1 Explain how the amount of rest and they types of food, exercise, and recreation humans choose can influence and affect their well-being.

Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; KnowZone, SE page 52-53

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.2 Recognize that vitamins and minerals are needed in small amounts and are essential to maintain proper health. Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.3 Explain how proper food preparation and appropriate food handling practices can maintain the safety and quality of food.

Chapter 3, Lesson 2, Video C, SE page 57

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.1 Identify what the physical structures of humans do (e.g., sense organs-eyes, ears, skin, etc.) or compare physical structures of humans to similar structures of animals.

See Level C:

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.2 Distinguish between characteristics of humans that are inherited from parents (i.e., hair color, height, skin color, ye color) and others that are learned (e.g., riding a bike, singing a song, playing a game, reading).

Chapter 2, Lesson 3, Video B, SE page 40; Video C, SE page 41

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.3 Recognize the nutritional value of different foods and distinguish between healthy and unhealthy food choices using data gathered from food labels and dietary guidelines, such as the food pyramid.

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

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(LS5)-4-1.1 Recognize that man uses various mechanical devices to record and describe living organisms.

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

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(LS5)-4-2.1 Demonstrate the use of appropriate tools and simple equipment, such as thermometers, magnifiers, and microscopes to gather data and extend the senses.

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

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(LS5)-4-2.2 Identify and describe the purpose of tools used by health care professionals, such as X-rays and stethoscopes. Chapter 3, Lesson 2, Video A, SE page 55

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-4-3.1 Recognize that medical technology provides information about a body's condition, such as determining blood pressure, and recognizing the need to repair, replace, and support the affected body parts.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-4-3.2 Recognize that biotechnology refers to the different ways humans modify the living environment to meet their needs, including growing food, genetic engineering and using living organisms such as yeast to prepare foods.

This concept is not covered at this level.

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

CAREER TECHNICAL EDUCATION CONNECTIONS

S(LS5)-4-4.1 Identify some jobs/careers that require knowledge and use of life science content and/or skills.

Chapter 1, Lesson 2, Critical Thinking, SE page 13

Chapter 3, Lesson 1, Critical Thinking, SE page 51; Lesson 2, Video A, SE page 55; Critical Thinking, SE page 59

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-4-1.1 Explain that materials may be composed of parts that are too small to be seen without magnification. Chapter 8, Lesson 1, Video B, SE page 158; Process Skill, SE page 161

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-4-1.2 Use measures of weight (data) to demonstrate that the whole equals the sum of its parts.

Chapter 8, Lesson 1, Video A, SE page 157

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.1 Recognize that substances can be classified by observable properties.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.2 Explain that some materials can exist in different states, and describes the distinct physical properties of each state of matter.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.3 Explain how some materials, such as water, can change from one state to another by heating or cooling. Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.4 Make a prediction about what might happen to the state of common materials when heated or cooled or categorize materials as solid, liquid, or gas.

Chapter 8, Lesson 2, Video A, SE page 163; Process Skill, SE page 167

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.5 Collect and organize data about physical properties in order to classify objects or draw conclusions about objects and their characteristic properties (e.g., temperature, color, size, shape, weight, texture, flexibility).

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

1. CVHANGE

S(PS2)-4-1.1 Recognize that energy has the ability to create change.

Chapter 8, Lesson 3, Video A, SE page 171; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page181; Process Skill, SE page 183; Lesson 2, Video A, SE page 187; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.1 Identify the various forms of energy, such as electrical, light, heat, sound.

Chapter 8, Lesson 3, Video A, SE page 171; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page181; Process Skill, SE page 183; Lesson 2, Video A, SE page 187; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.2 Recognize that electricity in circuits can produce light, heat, sound, and magnetic effects. Chapter 9, Lesson 2, Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.3 Identify and describe the organization of a simple circuit.

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

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.4 Differentiate between objects and materials that conduct electricity and those that are insulators of electricity.. See Level B: Chapter 9, Lesson 1, Video B, SE page 180

Chapter 9, Lesson 1, video B, SE page

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.5 Explain that light travels in a straight line until it strikes an object, and describe how it can be reflected by a mirror, bent by a lens, or absorbed by the object.

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.6 Given a specific example or illustration (e.g., simple closed circuit, rubbing hands together) predict the observable effects of energy (i.e., light bulb lights, a bell rings, hands warm up). (e.g., a test item might ask "what will happen when...?").

Chapter 7, Lesson 1, Critical Thinking, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Critical Thinking, SE page 147; Process Skill, SE page 147

Chapter 8, Lesson 3, Critical Thinking, SE page 175

Chapter 9, Lesson 1, Critical Thinking, SE page 183; Process Skill, SE page 183; KnowZone, SE pages 184-185; Lesson 2, Critical Thinking, SE page 191; Lesson 3, Critical Thinking, SE page 197

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.7 Use observations of light in relation to other objects/substances to describe the properties of light (can be reflected, refracted, or absorbed).

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.8 Experiment, observe, or predict how heat might move from one object to another.

Chapter 8, Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.1 Recognize that magnets attract certain kinds of other materials and classify objects by those magnets will attract and those they will not.

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

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.2 Recognize that magnets attract and repel each other.

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

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.3 Explain that electrically charged material pulls on all other materials and can attract or repel other charged materials.

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

Physical Science PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.4 Recognize that the Earth's gravitational force pulls any object toward it.

Chapter 4, Lesson 1, Video A, SE page 70

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

Chapter 7, Lesson 1, Video C, SE page 137

Physical Science PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.5 Use observations of magnets in relation to other objects to describe the properties of magnetism (i.e., attract or repel certain objects or has no effect).

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

Physical Science

PS3-The motion of an object is affected by force.

2. MOTION

S(PS3)-4-2.1 Use data to predict how a change in force (greater/less) might effect the position, direction of motion, or speed of an object (e.g., ramps and balls).

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(PS4)-4-1.1 Understand that materials are used in certain products based on their properties, such as strength and flexibility. Chapter 8, KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; Process Skill, SE page 175

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(PS4)-4-1.2 Recognize that products are made using a combination of technologies, such as how an escalator uses both a pulley system and an electrical motor.

Chapter 7, Lesson 2, Video C, SE page 145; Critical Thinking, SE page 147; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(PS4)-4-2.1 Demonstrate how to use tools, such as magnifiers, scales, balances, rulers, and thermometers to gather data and extend the senses.

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

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(PS4)-4-2.2 Describe how some tools can be used to modify natural materials by processes such as separating, shaping, and joining, to produce new materials.

This concept is not covered at this level.

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-4-3.1 Given examples of transportation systems used in New Hampshire, such as buses, trains, cars, and bicycles and describe the sources of energy they use.

This concept is not covered at this level.

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-4-3.2 Explain that manufactured products are designed to solve a problem or meet a need.

Chapter 7, Lesson 2, Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 1518, KnowZone, SE pages 168-169; Lesson 3, Critical Thinking, SE page 175apter 2,

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

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-4-3.3 Provide an example to illustrate that manufacturing involves changing natural materials into finished products of a large number of objects that look almost identical.

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

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. CAREER TECHNICAL EDUCATION CONNECTIONS

S(PS4)-4-4.1 Identify some jobs/careers that require knowledge and use of physical science content and/or skills.

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

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.1 Extend the senses using simple tools.

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

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105

Chapter 6, KnowZone, SE page 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129; Process Skill, SE page 131

Chapter 7, LabTime Hands-On Activity, TRB pages 123-125; TG page 138

Chapter 8, Lesson 1, Video C, SE page 187; LabTime Hands-On Activity. TRB ages 141-143, TG page 156

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.2 Make and record observations for a given purpose.

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 5, Lab lime Hands-On Activity 5, 1 KB pages 87-89, 1G page 102 Chapter 6, Language 2, Process Shill, SE many 121, Lab Time Hands On Activity 6, 7

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, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.3 Differentiate between observations and inferences.

Chapter 1, Lesson 1, Process Skill, SE page 7; Lesson 2, Process Skill, SE page 13; Chapter 1 LabTime Hands-On Activity, TRB pages 15-17, TG page 30

Chapter 2, Lesson 3, Process Skill, SE page 43

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

Chapter 4, Lesson 2 Process Skill, SE page 79; LabTime Hands-On Activity, TRB pages 69-71, TG page 84

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

Chapter 6, Lesson 3 Process Skill, SE page 131; LabTime Hands-On Activity, TRB pages 105-107, TG page 120

Chapter 7 LabTime Hands-On Activity, TRB pages 123-125, TG page 138

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

Chapter 9, Lesson 1 Process Skill, SE page 183; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.4 Record observations using standard units of measurement.

Chapter 3, Lesson 3, Process Skill, SE page 65

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lab Time Hands-On Activity 8, TRB pages 120, 120, 16 page 160

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.5 Classify according to several attributes and describe or show the method for classification.

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Process Skill, SE page 13

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 8, Lesson 1, Process Skill, SE page 161

Chapter 9, Lesson 3, Process Skill, SE page 197

Classification, SE page 202

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.6 Compare methods of classifying based on the goal.

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Process Skill, SE page 13 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 8, Lesson 1, Process Skill, SE page 161

Chapter 9, Lesson 3, Process Skill, SE page 197

Classification, SE page 202

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.7 Ask questions about objects, organisms and events in their local environment.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.8 Pose questions to investigate and practical problems to solve.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

2. DESIGNING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-2.1 Plan a step-by-step process to solve a practical problem or to carry out a "fair test" of a simple scientific question.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

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

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
2. DESIGNING SCIENTIFIC INVESTIGATIONS
S(SPS1)-4-2.2 Select an activity and justify it as an effective means of collecting appropriate data.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-3.1 Follow a set of procedures.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS S(SPS1)-4-3.2 Plan and test ideas through guided experiments. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in... SPS1: Scientific Inquiry and Critical Thinking Skills (INQ) 3. CONDUCTING SCIENTIFIC INVESTIGATIONS S(SPS1)-4-3.3 Identify and use appropriate tools. 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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-4-4.1 Compile and display data in a variety of formats.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-4-4.2 Select an appropriate format to represent data or observations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-4-4.3 Identify and suggest possible explanations for patterns.

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

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

Chapter 5, Lesson 2, Video B, SE page 100

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video SE page 115; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

$\partial \partial $
4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS
S(SPS1)-4-4.4 Analyze data and identify discrepancies.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
5. EVALUATING SCIENTIFIC EXPLANATIONS
S(SPS1)-4-5.1 Cite evidence or data to support conclusions.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

5. EVALUATING SCIENTIFIC EXPLANATIONS

S(SPS1)-4-5.3 Draw a conclusion to answer an initial question, based on the evidence collected.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 2, Process Skill, SE page 59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

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

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.1 Sometimes scientists have different explanation for the same set of observations, That usually leads to them to make more observations to resolve the differences.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 2, Process Skill, SE page 59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

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

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.2 Results of similar scientific investigations seldom turn out exactly the same, but if the differences are large it's important to try to figure out why.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.3 Recognize when comparisons might not be fair because some conditions are not kept the same.

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 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 87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 2, Math in Science, SE page 103; Process Skill, SE page 103; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 3, Process Skill, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.4 Scientific investigation may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments. Investigations can focus on physical, biological, and social 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, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.5 Scientists' explanations about what happens in the world come partly from what they observe, partly from what they think.

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, Lab Time Hands On Activity 7, TDD pages 103-107, 1G page 120 Chapter 7, Lab Time Hands On Activity 7, TDD pages 123, 125, TC page 129

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-4-2.1 In something that consists of many parts, the parts usually influence one another.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21; 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; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 56; Video C, SE page 57; Lesson 3, Video B, SE page 62; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson, 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76;

Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Lesson 3, Video A, SE page 127; Video B, SE page 128; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Energy Transfer, SE page 203

Planet Earth, SE page 204

Earth in Space, SE page 205

SPS2: Unifying Concepts of Science 2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-4-2.2 Something may not work well (or not at all) if a part is missing, broken, worn out, mismatched, or misconnected.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21; 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; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 56; Video C, SE page 57; Lesson 3, Video B, SE page 62; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson, 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Lesson 3, Video A, SE page 127; Video B, SE page 128; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Energy Transfer, SE page 203

Planet Earth, SE page 204 Earth in Space, SE page 205

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.1 Seeing how a model works after changes are made to it may suggest how the real thing would work if the same changes were done to tit.

Chapter 4 LabTime Hands-On Activity, TRB Pages 69-71; TG page 84 Chapter 5 LabTime Hands-On Activity, TRB Pages 87-89; TG page 102 Chapter 6 LabTime Hands-On Activity, TRB pages 105-107; TG page 120 Chapter 7, Lesson 3 Process Skill, SE page 153

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.2 Geometric figures, number sequences, graphs, diagrams, pictures.

Chapter 1, Lesson 2, Math in Science, SE page 13; LabTime Hands-On Activity, TRG pages 15-17; TG page 30 Chapter 2, LabTime Hands-On Activity, TRB pages 33-34; TG page 48

Chapter 2, Lab Time Hands-On Activity, TRB pages 53-54, TG page 48 Chapter 3, Lab Time Hands-On Activity, TRB pages 51-53; TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 87; LabTime Hands-On Activity, TRB Pages 69-71; TG page 84

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

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

Chapter 7, Lesson 3, Process Skill, SE page 153; LabTime Hands-On Activity, TRB pages 123-125; TG page 138

Chapter 8, LabTime Hands-On Activity, TRB pages 141-143; TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity, TRB pages 159-161; TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.3 Almost everything has limits on how big or small it can be.

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

Chapter 4, KnowZone, SE pages 80-81

Chapter 6, Lesson 2, Video C, SE page 121

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.1 Some small changes can be detected by taking measurements.

Chapter 3, Lesson 3, Process Skill, SE page 65

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 125-125, 1G page 156 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.2 Some changes are so slow or so fast that they are hard to see.

Chapter 1, KnowZone, SE pages 14-15

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

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

Chapter 9, KnowZone, SE pages 184-185

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.3 Some features of things may stay the same even when other features change. Some patterns look the same when they are shifted over, or turned, or reflected, or seem from different directions.

This concept is not covered at this level.

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-4-5.1 Discover the relationship between shape and use.

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 2, Video A, SE page 163

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-4-5.2 Explore methods, designs and problems of transporting liquids.

This concept is not covered at this level.

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

1. COLLABORATION IN SCIENTIFIC ENDEAVORS

S(SPS3)-4-1.1 Given a specific role in a group, is able to complete the assigned task. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

1. COLLABORATION IN SCIENTIFIC ENDEAVORS

S(SPS3)-4-1.2 Communicates ideas to others.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 2, Process Skill, SE page 167; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS3: Personal, Social, and Technological Perspectives
1. COLLABORATION IN SCIENTIFIC ENDEAVORS
S(SPS3)-4-1.3 Given specific feedback about work of others.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, 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

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.1. Demonstrate a basic conservation action such as recycling or a schoolyard habitat project.

Chapter 4, Lesson 2, Video C, SE page 77; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Process Skill, SE page 87

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.2 Develop questions based upon their observations about the natural world and design a simple investigation.

Chapter 1, Lesson 1, Process Skill, SE page 7: LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.3 Develop questions that help them learn about the environment, design, and do simple investigations.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.4 Locate and collect information about the environment and environmental and natural resources topics. Chapter 1, KnowZone, SE pages 14-15

Chapter 2, Lesson 2, Process Skill, SE page 35; KnowZone, SE pages 36-37; Lesson 3, Process Skill, SE page 43 Chapter 3, Lesson 1, Process Skill, SE page 51; KnowZone, SE pages 52-53; Lesson 3, Video C, SE page 63; Process Skill, SE page 65

Chapter 4, KnowZone, SE pages 80-81

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill, SE page 109

Science Process Skills: All students can explore the world by developing skills in
SPS3: Personal, Social, and Technological Perspectives
2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION
S(SPS3)-4-2.5 Use reliable information to answer questions.
Chapter 1, KnowZone, SE pages 14-15
Chapter 2, KnowZone, SE pages 36-37
Chapter 3, KnowZone, SE pages 52-53
Chapter 4, KnowZone, SE pages 80-81
Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill SE page 109
Chapter 6, KnowZone, SE pages 124-125
Chapter 7, KnowZone, SE pages 140-141
Chapter 8, KnowZone, SE pages 168-169
Chapter 9, KnowZone, SE pages 184-185

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.6 Organize information to search for relationships and patterns concerning the environment and environmental topics.

Chapter 1, Lesson 1, Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Process Skill, SE page 13 Chapter 2, Lesson 1, Process Skill, SE page 29; Lesson 2, Process Skill, SE page 35; Lesson 3, Process Skill, SE page 43 Chapter 3, Lesson 1, Process Skill, SE page 51 Chapter 4, Lesson 1, Process Skill, SE page 73

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.7 Identify and investigate issues in their local environments and communities.

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

Chapter 3, Lesson 3, Process Skill, SE page 65

Chapter 4, Lesson 2, Process Skill, SE page 79; Lesson 3, Process Skill, SE page 87

Chapter 5, Lesson 2, Critical Thinking, SE page 103

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-4-3.1 Describe the design process as a logical progression for transforming ideas into reality.

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-4-3.2 Describe how people have designed and used tools throughout history and provide examples of how many of these tools, while improved, are still in use today.

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19 Chapter 4, Lesson 3, Process Skill, SE page 87

Chapter 5, KnowZone, SE pages 96-97

Science Process Skills: All students can explore the world by developing skills in... SPS3: Personal, Social, and Technological Perspectives 3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION S(SPS3)-4-3.3 Provide examples illustrating that throughout history, people of all ages and from all walks of life, have made significant contributions to the fields of science and technology. Chapter 3, Lesson 2 Process Skill, SE page 59 Chapter 4, KnowZone, SE pages 80-81 Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105 Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129 Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151 Chapter 8, KnowZone, SE pages 168-169 Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page SE page 188; Video C, SE page 189

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

1. INFORMATION AND MEDIA LITERARY

S(SPS4)-4-1.1 Access information from a variety of media sources (i.e., Internet, CD-ROM programs, print resources).

Chapter 1, KnowZone, SE pages 14-15

Chapter 2, KnowZone, SE pages 36-37

Chapter 3, KnowZone, SE pages 52-53

Chapter 4, KnowZone, SE pages 80-81

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill SE page 109

Chapter 6, KnowZone, SE pages 124-125

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169 Chapter 9, KnowZone, SE pages 184-185

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

1. INFORMATION AND MEDIA LITERARY

S(SPS4)-4-1.2 Use appropriate tools to measure and graph data.

Chapter 3, Lesson 3, Process Skill, SE page 65

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Science Process Skills: All students can explore the world by developing skills in
SPS4 Science Skills for Information, Communication and Media Literary
1. INFORMATION AND MEDIA LITERARY
S(SPS4)-4-1.3 Analyze and compare data from a variety of age-appropriate sources such as newspapers and websites.
Chapter 1, KnowZone, SE pages 14-15
Chapter 2, KnowZone, SE pages 36-37
Chapter 3, KnowZone, SE pages 52-53
Chapter 4, KnowZone, SE pages 80-81
Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill SE page 109
Chapter 6, KnowZone, SE pages 124-125
Chapter 7, KnowZone, SE pages 140-141
Chapter 8, KnowZone, SE pages 168-169
Chapter 9, KnowZone, SE pages 184-185

SPS4 Science Skills for Information, Communication and Media Literary

2. COMMUNICATION SKILLS

S(SPS4)-4-2.1 Use a variety of tools and formats (oral presentations, journals, and multimedia presentations) to summarize and communicate the results of observations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 2, Process Skill, SE page 167; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.1 Apply a variety of age-appropriate strategies to address real-life issues (e.g., identify factors that affect plants in a particular habitat).

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.2 Build a Concept Map (or other graphic organizer) to understand a complex problem.

Teacher Resource Book, pages 3, 4, 5, 7, 8, 9, 11, 12, 13, 18, 21, 22, 23, 25, 27, 29, 30, 31, 37, 38, 39, 40, 41, 43, 44, 45, 47, 48, 49, 57, 58, 59, 61, 62, 63, 66, 67, 71, 75, 76, 77, 79, 80, 81, 83, 84, 85, 91, 93, 94, 95, 97, 98, 99, 100, 102, 103, 108, 109, 110, 111, 112, 113, 115, 117, 119, 120, 121, 127, 129, 130, 131, 133, 134, 135, 137, 138, 139, 147, 148, 149, 151, 152, 153, 155, 156, 157, 162

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.3 Organize observations and data into tables, charts, and graphs.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174 Science Process Skills: All students can explore the world by developing skills in... SPS4 Science Skills for Information, Communication and Media Literary 4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION S(SPS4)-4-4.1 Ask questions and plan investigations to find answers. 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 8, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-4-4.2 Compile data gathered through observations to record and present results using tally charts, tables and graphs.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS4 Science Skills for Information, Communication and Media Literary
4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION
S(SPS4)-4-4.3 Use evidence to construct explanations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

5. CREATIVITY AND INTELLECTUAL CURIOSITY

S(SPS4)-4-5.1 Use a variety of equipment and software packages to enter, process, display, and/or communicate information in different forms using text, tables, pictures, and sound. (i.e., brainstorming software, collaboration software,

telecommunications, presentation software, digital cameras, projectors.

Chapter 1, KnowZone, SE pages 14-15 Chapter 2, KnowZone, SE pages 36-37 Chapter 3, KnowZone, SE pages 52-53 Chapter 4, KnowZone, SE pages 80-81 Chapter 5, KnowZone, SE pages 96-97: I

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill SE page 109

Chapter 6, KnowZone, SE pages 124-125

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169 Chapter 9, KnowZone, SE pages 184-185

Science Process Skills: All students can explore the world by developing skills inSPS4 Science Skills for Information, Communication and Media Literary6. INTERPERSONAL AND COLLABORATIVE SKILLSS(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, LabTime Hands-On Activity 7, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174	
SPS4 Science Skills for Information, Communication and Media Literary6. INTERPERSONAL AND COLLABORATIVE SKILLSS(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174	Science Process Skills: All students can explore the world by developing skills in
6. INTERPERSONAL AND COLLABORATIVE SKILLS S(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings. 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 8, 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	SPS4 Science Skills for Information, Communication and Media Literary
S(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174	6. INTERPERSONAL AND COLLABORATIVE SKILLS
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174	S(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings.
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174	Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
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	Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...SPS4 Science Skills for Information, Communication and Media Literary6. INTERPERSONAL AND COLLABORATIVE SKILLSS(SPS4)-4-6.2 Engage in group decision making activities.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 5, TRB pages 69-71, TG page 102Chapter 5, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in... SPS4 Science Skills for Information. Communication and Media Literary

6. INTERPERSONAL AND COLLABORATIVE SKILLS

S(SPS4)-4-6.3 Role-play different point of view on an issue.

Chapter 4, Lesson 3, Writing in Science, SE page 87

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

7. SELF DIRECTION

S(SPS4)-4-7.1 Keep a journal record of observations, recognizing patterns, summarizing findings, and reflecting on the observations.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

SPS4 Science Skills for Information, Communication and Media Literary

8. ACCOUNTABILITY AND ADAPTABILITY

S(SPS4)-4-8.1 Establish ongoing communication with students from other communities or countries to share and compare data.

Chapter 5, Lesson 3, Enrichment, TRG page 100 Chapter 9, Lesson 3, Writing in Science, SE page 197

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

9. SOCIAL RESPONSIBILITY

S(SPS4)-4-9.1 Collaborate with other learners by letter, phone, or online.

Chapter 5, Lesson 3, Enrichment, TRG page 100

Chapter 9, Lesson 3, Writing in Science, SE page 197
SRA Snapshots Video ScienceTM: Level B correlation to New Hampshire Science Framework Grade 4

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

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.1 Explain how water exists in the atmosphere in different forms and describe how it changes from one form to another through various processes, such as freezing, condensation, precipitation, and evaporation.

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

The Water Cycle, SE page 204

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.2 Explain that air surrounds the Earth, it takes up space, and it moves around as wind.

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.3 Based on data collected from daily weather observations, describe weather changes or weather patterns.

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

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-4-1.4 Explain how the use of scientific tools helps to extend senses and gather data about weather (i.e., weather/wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks/rulers: snow depth; rain gauges: rain amount in inches).

Chapter 5, Lesson 2, Video C, SE page 99; LabTime Hands-On Activity 5, TRB pages 87-89; TG page 102

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.1 Describe Earth materials such as gases found in the atmosphere, rocks, soils, and water in it liquid and solid states.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.2 Describe rock as being composed of different combinations of minerals.

Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Process Skills, SE page 79; Lesson 3, Video A, SE page 81

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.3 Given information about Earth materials, explain how their characteristics lend themselves to specific uses. 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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-4-2.4 Given certain Earth materials (soils, rocks, or minerals) use physical properties to sort, classify, and/or describe them.

Level B:

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

See also 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

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

3. FOSSILS

S(ESS1)-4-3.1 Recognize and explain that fossils offer evidence of plants, animals, and the nature of environments that existed long ago.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

4. OBSERVATION OF THE EARTH FROM SPACE

S(ESS1)-4-4.1 Recognize features of the Earth as viewed by astronauts in orbit and as transmitted by scientific instruments on satellites and spacecraft.

Chapter 5, Lesson 2, Video C, SE page 99

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-4-5.1 Identify and describe processes that affect the features of the Earth's surface, including weathering, erosion, deposition of sediment.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-4-5.2 Explain how wind, water, or ice shape and reshape the Earth's surface.

Chapter 3, Lesson 2, Video A, SE page 55 Chapter 4, Lesson 1, Video A, SE page 69

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.1 Explain that smaller rocks come from the breaking and weathering of larger rocks and bedrock. Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Writing in Science, SE page 79; Process Skill, SE page 79

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.2 Distinguish between the three categories or rocks, metamorphic, igneous, and sedimentary, and describe the processes that create them.

Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Writing in Science, SE page 79; Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.3 Identify minerals by their physical properties, such as color, texture, and cleavage, and describe simple tests used in the identification process.

Chapter 4, Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; Process Skill, SE page 85; KnowZone, SE page 86-87

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

6. ROCK CYCLE

S(ESS1)-4-6.4 Use results from an experiment to draw conclusions about how water interacts with earth materials (e.g., percolation, erosion, frost heaves).

Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79 Chapter 5, Lesson 1, Video A, SE page 91; Video C, SE page 93; Critical Thinking, SE page 95

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

7. WATER

S(ESS1)-4-7.1 Recognize and describe the Earth's surface as mostly covered by water.

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

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of tie, through constant change processes.

7. WATER

S(ESS1)-4-7.2 Explain that most of Earth's water is salt water, which is found in the oceans, and that fresh water is found in rivers, lakes, underground sources, and glaciers.

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

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

1. EARTH, SUN AND MOON

S(ESS2)-4-1.1 Explain that night and day are caused by the Earth's rotation on its axis and that the Earth rotates approximately once every 24 hours.

Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE pages 117

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

1. EARTH, SUN AND MOON

S(ESS2)-4-1.2 Describe the Sun as a star.

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

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships. 2. ENERGY

S(ESS2)-4-2.1 Recognize the Sun provides light and heat necessary to maintain the temperature on 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

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

3. SOLAR SYSTEM

S(ESS2)-4-3.1 Recognize the Moon orbits the Earth.

Chapter 6, Lesson 1, Video C, SE page 115; Process Skill, SE page 117

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships. 3. SOLAR SYSTEM

S(ESS2)-4-3.2 Recognize the Earth is one of a number of planets that orbit the Sun.

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

4. VIEW FROM EARTH

S(ESS2)-4-4.1 Recognize that although star patterns seen in the sky appear to move slowly each night from east to west they actually remain the same, and explain why different stars can be seen during different seasons.

See Level A:

Chapter 6, Lesson 3, Video A, SE page 127

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships.

4. VIEW FROM EARTH

S(ESS2)-4-4.2 Explain why the planets look like stars, and why, over a period of time, they appear to wander among the constellations.

Chapter 6, Lesson 2, Video B, SE page 120

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

1. SIZE AND SCALE

S(ESS3)-4-1.1 Recognize that astronomical objects in space are massive in size and are separated from one another by vast distances.

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

1. SIZE AND SCALE

S(ESS3)-4-1.2 Explain that telescopes magnify the size of distant objects and significantly increase the number of these objects that can be viewed from Earth.

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

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

2. STARS AND GALAXIES

S(ESS3)-4-2.1 Recognize and describe the stars, like the Sun, as spherical in nature.

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

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

2. STARS AND GALAXIES

S(ESS3)-4-2.2 Recognize that stars come in different colors, and that the Sun is a yellow star.

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

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(ESS4)-4-1.1 Recognize that man uses various mechanical devices to record changes in weather and the Earth.

Chapter 5, Lesson 2, Video C, SE page 99

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; KnowZone, SE pages 130-131

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 2. TOOLS

S(ESS4)-4-2.1 Demonstrate the use of simple instruments including thermometers, windsocks, meter sticks, rain gauges to collect weather data.

Chapter 5, Lesson 2, Video C, SE page 99; LabTime Hands-On Activity 5, TRB pages 87-89; TG page 102

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.1 Distinguish between and provide examples of materials that can be recycled/reused and those that cannot. 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

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.2 Provide examples of technology that have changed the environment and explain whether the effect had a positive or negative impact.

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

Chapter 5, Lesson 2, Video C, SE page 99

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; KnowZone, SE pages 130-131

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS

S(ESS4)-4-3.3 Explain how to dispose of waste so that it does not harm the environment.

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

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. ENVIRONEMNTAL CHANGE

S(ESS4)-4-4.1 Recognize there are pros and cons to using different types of energy, such as solar energy and fossils fuels, and compare the differences.

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

Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195; KnowZone, SE pages 196-197

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

5. CAREER TECHNICAL EDUCATION CONNECTIONS

S(ESS4)-4-5.1 Identify some jobs/careers that require knowledge and use of Earth science content and/or skills.

Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 2, Video B, SE page 82; KnowZone, SE pages 86-87 Chapter 5, Lesson 2, Video C, SE page 99; Critical Thinking, SE page 1011 KnowZone, SE pages 130-131

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-4-1.1 Recognize and identify the various ways in which living things can be grouped.

Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-4-1.2 Sort/classify different living things using similar and different characteristics. Describe why organisms belong to each group or cite evidence about how they are alike or not alike.

Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.1 Recognize that living organisms have certain structures and systems that perform specific functions, facilitating survival, growth and reproduction.

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

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.2 Identify and describe the function of the plant structures responsible for food production, water transport, support, reproduction, growth and protection.

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

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.3 Identify and explain how the physical structures of an organism (plants or animals) allow it to survive in its habitat/environment (e.g., roots for water; nose to smell fire).

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Critical Thinking, SE page 13; KnowZone, SE pages 14-15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, KnowZone, SE pages 36-37

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-4-2.4 Identify the basic needs of plants and animals in order to stay alive (i.e., water, air, food, space).

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

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.1 Distinguish between plant and animal characteristics that are inherited. Such as eye color in humans and the shapes of leaves in plants, and those that are affected by their environments, such as grass turning brown due to lack of water. **Chapter 1, Lesson 2, Video C, SE page 11; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30**

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.2 Recognize that living organisms have life cycles, which include birth, growth and development, reproduction, and death; and explain how these life cycles vary for different 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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.3 Describe the reproductive process of plants, explaining that some plants grow from seed, while others grow from the parts of other plants.

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-4-3.4 Predict, sequence, or compare the life stages of organisms—plants and animals (e.g., put images of life stages in sequence, and compare two 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

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-4-1.1 Describe how the nature of an organism's environment, such as the availability of a food source, the quantity and variety of other species present, and the physical characteristics of the environment, affect the organism's patterns of behavior. Chapter 1, Lesson 2, Video C, SE page 11; Writing in Science, SE page 13

Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53

SRA Snapshots Video ScienceTM: Level B correlation to New Hampshire Science Framework Grade 4, page 9

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-4-1.2 Describe the interaction of living organisms with nonliving things.

Chapter 1, Lesson 1, Video C, SE page 5; Lesson 2, Video C, SE page 11; 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; Video B, SE page 26; Video C, SE page 27; Critical Thinking, SE page 29; 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; KnowZone, SE page 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 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 A, SE page 55; Video B, SE page 56; Video C, SE page 57; Critical Thinking, SE page 59; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; Process Skill, SE page 65

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-4-2.1 Recognize that the transfer of energy through food is necessary for all living organisms and describe the organization of food webs.

Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-4-2.2 Recognize that energy is needed for all organisms to stay alive and grow or identify where a plant or animal gets its energy.

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

Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Writing in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Lesson 2, Video A, SE page 55

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-4-3.1 Recognize that plants and animals interact with one another in various ways besides providing food, such as seed dispersal or pollination.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; Lesson Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-4-3.2 Describe ways plants and animals depend on each other (e.g., shelter, nesting, food).

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; Lesson Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.1 Provide examples of how environmental changes can cause different effects on different organisms.

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

Chapter 2, Lesson 1, Video B, SE page 26; Lesson 3, Video C, SE page 41; Process Skill, SE page 43

Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 2, Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.2 Provide examples of how an organism's inherited characteristics can adapt and change over time in response to changes in the environment.

Chapter 1, Lesson 2, Video C, SE page 11; KnowZone, SE pages 14-15 Chapter 3, Lesson 1, Video B, SE page 48

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-4-1.3 Using information (data or scenario), explain how changes in the environment can cause organisms to respond (e.g., survive there and reproduce, move away, die).

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

Chapter 2, Lesson 1, Video B, SE page 26; Lesson 3, Video C, SE page 41; Process Skill, SE page 43 Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 2, Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

2. EVOLUTION

S(LS3)-4-2.1 Compare information about fossils to living organisms and other fossils to determine any similarities and differences.

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

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-4-3.1 Recognize that individuals of the same species differ in their characteristics, and explain that sometimes these differences give individuals an advantage in survival and reproduction.

This concept is not covered at this level.

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-4-3.2 Recognize that for any particular environment, some kinds of animals and plants survive well, some less well, and some cannot survive at all.

Chapter 1, Lesson 2, Video C, SE page 11; Writing in Science, SE page 13

Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-4-1.1 Recognizes that an individual organism's behavior is affected by internal cues, such as hunger and thirst; and describe how an organism uses it s senses to understand and respond to these cues.

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

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-4-1.2 Recognize that an individual organism's behavior is influenced by external cues, such as seasonal change, and describe how an organism might react, such as migrating or hibernating.

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

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-4-1.3 Recognize behaviors that may be unsafe or unhealthy for themselves and others.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, 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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.1 Explain how the amount of rest and the types of food, exercise, and recreation humans choose can influence and affect their well-being.

See Level A:

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51; KnowZone, SE pages 52-53

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.2 Recognize that vitamins and minerals are needed in small amounts and are essential to maintain proper health. See Level A:

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-4-2.3 Explain how proper food preparation and appropriate food handling practices can maintain the safety and quality of food.

This concept is not covered at this level.

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.1 Identify what the physical structures of humans do (e.g., sense organs-eyes, ears, skin, etc.) or compare physical structures of humans to similar structures of animals.

See Level C:

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.2 Distinguish between characteristics of humans that are inherited from parents (i.e., hair color, height, skin color, eye color) and others that are learned (e.g., riding a bike, singing a song, playing a game, reading).

Chapter 1, Lesson 2, Video C, SE page 11; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-4-3.3 Recognize the nutritional value of different foods and distinguish between healthy and unhealthy food choices using data gathered from food labels and dietary guidelines, such as the food pyramid.

See Level A:

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

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 1. DESIGN TECHNOLOGY

S(LS5)-4-1.1 Recognize that man uses various mechanical devices to record and describe living organisms.

Chapter 3, KnowZone, SE pages 52-53; Lesson 2, Writing in Science, SE page 59

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 2. TOOLS

S(LS5)-4-2.1 Demonstrate the use of appropriate tools and simple equipment, such as thermometers, magnifiers, and microscopes to gather data and extend the senses.

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

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(LS5)-4-2.2 Identify and describe the purpose of tools used by health care professionals, such as X-rays and stethoscopes. **This concept is not covered at this level.**

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-4-3.1 Recognize that medical technology provides information about a body's condition, such as determining blood pressure, and recognizing the need to repair, replace, and support the affected body parts.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-4-3.2 Recognize that biotechnology refers to the different ways humans modify the living environment to meet their needs, including growing food, genetic engineering and using living organisms such as yeast to prepare foods.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

CAREER TECHNICAL EDUCATION CONNECTIONS

S(LS5)-4-4.1 Identify some jobs/careers that require knowledge and use of life science content and/or skills.

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

Chapter 2, Lesson 1, Critical Thinking, SE page 29; Lesson 3, Process Skill, SE page 43 Chapter 3, Lesson 3, Critical Thinking, SE page 65

Chapter 3, Lesson 3, Critical Thinking, SE page 65

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-4-1.1 Explain that materials may be composed of parts that are too small to be seen without magnification.

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 3, Video B, SE page150

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-4-1.2 Use measures of weight (data) to demonstrate that the whole equals the sum of its parts.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.1 Recognize that substances can be classified by observable properties.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.2 Explain that some materials can exist in different states, and describes the distinct physical properties of each state of matter.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.3 Explain how some materials, such as water, can change from one state to another by heating or cooling. 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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.4 Make a prediction about what might happen to the state of common materials when heated or cooled or categorize materials as solid, liquid, or gas.

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

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-4-2.5 Collect and organize data about physical properties in order to classify objects or draw conclusions about objects and their characteristic properties (e.g., temperature, color, size, shape, weight, texture, flexibility).

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

1. CVHANGE

S(PS2)-4-1.1 Recognize that energy has the ability to create change.

Chapter 8, Lesson 1, Video A, SE page 157; Lesson 2, Video A, SE page 163

Chapter 9, Lesson 1, Video A, SE page 179; Lesson 2, Video A, SE page 185; Lesson 3, Video A, SE page 191

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.1 Identify the various forms of energy, such as electrical, light, heat, sound.

Chapter 8, Lesson 1, Video A, SE page 157; Lesson 2, Video A, SE page 163

Chapter 9, Lesson 1, Video A, SE page 179; Lesson 2, Video A, SE page 185; Lesson 3, Video A, SE page 191

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.2 Recognize that electricity in circuits can produce light, heat, sound, and magnetic effects.

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

 Physical Science

 PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

 3. ENERGY

S(PS2)-4-3.3 Identify and describe the organization of a simple circuit. Chapter 9, Lesson 1, Video C, SE page 181

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.4 Differentiate between objects and materials that conduct electricity and those that are insulators of electricity.. Chapter 9, Lesson 1, Video B, SE page 180

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.5 Explain that light travels in a straight line until it strikes an object, and describe how it can be reflected by a mirror, bent by a lens, or absorbed by the object.

Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.6 Given a specific example or illustration (e.g., simple closed circuit, rubbing hands together) predict the observable effects of energy (i.e., light bulb lights, a bell rings, hands warm up). (e.g., a test item might ask "what will happen when...?").

Chapter 9, Lesson 1, Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 189; Process Skill, SE page 189; Lesson 3, Critical Thinking, SE page 195; Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.7 Use observations of light in relation to other objects/substances to describe the properties of light (can be reflected, refracted, or absorbed).

Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-4-3.8 Experiment, observe, or predict how heat might move from one object to another.

See Level A:

Chapter 8, Lesson 3, Video A, , SE page 171; Video B, SE page 172; Video C, SE page 173

See also Level C:

Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES S(PS3)-4-1.1 Recognize that magnets attract certain kinds of other materials and classify objects by those magnets will attract

and those they will not.

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

 Physical Science

 PS3-The motion of an object is affected by force.

 1. FORCES

 S(PS3)-4-1.2 Recognize that magnets attract and repel each other.

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

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.3 Explain that electrically charged material pulls on all other materials and can attract or repel other charged materials. **See Level A:**

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

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.4 Recognize that the Earth's gravitational force pulls any object toward it.

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

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-4-1.5 Use observations of magnets in relation to other objects to describe the properties of magnetism (i.e., attract or repel certain objects or has no effect).

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

Physical Science

PS3-The motion of an object is affected by force.

2. MOTION

S(PS3)-4-2.1 Use data to predict how a change in force (greater/less) might effect the position, direction of motion, or speed of an object (e.g., ramps and balls).

See Level A:

Chapter 7, Lesson 1, Video C, SE page 135; Video B, SE page 136; Video C, SE page 137

See also Level C:

Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(PS4)-4-1.1 Understand that materials are used in certain products based on their properties, such as strength and flexibility. Chapter 4, Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; Critical Thinking, SE page 85; KnowZone, SE pages 86-87 Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 2, Video C, SE page 165; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(PS4)-4-1.2 Recognize that products are made using a combination of technologies, such as how an escalator uses both a pulley system and an electrical motor.

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129 Chapter 9, Lesson 2, Video B, SE page 186; Video C, SE page 187

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(PS4)-4-2.1 Demonstrate how to use tools, such as magnifiers, scales, balances, rulers, and thermometers to gather data and extend the senses.

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

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 2. TOOLS

S(PS4)-4-2.2 Describe how some tools can be used to modify natural materials by processes such as separating, shaping, and joining, to produce new materials.

This concept is not covered at this level.

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-4-3.1 Given examples of transportation systems used in New Hampshire, such as buses, trains, cars, and bicycles and describe the sources of energy they use.

This concept is not covered at this level.

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION S(PS4)-4-3.2 Explain that manufactured products are designed to solve a problem or meet a need.

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; video C, SE page 127; Critical Thinking, SE page 129

Chapter 7, KnowZone, SE page 140-141

Chapter 8, Lesson 2, Video C, SE page 165; Lesson 3, Video C, SE page 173

Chapter 9, Lesson 2, Video C, SE page 187; Critical Thinking, SE page 189; Process Skill, SE page 189; KnowZone, SE page 196-197

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-4-3.3 Provide an example to illustrate that manufacturing involves changing natural materials into finished products of a large number of objects that look almost identical.

This concept is not covered at this level.

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. CAREER TECHNICAL EDUCATION CONNECTIONS

S(PS4)-4-4.1 Identify some jobs/careers that require knowledge and use of physical science content and/or skills.

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169

Chapter 9, Lesson 3, Video B, SE page 192; KnowZone, SE pages 196-197

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.1 Extend the senses using simple tools. 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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.2 Make and record observations for a given purpose.

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

Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 2, Process Skill, SE page 79; Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Writing in Science, SE page 117; Process Skill, SE page 117; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 161; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.3 Differentiate between observations and inferences.

Chapter 1, Lesson 1, Process Skill, SE page 7; Lesson 2, Process Skill, SE page 11; 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, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 3, Process Skill, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 3, Process Skill, SE page 153l 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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.4 Record observations using standard units of measurement. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 1, Lab Time Hands-On Activity 1, TKB pages 13-17, TG page 30 Chapter 5, Lab Time Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, Lagran 2, Video A, SE page 142, Video D, SE page 144, Video C, SE page 1

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.5 Classify according to several attributes and describe or show the method for classification.

Chapter 1, Lesson 1, Process Skill, SE page 7; Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.6 Compare methods of classifying based on the goal.

Chapter 1, Lesson 1, Process Skill, SE page 7; Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-4-1.7 Ask questions about objects, organisms and events in their local environment.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
1. MAKING OBSERVATIONS AND ASKING QUESTIONS
S(SPS1)-4-1.8 Pose questions to investigate and practical problems to solve.
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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

2. DESIGNING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-2.1 Plan a step-by-step process to solve a practical problem or to carry out a "fair test" of a simple scientific question.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

2. DESIGNING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-2.2 Select an activity and justify it as an effective means of collecting appropriate 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, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
3. CONDUCTING SCIENTIFIC INVESTIGATIONS
S(SPS1)-4-3.1 Follow a set of procedures.
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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-3.2 Plan and test ideas through guided experiments. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-4-3.3 Identify and use appropriate tools.

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

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONSS(SPS1)-4-4.1 Compile and display data in a variety of formats.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-OnActivity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-4-4.2 Select an appropriate format to represent data or observations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONSS(SPS1)-4-4.3 Identify and suggest possible explanations for patterns.Chapter 1, Lesson 3, Video C, SE page 13Chapter 3, Lesson 2, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115The Water Cycle, SE page 204Earth in Space, SE page 205

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONSS(SPS1)-4-4.4 Analyze data and identify discrepancies.Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

5. EVALUATING SCIENTIFIC EXPLANATIONS

S(SPS1)-4-5.1 Cite evidence or data to support conclusions.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 69-71, TG page 102 Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

5. EVALUATING SCIENTIFIC EXPLANATIONS

S(SPS1)-4-5.2 Determine If an observation or measurement supports a given scientific explanation.

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

Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, 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, TBP pages 105, 107, TC page 120

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, Lesson 3, Math in Science, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174 Science Process Skills: All students can explore the world by developing skills in... SPS1: Scientific Inquiry and Critical Thinking Skills (INQ) 5. EVALUATING SCIENTIFIC EXPLANATIONS S(SPS1)-4-5.3 Draw a conclusion to answer an initial question, based on the evidence collected. Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.1 Sometimes scientists have different explanation for the same set of observations, That usually leads to them to make more observations to resolve the differences.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.2 Results of similar scientific investigations seldom turn out exactly the same, but if the differences are large it's important to try to figure out why.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.3 Recognize when comparisons might not be fair because some conditions are not kept the same.

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

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

Chapter 3, Lesson 3, Process Skill, SE page 65

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

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.4 Scientific investigation may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments. Investigations can focus on physical, biological, and social questions.

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-4-1.5 Scientists' explanations about what happens in the world come partly from what they observe, partly from what they think.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-4-2.1 In something that consists of many parts, the parts usually influence one another.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 65

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

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video A, SE page 97; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video C, SE page 121; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Video C, SE page 137; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

Chapter 9, Lesson 1, Video C, SE page 181; Lesson 2, Video C, SE page 187; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-4-2.2 Something may not work well (or not at all) if a part is missing, broken, worn out, mismatched, or misconnected.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 65

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

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video A, SE page 97; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video C, SE page 121; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Video C, SE page 137; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

Chapter 9, Lesson 1, Video C, SE page 181; Lesson 2, Video C, SE page 187; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in... SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.1 Seeing how a model works after changes are made to it may suggest how the real thing would work if the same changes were done to tit.

Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 6, Lesson 1, Process Skill, SE page 117

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

Chapter 9, Lesson 2, Process Skill, SE page 189

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.2 Geometric figures, number sequences, graphs, diagrams, pictures.

Chapter 2, Lesson 2 Process Skill, SE page 35

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

Chapter 4, Lesson 1 Process Skill, SE page 73; LabTime Hands-On Activity, TRB pages 69-71, TG page 84 Chapter 6, Lesson 1 Process Skill, SE page 117; LabTime Hands-On Activity, TRB pages 105-107, TG page 120 Chapter 9, Lesson 2 Process Skill, SE page 189; Lesson 3 Math in Science, SE page 195; LabTime Hands-On Activity, TRB pages 159-161, TG page 174 Energy Pyramid, SE page 203 The Planet Earth, SE page 204 Earth in Space, SE page 205

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-4-3.3 Almost everything has limits on how big or small it can be.

Chapter 1, KnowZone, SE pages 14-15

Chapter 3, Lesson 2, Video A, SE page 54; Lesson 3, Video B, SE page 62

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.1 Some small changes can be detected by taking measurements.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.2 Some changes are so slow or so fast that they are hard to see.

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

Chapter 4, Lesson 1, Video B, SE page 70; Lesson 2, Video A, SE page 75; Video C, SE page 77

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.4.3 Some features of things may stay the same even when other features change. Some patterns look the same when they are shifted over, or turned, or reflected, or seem from different directions.

This concept is not covered at this level.

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-4-5.1 Discover the relationship between shape and use.

Chapter 1, KnowZone, SE pages 14-15 Chapter 2, KnowZone, SE pages 36-37

Chapter 7, KnowZone, SE pages 140-141

Chapter (, KnowZone, SE pages 196-197

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-4-5.2 Explore methods, designs and problems of transporting liquids.

This concept is not covered at this level.

SPS3: Personal, Social, and Technological Perspectives

1. COLLABORATION IN SCIENTIFIC ENDEAVORS S(SPS3)-4-1.2 Communicates ideas to others.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 5, Lesson 3, Process Skill, SE page 109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

1. COLLABORATION IN SCIENTIFIC ENDEAVORS

S(SPS3)-4-1.3 Givens specific feedback about work of others. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.1. Demonstrate a basic conservation action such as recycling or a schoolyard habitat project.

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

Chapter 2, Lesson 2, Critical Thinking, SE page 29; Lesson 3, Video C, SE page 41; Process Skill, SE page 43 Chapter 3, Lesson 2, Critical Thinking, SE page 59; Lesson 3, Video C, SE page 63; Critical thinking, SE page 65; Process Skill, SE page 65

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

Chapter 9, Lesson 3, video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195

Science Process Skills: All students can explore the world by developing skills in... SPS3: Personal, Social, and Technological Perspectives 2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION S(SPS3)-4-2.2 Develop questions based upon their observations about the natural world and design 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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.3 Develop questions that help them learn about the environment, design, and do simple investigations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.4 Locate and collect information about the environment and environmental and natural resources topics.

Chapter 1, Lesson 3, Critical Thinking, SE page 21; Process Skill, SE page 21

Chapter 2, Lesson 1, Critical Thinking, SE page 293; Process Skill, SE page 29; Lesson 3, Critical Thinking, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 2, Critical Thinking, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Critical Thinking, SE page 101; KnowZone, SE pages 102-103; Lesson 3, Critical Thinking, SE page 109

Science Process Skills: All students can explore the world by developing skills in...

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.5 Use reliable information to answer questions.

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, 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

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.6 Organize information to search for relationships and patterns concerning the environment and environmental topics.

Chapter 2, Lesson 2, Critical Thinking, SE page 35; Process Skill, SE page 35

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-4-2.7 Identify and investigate issues in their local environments and communities.

Chapter 1, Lesson 3, Process Skill, SE page21

Chapter 2, Lesson 1, Process Skill, SE page 29; Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 2, Critical Thinking, SE page 59; Process Skill, SE page 59; Lesson 3, Video C, SE page 63; Process Skill, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL: ICATION

S(SPS3)-4-3.1 Describe the design process as a logical progression for transforming ideas into reality.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL: ICATION

S(SPS3)-4-3.2 Describe how people have designed and used tools throughout history and provide examples of how many of these tools, while improved, are still in use today.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-4-3.3 Provide examples illustrating that throughout history, people of all ages and from all walks of life, have made significant contributions to the fields of science and technology.

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

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Math in Science, SE page 129; KnowZone, SE pages 130-131

Chapter 7, Lesson 3, Video A, SE page 149

Chapter 8 KnowZone, SE pages 168-169

Chapter 9 KnowZone, SE pages 196-197

Science Process Skills: All students can explore the world by developing skills in	
SPS4 Science Skills for Information, Communication and Media Literary	
1. INFORMATION AND MEDIA LITERARY	
S(SPS4)-4-1.1 Access information from a variety of media sources (i.e., Internet, CD-ROM programs, print resources).	
Chapter 1 KnowZone, SE pages 14-15; Lesson 3 Process Skill, SE page 21	
Chapter 2 KnowZone, SE pages 36-37; Lesson 3 Process Skill, SE page 43	
Chapter 3 KnowZone, SE pages 52-53; Lesson 2 Process Skill, SE page 59	
Chapter 4, Lesson 2 Process Skill, SE page 79; KnowZone, SE pages 86-87	
Chapter 5 KnowZone, SE pages 102-103	
Chapter 6, Lesson 3 Math in Science, SE page 129; KnowZone, SE pages 130-131	
Chapter 7 KnowZone, SE pages 140-141	
Chapter 8 KnowZone, SE pages 168-169	
Chapter 9 KnowZone, SE pages 196-198	

SPS4 Science Skills for Information, Communication and Media Literary

1. INFORMATION AND MEDIA LITERARY

S(SPS4)-4-1.2 Use appropriate tools to measure and graph 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

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

1. INFORMATION AND MEDIA LITERARY

S(SPS4)-4-1.3 Analyze and compare data from a variety of age-appropriate sources such as newspapers and websites.

Chapter 1 KnowZone, SE pages 14-15; Lesson 3 Process Skill, SE page 21

Chapter 2 KnowZone, SE pages 36-37; Lesson 3 Process Skill, SE page 43

Chapter 3 KnowZone, SE pages 52-53; Lesson 2 Process Skill, SE page 59

Chapter 4, Lesson 2 Process Skill, SE page 79; KnowZone, SE pages 86-87

Chapter 5 KnowZone, SE pages 102-103

Chapter 6, Lesson 3 Math in Science, SE page 129; KnowZone, SE pages 130-131

Chapter 7 KnowZone, SE pages 140-141

Chapter 8 KnowZone, SE pages 168-169

Chapter 9 KnowZone, SE pages 196-198

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

2. COMMUNICATION SKILLS

S(SPS4)-4-2.1 Use a variety of tools and formats (oral presentations, journals, and multimedia presentations) to summarize and communicate the results of observations.

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

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.1 Apply a variety of age-appropriate strategies to address real-life issues (e.g., identify factors that affect plants in a particular habitat).

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.2 Build a Concept Map (or other graphic organizer) to understand a complex problem.

Chapter 6, Lesson 3, Math in Science, SE page 129

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

Teacher's Resource Book: pages 1, 3, 4, 5, 7, 8, 9, 11, 12, 13, 20, 21, 22, 23, 25, 26, 27, 29, 30, 31, 38, 39, 40, 41, 43, 44, 45, 47, 48, 49, 55, 57, 58, 59, 61, 62, 63, 65, 66, 67, 73, 75, 76, 77, 79, 80, 81, 83, 84, 85, 91, 92, 93, 94, 95, 97, 98, 99, 101, 102, 103, 109, 110, 111, 112, 113, 115, 116, 117, 119, 120, 121, 125, 128, 129, 130, 131, 133, 134, 135, 137, 138, 139, 145, 146, 147, 148, 149, 151, 152, 153, 155, 156, 156, 161

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-4-3.3 Organize observations and data into tables, charts, and graphs.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-4-4.1 Ask questions and plan investigations to find answers.

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

SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-4-4.2 Compile data gathered through observations to record and present results using tally charts, tables and graphs.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-On

Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-4-4.3 Use evidence to construct explanations.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

5. CREATIVITY AND INTELLECTUAL CURIOSITY

S(SPS4)-4-5.1 Use a variety of equipment and software packages to enter, process, display, and/or communicate information in different forms using text, tables, pictures, and sound. (i.e., brainstorming software, collaboration software, telecommunications, presentation software, digital cameras, projectors.

Chapter 1 KnowZone, SE pages 14-15; Lesson 3 Process Skill, SE page 21

Chapter 2 KnowZone, SE pages 36-37; Lesson 3 Process Skill, SE page 43

Chapter 3 KnowZone, SE pages 52-53; Lesson 2 Process Skill, SE page 59

Chapter 4, Lesson 2 Process Skill, SE page 79; KnowZone, SE pages 86-87

Chapter 5 KnowZone, SE pages 102-103

Chapter 6, Lesson 3 Math in Science, SE page 129; KnowZone, SE pages 130-131

Chapter 7 KnowZone, SE pages 140-141

Chapter 8 KnowZone, SE pages 168-169

Chapter 9 KnowZone, SE pages 196-198

Science Process Skills: All students can explore the world by developing skills in
SPS4 Science Skills for Information, Communication and Media Literary
6. INTERPERSONAL AND COLLABORATIVE SKILLS
S(SPS4)-4-6.1 Plan and conduct a scientific investigation in group settings.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS4 Science Skills for Information, Communication and Media Literary
6. INTERPERSONAL AND COLLABORATIVE SKILLS
S(SPS4)-4-6.2 Engage in group decision making activities.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

 Science Process Skills: All students can explore the world by developing skills in...

 SPS4 Science Skills for Information, Communication and Media Literary

 6. INTERPERSONAL AND COLLABORATIVE SKILLS

 S(SPS4)-4-6.3 Role-play different point of view on an issue.

 Chapter 6, Lesson 2, Enrichment, TG page 114

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

7. SELF DIRECTION

S(SPS4)-4-7.1 Keep a journal record of observations, recognizing patterns, summarizing findings, and reflecting on the observations.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174
SPS4 Science Skills for Information, Communication and Media Literary

8. ACCOUNTABILITY AND ADAPTABILITY

S(SPS4)-4-8.1 Establish ongoing communication with students from other communities or countries to share and compare data.

Chapter 5, Lesson 2, Writing in Science, SE page 101; Lesson 3, Process Skill, SE page 109

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

9. SOCIAL RESPONSIBILITY

S(SPS4)-4-9.1 Collaborate with other learners by letter, phone, or online.

Chapter 5, Lesson 2, Writing in Science, SE page 101; Lesson 3, Process Skill, SE page 109

SRA Snapshots Video Science™: Level C correlation to New Hampshire Science Framework 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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-6-1.1 Describe and make predictions about local and regional weather conditions using observation and data collection methods.

Chapter 5, Lesson 3, Video A, SE page 103; Process Skill, SE page 107

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-6-1.2 Identify weather patterns by tracking weather related events, such as hurricanes.

Chapter 5, Lesson 3, Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-6-1.3 Explain the composition and structure of the Earth's atmosphere.

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-6-1.4 Describe weather in terms of temperature, wind speed and direction, precipitation, and cloud cover.

Chapter 4, Lesson 3, Video A, SE page 103; Video B, SE page 104; Process Skill, SE page 107

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. ATMOSPHERE, CLIMATE, & WEATHER

S(ESS1)-6-1.5 Describe how clouds affect weather and climate, including precipitation, reflecting light from the sun, and retaining heat energy emitted from the Earth's surface.

Chapter 5, Lesson 2, Video B, SE page 98; Lesson 3, Video B, SE page 104

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-6-2.1 Differentiate between renewable and non-renewable resources.

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-6-2.2 Describe and define the different landforms in the Earth's surface, such as coastlines, rivers, mountains, deltas, canyons, etc.

Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Writing in Science, SE page 87; Process Skill, SE page 87

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

2. COMPOSITION & FEATURES

S(ESS1)-6-2.3 Identify and distinguish between various landforms, using a map and/or digital images...

Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Writing in Science, SE page 87; Process Skill, SE page 87

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

3. FOSSILS

S(ESS1)-6-3.1 Recognize that fossils offer evidence relating to changes in life forms and environmental conditions over geologic time.

Chapter 2, Lesson 1, Video C, SE page 27 Chapter 4, Lesson 3, Video A, SE page 83

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

3. FOSSILS

S(ESS1)-6-3.2 Identify connections between fossil evidence and geological events, such as changes in atmospheric composition, movement of tectonic plates, and asteroid/comet impact; and develop a means of sequencing this evidence.

Chapter 2, Lesson 1, Video C, SE page 27 Chapter 4, Lesson 3, Video A, SE page 83

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

4. OBSERVATION OF THE EARTH FROM SPACE

S(ESS1)-6-4.1 Recognize that images taken of the Earth from space can show its features, and any changes in those features that appear over time.

Chapter 5, Lesson 3, Video A, SE page 103; Video B, SE page 104 Chapter 6, Lesson 3, Video B, SE page 128

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

4. OBSERVATION OF THE EARTH FROM SPACE

S(ESS1)-6-4.2 Explain that satellites can be used to view and track storms and Earth events, such as hurricanes and wild fires. Chapter 5, Lesson 3, Video A, SE page 103; Video B, SE page 104 Chapter 6, Lesson 3, Video B, SE page 128

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-6-5.1 Recognize that things change in steady, repetitive, or irregular ways, or sometimes, in more than one way at the same time.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Process Skill, SE page 81; Lesson 3, Process Skill, SE page 87

Chapter 5, Lesson 1, Video B, SE page 92; Video C, SE page 93; Critical Thinking, SE page 95; Process Skill, SE page 95; Lesson 2, Video B, SE page 98; Critical Thinking, SE page 101; Process Skill, SE page 101; Lesson 3, Video A, SE page 103

Chapter 6, Lesson 1, Critical Thinking, SE page 117; 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 Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-6-5.2 Explain how some changes to the Earth's surface happen abruptly, as a result of landslides, earthquakes, and volcanic eruptions; while other changes, happen very slowly as a result of weathering, erosions, and deposition of sediment caused by waves, wind, water, and ice.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Process Skill, SE page 73; KnowZone, SE pages 74-75

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

5. PROCESSES & RATES OF CHANGE

S(ESS1)-6-5.3 Recognize that vibrations in materials set up wavelike disturbances that spread away from the source, as with earthquakes.

Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

6. ROCK CYCLE

S(ESS1)-6-6.1 Explain how soil is formed from combinations of weathered rock and decomposed plant and animal remains, and that it contains living organisms.

Level C:

Chapter 4, Lesson 3, Video C, SE page 85

See also Level A:

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

6. ROCK CYCLE

S(ESS1)-6-6.2 Identify the components of soil and other factors, such as bacteria, fungi and worms, which influence its texture, fertility, and resistance to erosion.

Level C:

Chapter 4, Lesson 3, Video C, SE page 85

See also Level A: Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

6. ROCK CYCLE

S(ESS1)-6-6.3 Describe the properties of soil, such as color, texture, capacity to retain water, and its ability to support plant life.

Level C:

Chapter 4, Lesson 3, Video C, SE page 85

See also Level A:

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

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

7. WATER

S(ESS1)-6-7.1 Explain the properties that make water an essential component of the Earth's system, including solvency and its ability to maintain a liquid state at most temperatures.

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99

Earth Space Science

ESS1-The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

7. WATER

S(ESS1)-6-7.2 Explain that water quality has a direct effect on Earth's life forms.

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

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

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships.

1. EARTH, SUN AND MOON

S(ESS2)-6-1.1 Recognize and describe how the regular and predictable motions of the Earth and Moon explain certain Earth phenomena, such as day and night, the seasons, the year, shadows, and the 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

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships.

1. EARTH, SUN AND MOON

S(ESS2)-6-1.2 Recognize that of all the known planets, Earth appears to be somewhat unique, and describe the conditions that exist on Earth that allow it to support life.

Chapter 5, Lesson 1, Video A, SE page 91; Video C, SE page 95; Critical Thinking, SE page 95; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99

Chapter 6, Lesson 1, Video A, SE page 113; Critical Thinking, SE page 117; Lesson 3, Video A, SE page 127; Critical Thinking, SE page 1131

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships. 2. ENERGY

S(ESS2)-6-2.1 Recognize how the tilt of the Earth's axis and the Earth's revolution around the Sun affect seasons and weather patterns.

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

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships. 2. ENERGY

S(ESS2)-6-2.2 Identify and describe seasonal, daylight and weather patterns as they relate to energy.

Chapter 5, Lesson 1, Video B, SE page 92; Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video B, SE page 98; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; Process Skill, SE page 107; KnowZone, SE pages 108-109

Chapter 6, Lesson 2, Video A, SE page 121; Critical Thinking, SE page 125

Earth Space Science ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial relationships. **3. SOLAR SYSTEM** None at this grade level.

Earth Space Science

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships.

4. VIEW FROM EARTH

S(ESS2)-6-4.1 Explain the historical perspective of planetary exploration and man's achievements in space, beginning with Russia's Sputnik mission in 1957.

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

ESS2-The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships. 4. VIEW FROM EARTH

4. VIEW FROM EARTH

S(ESS2)-6-4.2 Describe man's perception of the constellations throughout history, and explain how he has used them to his advantage, including navigational purposes and to explain historical events.

See Level A:

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

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time. 1. SIZE AND SCALE

None at this grade level.

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

2. STARS AND GALAXIES

None at this grade level.

Earth Space Science

ESS3-The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

3. UNIVERSE

None at this grade level.

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 1. DESIGN TECHNOLOGY S(ESS4)-6-1.1 Understand that technology is used to design tools that improve out ability to measure and observe the world. 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

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 2. TOOLS SCIENCE 4. 6.2.1 Responsible that satellites and Dependence on he used to choose a predict the usether

S(ESS4)-6-2.1 Recognize that satellites and Doppler radar can be used to observe or predict the weather. Chapter 5, Lesson 3, Video A, SE page 103; Video B, SE page 104; Critical Thinking, SE page 107 Chapter 6, Lesson 3, Video B, Sep age 128

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues. 2. TOOLS

S(ESS4)-6-2.2 Employ knowledge of basic weather symbols to read and interpret weather and topographic maps.

S(ESS4)-6-2.

Chapter 5, Lesson 3, Video C, SE page 107

See also Level B:

Chapter 5, Lesson 2, Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video A, SE page 105; Video B, SE page 106

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(ESS4)-6-2.3 Read and interpret data from barometers, sling psychrometers, and anemometers.

See Level A:

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; Critical Thinking, SE page 109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

See also Level B:

Chapter 5, Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS)

S(ESS4)-6-3.1 Provide examples of products that man has developed which have humans do things that they could not do otherwise, and identify the natural materials used to produce these products.

Chapter 4, Lesson 3, Video C, SE page 85

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

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS)

S(ESS4)-6-3.2 Identify the most appropriate materials for a given design task with requirements for specific properties, such as weight, strength, hardness, and flexibility.

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85

Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144, Lesson 2, Video A, SE page 140

SE page 144; Lesson 3, Video A, SE page 149 Chapter 8, Lesson 2, Video A, SE page 163

Earth Space Science

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL: USES OF EARTH MATERIALS)

S(ESS4)-6-3.3 Provide examples of how to reduce waste through conservation, recycling, and reuse.

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

Chapter 4, Lesson 3, Video C, SE page 85

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101

ESS4-The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. CAREER TECHNICAL EDUCATION CONNECTIONS

S(ESS4)-6.4.1 Understand that some form of science is used in most jobs/careers and that some jobs/careers specifically require knowledge of Earth science.

Chapter 4, KnowZone, SE pages 74-75

Chapter 5, Lesson 1, Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Lesson 3, Video A, SE page 103; KnowZone, SE pages 108-109

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-6-1.1 Identify ways in which living things can be grouped and organized, such as taxonomic groups of plants, animals and fungi.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Process Skill, SE page 29

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

1. CLASSIFICATION

S(LS1)-6-1.2 Categorize organisms into kingdoms that are currently recognized, according to shared characteristics. Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Process Skill, SE page 29

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.1 Recognize that all living things are composed of cells, and explain that while many organisms are single celled, such as yeast, others, including humans, are multicellular.

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.2 Explain that the way in which cells function is similar in all organisms.

Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; Lesson 2, Video A, SE page 9; Lesson 3, Video A, SE page 15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.3 Recognize that cells use energy obtained from food, to conduct the functions necessary to sustain life, such as cell growth.

Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; Lesson 2, Video A, SE page 9

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.4 Recognize and describe the hierarchical organization of living systems, including cells, tissues, organs, organ systems, whole organisms, and ecosystems.

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.5 Explain that multicellular organisms have specialized cells, tissues, organs, and organ systems that perform certain necessary functions, including digestion, respiration, reproduction, circulation, excretion, movement, control and coordination and protection from disease.

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

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

2. LIVING THINGS AND ORGANIZATION

S(LS1)-6-2.6 Recognize that the human cells found in tissues and organs are similar to those of other animals, but somewhat different from cells found in plants.

Chapter 1, Lesson 2, Video A, SE page 9

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-6-3.1 Explain that cells repeatedly divide to make more cells for growth and repair.

Chapter 1, Lesson 1, Math in Science, SE page 7; Lesson 2, Video B, SE page 10; Lesson 3, Video A, SE page 15

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-6-3.2 Explain that the same genetic information is copied in each cell of a new organism.

This concept is not covered at this level.

Life Science

LS1-All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).

3. REPRODUCTION

S(LS1)-6-3.3 Explain that all living things reproduce in order to continue their species.

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

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-6-1.1 Identify and describe the factors that influence the number and kinds of organisms an ecosystem can support, including the resources that are available, the differences in temperature, the composition of the soil, any disease, the threat of predators, and competition from other organisms.

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

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

1. ENVIRONEMNT

S(LS2)-6-1.2 Explain that most microorganisms do not cause disease and that many are beneficial to the environment. Level C:

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

See also Level B:

Chapter 2, Lesson 2, Video C, SE page 33; Process Skill, SE page 35

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-6-2.1 Describe how energy is transferred in an ecosystem through food webs, and explain the roles and relationships between producers, consumers, and decomposers.

Level C:

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

Energy Pyramid, SE page 203

See also Level B: Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21 Food Web, SE page 203 Energy Pyramid, SE page 203

Life Science
LS2-Energy flows and mater recycles through an ecosystem.
2. FLOW OF ENERGY
S(LS2)-6-2.2 Recognize that one of the most general distinctions among organisms is between plants, which use sunlight to
make their own food, and animals, which consume energy-rich foods.
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

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-6-2.3 Describe the process of photosynthesis and explain that plants can use the food they make immediately or store it for later use.

Level C:

Chapter 1, Lesson 2, Video A, SE page 9 Chapter 7, Lesson 3, Video A, SE page 149

See also Level B:

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

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

2. FLOW OF ENERGY

S(LS2)-6-2.4 Recognize that energy, in the form of heat, is usually a byproduct when one form of energy is converted to another, such as when living organisms transform stored energy to motion.

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

Chapter 8, Lesson 1, Video A, SE page 157; Lesson 3, Video C, SE page 173

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-6-3.1 Define a population as all individuals of a species that exist together at a given place and time, and explain that all populations living together in a community, along with the physical factors 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

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-6-3.2 Identify and describe the ways in which organisms interact and depend on one another in an ecosystem, using food webs.

Chapter 2, Lesson 1, Video C, SE page 27; Lesson 2, Video C, SE page 33; KnowZone, SE page 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Writing in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; KnowZone, SE page 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; Process Skill, SE page 65

Life Science

LS2-Energy flows and mater recycles through an ecosystem.

3. RECYCLING OF MATERIALS

S(LS2)-6-3.3 Explain how insects and various other organisms depend on dead plant and animal matter for food, and describe how this process contributes to the system.

Chapter 1, KnowZone, SE pages 20-21

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

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-6-1.1 Provide examples of how all organisms, including humans, impact their environment and explain how some changes can be detrimental to other organisms.

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

Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63 Chapter 5, Lesson 2, Video C, SE page 49; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

1. CHANGE

S(LS3)-6-1.2 Explain how changes in environmental conditions can affect the survival of individual organisms and the entire species.

Chapter 3, Lesson 1, Video C, SE page 49; Lesson 2, Critical Thinking, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

2. EVIDENCE OF EVOLUTION

S(LS3)-6-2.1 Describe the fundamental concepts related to biological evolution, such as biological adaptations and the diversity of species.

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

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-6-3.1 Recognize that there are genetic variations among individuals in groups of organisms and provide examples of how these variations affect the survival of an organism.

This concept is not covered at this level.

Life Science

LS3-Groups of organisms show evidence of change over time (e.g., evolution, natural selection, structures, behaviors, and biochemistry).

3. NATURAL SELECTION

S(LS3)-6-3.2 Recognize that only organisms that are able to reproduce can pass on their genetic information to the next generation.

Chapter 1, Lesson 1, Video B, SE page 4

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-6-1.1 Recognizes that learning requires more than just storage and retrieval of information and that prior knowledge needs to be tapped in order to make sense out of new experiences or information.

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-6-1.2 Explain that people can learn about others from direct experience, from the media, and from listening to others talk about their life and work.

This concept is not covered at this level.

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. BEHAVIOR

S(LS4)-6-1.3 Provide examples of how humans make judgments about new situations based on memories of past experiences. **This concept is not covered at this level.**

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-6-2.1 Explain that the human body has ways to defend itself against disease causing organisms and describe how defenders, including tears, saliva, the skin, some blood cells, and stomach secretions support the defense process. Chapter 1, Lesson 3, Video A, SE page 15; Critical Thinking, SE page 19; KnowZone, SE page 20-21

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-6-2.2 Recognize that there are some diseases that human beings can only get once, and explain how many diseases can be prevented by vaccination.

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-6-2.3 Explain how vaccines induce the body to build immunity to a disease without actually causing the disease itself. Chapter 1, Lesson 3, Video A, SE page 15; Critical Thinking, SE page 19; KnowZone, SE page 20-21

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

2. DISEASE

S(LS4)-6-2.4 Recognize a healthy body cannot fight all germs that invade it, and explain how some germs interfere with the body's defenses.

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

Life Science

LS4-Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

3. HUMAN IDENTITY

S(LS4)-6-3.1 Recognize that the length and quality of human life are influenced by many factors, including sanitation, diet, medical care, gender, genes, environmental conditions, and personal health behaviors.

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(LS5)-6-1.1 Recognize that an agricultural system is designed to maximize the use of all the elements in the system, including using plants for food, oxygen, for the filtration of air and water, and for making compost. **This concept is not covered at this level.**

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(LS5)-6-2.1 Demonstrate the appropriate use of tools, such as thermometers, probes, microscopes and computers to gather, analyze, and interpret data in the life sciences.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 2, Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16; KnowZone, SE pages 20-21 Chapter 2, Lesson 1, Critical Thinking, SE page 29 Chapter 3, Lesson 2, Process Skill, SE page 65

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-6-3.1 Provide examples of early health care technology that helped to extend the life expectancy of humans, such as the discovery of penicillin, sterilization of surgical instruments.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-6-3.2 Differentiate between vaccines, which help prevent diseases from developing and spreading, and medicines, which relieve symptoms or cure diseases.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-6-3.3 Recognize that the quality of personal health can be influenced by society and technology.

This concept is not covered at this level.

Life Science

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL) : MEDICAL TECHNOLOGY and BIOTECHNOLOGY

S(LS5)-6-3.4 Identify and describe some of the processes and systems used to grow food in New Hampshire, including irrigation, pest control and harvesting.

LS5-The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

CAREER TECHNICAL EDUCATION CONNECTIONS

S(LS5)-6-4.1 Understand that some form of science is used in most jobs/careers specifically require knowledge of life science. Chapter 1, Lesson 1, Video C, SE page 5; Critical Thinking, SE page 7

Chapter 3, Lesson 2, Video C, SE page 55; Critical Thinking, SE page 57; KnowZone, SE pages 58-59; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-6-1.1 Recognize that all matter is composed of minute particles called atoms, and explain that all substances are composed of atoms, each arranged into different groupings.

Chapter 7, Lesson 1, Video A, SE page 135; Critical Thinking, SE page 139; KnowZone, SE page 140-141

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-6-1.2 Identify elements as substances that contain only one kind of atom and explain that elements do not break down by normal laboratory reactions, such as heating, exposure to electric current, and reaction to acid.

Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141 Periodic Table of the Elements, SE pages 206-207

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. COMPOSITION

S(PS1)-6-1.3 Recognize that over one hundred elements exist, and identify the periodic table as a tool for organizing the information about them.

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-6-2.1 Identify elements according to their common properties, such as highly reactive metals, less reactive metals, highly reactive non-metals and almost non-reactive gases.

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

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-6-2.2 Identify substances by their physical and chemical properties, such as magnetism, conductivity, density, solubility, boiling and melting points.

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-6-2.3 Differentiate between weight and mass.

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

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

Physical Science

PS1-All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

2. PROPERTIES

S(PS1)-6-2.4 Identify energy as a property of many substances.

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

1. CHANGE

S(PS2)-6-1.1 Differentiate between a physical change, such as melting, and a chemical change, such as rusting.

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Process Skill, SE page 153

Chapter 8, Lesson 2, Video C, SE page 165

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

2. CONSERVATION

S(PS2)-6-2.1 Describe how mass remains constant in a closed system and provide examples relating to both physical and chemical change.

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

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-6-3.1 Explain that the pitch of a sound is dependent on the frequency of the vibration producing it.

See Level B:

Chapter 8, Lesson 1, 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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-6-3.2 Explain that sound vibrations move at different speeds, have different wavelengths and establish wave-like disturbances that emanate from the source.

See Level B:

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-6-3.3 Recognize that energy, in the form of heat, is usually a by-product when one form of energy is changed to another, such as when machines convert storied energy to motion.

Chapter 7, Lesson 2, Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 153

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-6-3.4 Explain that heat energy moves from warmer materials to cooler ones through conduction, convection, and radiation.

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

Physical Science

PS2-Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

3. ENERGY

S(PS2)-6-3.5 Explain how electrical circuits can be used to transfer energy in order to produce heat, light, sound, and chemical changes.

Level C:

Chapter 9, Lesson 1, Video A, SE page 171; Video B, SE page 172

See also Level B:

Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-6-1.1 Recognize that just as electric currents can produce magnetic forces, magnets can cause electric currents. **Level C:**

Chapter 8, Lesson 3, Video B, SE page 172

See also Level B:

Chapter 9, Lesson 2, Video A, SE page 185; Video B, SE page 186; Video C, SE page 187; Critical Thinking, SE page 189; Process Skill, SE page 189; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-6-1.2 Explain that when a force is applied to an object, it reacts in one of three ways: the object either speeds up, slows down, or goes in a different direction.

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; KnowZone, SE pages 184-185; Lesson 2, Video B, SE page 188; Vide C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS3-The motion of an object is affected by force.

1. FORCES

S(PS3)-6-1.3 Describe the relationship between the strength of a force on an object and the resulting effect, such as the greater the force, the greater the change in motion.

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 3, video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS3-The motion of an object is affected by force.

2. MOTION

S(PS3)-6-2.1 Explain how balanced and unbalanced forces are related to an object's motion.

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 3, video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS3-The motion of an object is affected by force.

2. MOTION

S(PS3)-6-2.2 Explain that an object's motion can be tracked and measured over time and that the data can be used to describe its position.

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

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. DESIGN TECHNOLOGY

S(PS4)-6-1.1 Understand that scientific principles are used in the design of technology.

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

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

2. TOOLS

S(PS4)-6-2.1 Recognize that manufacturing processes use a variety of tools and machines to separate, form, combine, and condition natural and synthetic materials.

This concept is not covered at this level.

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-6-3.1 Explain how a battery changes chemical energy into electrical energy.

Chapter 8, Lesson 1, Video A, SE page 157

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-6-3.2 Demonstrate how to produce a magnetic force with an electric current, such as an electromagnet, and how to produce an electric current with a magnet, such as a generator.

See Level B:

Chapter 9, Lesson 2, Video B, SE page 186; Video C, SE page 187; Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Physical Science

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. SOCIAL ISSUES (LOCAL AND GLOBAL): ENERY, POWER, AND TRANSPORTATION

S(PS4)-6-3.3 Provide an example to show that manufacturing processes involve changing natural materials into finished products through a series of processes that involve physical and/or chemical changes.

PS4-The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

4. CAREER TECHNICAL EDUCATION CONNECTIONS

S(PS4)-6-4.1 Understand that some form of science is used in most jobs/careers and that some jobs/careers specifically require knowledge of physical science.

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; Process Skill, SE page 175

Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; KnowZone, SE pages 184-185; Lesson 2, Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 195; Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.1 Make observations and record measurements using a variety of tools and instruments.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16

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

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

Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

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

Chapter 9, Lesson 2 Process Skill, SE page 191

Science Process Skills: All students can explore the world by developing skills in... SPS1: Scientific Inquiry and Critical Thinking Skills (INQ) 1. MAKING OBSERVATIONS AND ASKING QUESTIONS S(SPS1)-6-1.2 Plan observations based on a given purpose. 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 7, LabTime Hands-On Activity 7, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)1. MAKING OBSERVATIONS AND ASKING QUESTIONSS(SPS1)-6-1.3 Identify and investigate similarities and differences among observations and sets of observations.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.4 Use appropriate units and precision of metric measurements when recording data.

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

Chapter 5, Lesson 3, Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB page 87, TG page 102 Chapter 7, Lesson 2, Video C, SE page 165; LabTime Hands-On Activity 7, TRB page 123, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB page 141, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191

The Metric System, SE page 200-201

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.5 Use a classification key, such as a dichotomous key, to identify and distinguish among members of a group or set.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Critical Thinking, SE page 87 Chapter 6, Lesson 1, Video B, SE page 114

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 2, Video A, SE page 163; Lesson 3, Video C, SE page 173

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.6 Construct a simple classification key.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Critical Thinking, SE page 87 Chapter 6, Lesson 1, Video B, SE page 114

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 2, Video A, SE page 163; Lesson 3, Video C, SE page 173

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.7 Compare methods of classification for a specific purpose.

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Critical Thinking, SE page 87 Chapter 6, Lesson 1, Video B, SE page 114

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 2, Video A, SE page 163; Lesson 3, Video C, SE page 173

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)1. MAKING OBSERVATIONS AND ASKING QUESTIONSS(SPS1)-6-1.8 Ask questions about relationships between and among observations.Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 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 66Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 120Chapter 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 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.9 Determine what observations will be helpful to a given 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, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

1. MAKING OBSERVATIONS AND ASKING QUESTIONS

S(SPS1)-6-1.10 Distinguish between those questions that can be answered by science and those that cannot.

Chapter 5, Lesson 2, Process Skill, SE page 95

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

2. DESIGNING SCIENTIFIC INVESTIGATIONS

S(SPS1)-6-2.1 Design and record a simple step-by-step procedure to follow in order to carry out a fair test of a scientific question.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
2. DESIGNING SCIENTIFIC INVESTIGATIONS
S(SPS1)-6-2.2 Identify and utilize appropriate tools/technology for collecting data in designing investigations.
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

SPS1: Scientific Inquiry and Critical Thinking Skills (INO)

2. DESIGNING SCIENTIFIC INVESTIGATIONS

S(SPS1)-6-2.3 Incorporate components of good experimental design, such as controls and multiple trials into investigations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7. LabTime Hands-On Activity 7. TRB pages 123-125. TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INO)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-6-3.1 Carry out simple student or teacher developed procedures or experiments.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

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

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-6-3.2 Use appropriate tools to collect and record data.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129 Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169 Chapter 9, Lesson 2 Process Skill, SE page 191

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

3. CONDUCTING SCIENTIFIC INVESTIGATIONS

S(SPS1)-6-3.3 Follow the teacher's instructions in performing experiments, following all appropriate safety rules and procedures.

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS
S(SPS1)-6-4.1 Use appropriate tools to organize, represent, analyze, and explain data.
Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONSS(SPS1)-6-4.2 Make and record observations using a pre-determined format.Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, LabTime Hands-On Activity 7, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-6-4.4 Identify patterns and relationships in data and formulate basic explanations.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

- Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
- Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
- Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
- Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
- Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
- Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
- Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

4. REPRESENTING AND UNDERSTANDING RESULTS OF INVESTIGATIONS

S(SPS1)-6-4.5 Draw appropriate conclusions based on data collected.

- Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
- Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
- Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
- Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
- Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
- Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
- Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
- Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)
5. EVALUATING SCIENTIFIC EXPLANATIONS
S(SPS1)-6-5.1 Determine if the results of an experiment support or fail to support the scientific idea tested.
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

SPS1: Scientific Inquiry and Critical Thinking Skills (INQ)

5. EVALUATING SCIENTIFIC EXPLANATIONS

S(SPS1)-6-5.2 Explain how a hypothesis is a direct extension of a scientific idea and therefore makes the idea "testable."

Chapter 1, Lesson 2, Process Skill, SE page 13

Chapter 3, , Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65

Chapter 4, Lesson 2, Process Skill, SE page 81

Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, , Process Skill, SE page 147

Chapter 9, Lesson 3, Process Skill, SE page 197

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-6-1.1 Scientists do not pay much attention to claims about how something works unless they are backed up with evidence that can be confirmed and with a logical argument.

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 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, 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, Lesson 2, Process Skill, SE page 167; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-6-1.2 Describe how results of similar and repeated investigations may vary and suggest possible explanations for variations.

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

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-6-1.3 Sometimes similar investigations get different results because of unexpected differences in the things being investigated, the methods used, or the circumstances in which the investigation is carried out, and sometimes just because of uncertainties of observations.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

1. NATURE OF SCIENCE (NOS)

S(SPS2)-6-1.4 If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one of the variables.

Chapter 1, Lesson 2, Process Skill, SE page 13; Lesson 3, Process Skill, SE page 19

Chapter 3, Lesson 3, Process Skill, SE page 65

Chapter 7, Lesson 2, Process Skill, SE page 147

Chapter 8, Lesson 2, Process Skill, SE page 167

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-6-2.1 Thinking about things as systems means looking for how every part relates to others.

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; Video C, SE page 17; KnowZone, SE pages 20-21; 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; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 53; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE page 74-75; 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; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; 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; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; KnowZone, SE page 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 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; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-6-2.2 Collections of pieces (powders, marbles, sugar cubes or wooden blocks) may have properties that the individual pieces do not.

This concept is not covered at this level.

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-6-2.3 Estimate or predict the effect of making a change in one part of the system will have on other pasts and on the system as a whole.

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; Video C, SE page 17; KnowZone, SE pages 20-21; 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; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 53; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE page 74-75; 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: LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; 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; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; KnowZone, SE page 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 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; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-6-2.4 Energy exists in a variety of forms, including heat, light, sound, mechanical, electrical, and chemical energy. Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

SPS2: Unifying Concepts of Science

2. SYSTEMS AND ENERGY (SAE)

S(SPS2)-6-2.5 Energy can be transformed from one form to another, for example, from electrical energy to heat, light or mechanical energy.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-6-3.1 Models are often used to think about processes that happen too slowly, too quickly, or on too small a scale to observe directly, or that are too vast to be changed deliberately. Or that are potentially dangerous.

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

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

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

Chapter 9, Lesson1, Process Skill, SE page 183

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

3. MODELS AND SCALE (MAS)

S(SPS2)-6-3.2 Finding out the biggest and smallest values of something are often as revealing as knowing what the usual value is.

Chapter 1, Lesson 1 Math in Science, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 3, Lesson 2 Math in Science, SE page 57; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 5, Lesson 3 Process Skill, SE page 107 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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-6-4.1 Things change in steady, repetitive, or irregular ways-or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements.

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

Chapter 2, Lesson 1, Video B, SE page 26; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35

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

Chapter 4, Lesson 2, Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video B, SE page 100; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Lesson 3, Video A, SE page 127; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, video C, SE page 137; Lesson 2, Video A, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151

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

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195

SPS2: Unifying Concepts of Science

4. PATTERNS OF CHANGE (POC)

S(SPS2)-4.6-2 A system may stay the same because nothing is happening or because things are happening that exactly balance each other out.

Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Critical Thinking, SE page 43 Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; Lesson 3, Video A, SE page 61 Chapter 5, Lesson 2, Video B, SE page 98 Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123

Chapter 9, Lesson 3, Video A, SE page 193

Science Process Skills: All students can explore the world by developing skills in... SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-6-5.1 Describe the structure and function of organs.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-6-5.2 Diagram and label the structure of primary components of representative organs in plants and animals. **Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17**

Science Process Skills: All students can explore the world by developing skills in...

SPS2: Unifying Concepts of Science

5. FORM AND FUNCTION (FAF)

S(SPS2)-6-5.3 Investigate the relationship between various landforms and wind currents.

Chapter 5, Lesson 1, Video B, SE page 92

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives1. COLLABORATION IN SCIENTIFIC ENDEAVORSS(SPS3)-6-1.1 Work effectively within a cooperative group setting, accepting and executing assigned roles and responsibilities.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS3: Personal, Social, and Technological Perspectives
1. COLLABORATION IN SCIENTIFIC ENDEAVORS
S(SPS3)-6-1.2 Work collectively within a group toward a common goal.
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
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Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in
SPS3: Personal, Social, and Technological Perspectives
1. COLLABORATION IN SCIENTIFIC ENDEAVORS
S(SPS3)-6-1.3 Demonstrate respect of one another's abilities and contributions to the group.
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
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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

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-6-2.1 Develop, focus, and explain questions about the environment and do environmental investigations.

- Chapter 2, Lesson 3, Critical Thinking, SE page 43
- Chapter 3, Lesson 1, Process Skill, SE page 51; KnowZone, SE pages 58-59
- Chapter 3, Lesson 3, Critical Thinking, SE page 65

Chapter 4, Lesson 2, Process Skill, SE page 81; Lesson 3, Critical Thinking, SE page 87

Chapter 5, Lesson 1, Critical Thinking, SE page 95; Lesson 2, Critical Thinking, SE page 101; LabTime Hands-On

Activity 5, TRB pages 87-89, TG page 102

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

Chapter 8, Lesson 3, Critical Thinking, SE page 175

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-6-2.2 Design environmental investigations to answer particular questions.

Chapter 2, Lesson 3, Critical Thinking, SE page 43

Chapter 3, Lesson 1, Process Skill, SE page 51; KnowZone, SE pages 58-59

Chapter 3, Lesson 3, Critical Thinking, SE page 65

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

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-6-2.3 Explore evidence that human-caused changes have consequences for the immediate environment as well as for other places and future times.

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

Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63 Chapter 5, Lesson 2, Video C, SE page 49; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-6-2.4 Explore how humans shape and control the environment while creating knowledge and developing new technologies.

Chapter 3, KnowZone, SE pages 58-59; Lesson 3, Video B, SE page 62; Video C, SE page 63

Chapter 4, Lesson 3, Video C, SE page 85

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 3, Critical Thinking, SE page 131

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

2. COMMON ENVIRONMENTAL ISSUES, NATURAL RESOURCES MANAGEMENT AND CONSERVATION

S(SPS3)-6-2.5 Investigate environmental and resource management issues at scales that range from local to national to global. Chapter 2, Lesson 1, Video C, SE page 27

Chapter 3, KnowZone, SE pages 58-59; Lesson 3, Video B, SE page 62; Video C, SE page 63

Chapter 4, Lesson 3, Video C, SE page 85

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-6-3.1 Identify problems/issues that can be addressed by design technology.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-6-3.2 Identify and describe the procedure for designing a product, including identifying a need, researching,

brainstorming, selecting, developing a prototype, testing, and evaluating.

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

Science Process Skills: All students can explore the world by developing skills in...

SPS3: Personal, Social, and Technological Perspectives

3. SCIENCE AND TECHNOLOGY; TECHNOLOGICAL DESIGN AND APPL:ICATION

S(SPS3)-6-3.3 Evaluate technological designs using established criteria.

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

Science Process Skills: All students can explore the world by developing skills in	
SPS4 Science Skills for Information, Communication and Media Literary	
1. INFORMATION AND MEDIA LITERARY	
S(SPS4)-6-1.1 Use a variety of information access tools to locate, gather, and organize potential sources of scientific	
information to answer questions.	
Chapter 1, KnowZone, SE pages 20-21	
Chapter 2, KnowZone, SE pages 36-37	
Chapter 3, KnowZone, SE pages 58-59	
Chapter 4, KnowZone, SE pages 74-75	
Chapter 5, KnowZone, SE pages 108-109	
Chapter 6, KnowZone, SE pages 118-119	
Chapter 7, KnowZone, SE pages 140-141	
Chapter 8, KnowZone, SE pages 168-169	
Chapter 9, KnowZone, SE pages 184-185	

SPS4 Science Skills for Information, Communication and Media Literary

1. INFORMATION AND MEDIA LITERARY

S(SPS4)-6-1.2 Collect real-time observations and data, synthesizing and building upon existing information (e.g., online databases, NOAA, EPA, USGS) to solve problems.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in... SPS4 Science Skills for Information, Communication and Media Literary 1. INFORMATION AND MEDIA LITERARY

S(SPS4)-6-1.3 Use appropriate tools to analyze and synthesize information (e.g., diagrams, flow charts, frequency tables, bar graphs, line graphs, stem-and-leaf plots) to draw conclusions and implications based on investigations of an issue or question.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 125-125, 1G page 156 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

SPS4 Science Skills for Information, Communication and Media Literary

2. COMMUNICATION SKILLS

S(SPS4)-6-2.1 Use a wide range of tools and a variety of oral, written, and graphic formats to share information and results from observations and investigations.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

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

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-8-3.1 Execute steps in scientific inquiry to engage in the problem-solving and decision making processes.

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

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-8-3.2 Apply new and unusual applications of existing knowledge to new and different situations.

Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 19; Words in Science, SE page 19; Process Skill, SE page 19 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Writing in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Math in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Writing in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 57; Math in Science, SE page 57; Process Skill, SE page 57; Lesson 3, Critical Thinking, SE page 65; Words in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 81; Writing in Science, SE page 81; Process Skill, SE page 81; Lesson 3, Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 101; Math in Science, SE page 101; Process Skill, SE page 101; Lesson 3, Critical Thinking, SE page 107; Words in Science, SE page 107; Process Skill, SE page 107 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Math in Science, SE page 117; Process Skill, SE page 117; Lesson 2, Critical Thinking, SE page 125; Writing in Science, SE page 125; Process Skill, SE page 125; Lesson 3, Critical Thinking, SE page 131; Writing in Science, SE page 131; Process Skill, SE page 131 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Words in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2. Critical Thinking, SE page 191: Words in Science, SE page 191: Process Skill, SE page 191: Lesson 3. Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

3. CRITICAL THINKING AND SYSTEMS THINKING

S(SPS4)-8-3.3 Make sketches, graphs, and diagrams to explain ideas and to demonstrate the interconnections between systems.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174
Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-8-4.1 Formulate a scientific question about phenomena, a problem, or an issue and using a broad range of tools and techniques: plan and conduct an inquiry to address the question.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

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

Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in... SPS4 Science Skills for Information, Communication and Media Literary

4. PROBLEM IDENTIFICATION, FORMULATION, AND SOLUTION

S(SPS4)-8-4.2 Use evidence collected from observations or other sources and use them to create models 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, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

5. CREATIVITY AND INTELLECTUAL CURIOSITY

S(SPS4)-8-5.1 Use a variety of media tools to make oral and written presentations, which include written notes and descriptions, drawings, photos, and charts to communicate the procedures and results of an investigation.

Chapter 1, KnowZone, SE pages 20-21 Chapter 2, KnowZone, SE pages 36-37 Chapter 3, KnowZone, SE pages 58-59 Chapter 4, KnowZone, SE pages 74-75

Chapter 5, KnowZone, SE pages 108-109

Chapter 6, KnowZone, SE pages 118-119

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, KnowZone, SE pages 168-169 Chapter 9, KnowZone, SE pages 184-185

Science Process Skills: All students can explore the world by developing skills in
SPS4 Science Skills for Information, Communication and Media Literary
6. INTERPERSONAL AND COLLABORATIVE SKILLS
S(SPS4)-8-6.1 Work in diverse pair/teams to answer questions, solve problems and make decisions.
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
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Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary 6. INTERPERSONAL AND COLLABORATIVE SKILLS

S(SPS4)-8-6.2 Plan and develop team science projects.

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

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

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

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...SPS4 Science Skills for Information, Communication and Media Literary6. INTERPERSONAL AND COLLABORATIVE SKILLSS(SPS4)-8-6.3 Articulate understanding of content through personal interaction and sharing with peers.Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66Chapter 4, LabTime Hands-On Activity 5, TRB pages 69-71, TG page 102Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120Chapter 7, LabTime Hands-On Activity 8, TRB pages 123-125, TG page 138Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

7. SELF DIRECTION

S(SPS4)-8-7.1 Keep a journal of observations and investigations, and periodically evaluate entries to assess progress toward achieving the understanding of key ideas.

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
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Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
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Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

8. ACCOUNTABILITY AND ADAPTABILITY

S(SPS4)-8-8.1 Develop and execute a plan to collect and record accurate and complete data from various sources to solve a problem or answer a question. Gather and critically analyze data from a variety of sources.

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

8. ACCOUNTABILITY AND ADAPTABILITY

S(SPS4)-8-8.2 Participate in science competitions, where students are responsible for creating a product or participating in an event.

This concept is not covered at this level.

Science Process Skills: All students can explore the world by developing skills in...

SPS4 Science Skills for Information, Communication and Media Literary

9. SOCIAL RESPONSIBILITY

S(SPS4)-8-9.1 Collaborate with a network of learners by phone, video, virtual classroom platform.

Chapter 5, lesson 2, Writing in Science, SE page 95