SRA Snapshots Video Science™: Level A
correlation to
West Virginia Science Content Standards and Objectives
Grade 3

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

KEY:

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

Standard 1: History and the Nature of Science
SC.3.1.1 Students will recognize that scientific explanations may lead to new discoveries (e.g., new knowledge leads to new questions).
Chapter 6, KnowZone, SE pages 124-125; 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; Critical Thinking, SE page 153; Process Skill, SE page 153** **Chapter 8, KnowZone, SE pages 168-169; Lesson 3, Critical Thinking, SE page 175**

Standard 1: History and the Nature of Science
SC.3.1.2 Students will study the lives and discoveries of scientists of different cultures and backgrounds.
Chapter 3, Lesson 2 Process Skill, SE page 59 **Chapter 4, KnowZone, SE pages 80-81** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151** **Chapter 8, KnowZone, SE pages 168-169** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page SE page 188; Video C, SE page 189**

Standard 1: History and the Nature of Science
SC.3.1.3 Students will explore science careers in the community.
Chapter 3, Lesson 2, Critical Thinking, SE page 159; Process Skill, SE page 59 **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Process Skill, SE page 95; Lesson 3, Video A, SE page 105; Critical Thinking, SE page 109** **Chapter 6, Lesson 3, Critical Thinking, SE page 131** **Chapter 9, Lesson 3, Video C, SE page 195**

Standard 2: Science as Inquiry
SC.3.2.1 Students will demonstrate curiosity, initiative and creativity by planning and conducting 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**

Standard 2: Science as Inquiry
SC.3.2.2 Students will recognize that developing solutions to problems takes time, patience and persistence through individual and cooperative ventures.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.3.2.3 Students will support statements with facts found through research in reference books, science-related magazines and the Internet.
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** **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**

Standard 2: Science as Inquiry
SC.3.2.4 Students will use scientific instruments and everyday materials to investigate the natural world (e.g., graduated cylinder, hand lens, metric ruler, magnets, weather instruments, thermometer, calculators).
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57 **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105** **Chapter 6, KnowZone, SE page 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129; Process Skill, SE page 131** **Chapter 7, LabTime Hands-On Activity, TRB pages 123-125; TG page 138** **Chapter 8, Lesson 1, Video C, SE page 187; LabTime Hands-On Activity. TRB ages 141-143, TG page 156**

Standard 2: Science as Inquiry
SC.3.2.5 Students will use safe and proper techniques for handling, manipulating and care for science materials (e.g., follow safety rules, maintain a clean work area, treat living organisms humanely).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 5, Lesson 3, Video C, Se page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156**

Standard 2: Science as Inquiry
SC.3.2.6 Students will apply mathematical skills and use metric units in measurements.
Chapter 2, Lesson 2, Math in Science, SE page 35 **Chapter 3, Lesson 2, Math in Science, SE page 59; Lesson 3 Process Skill, SE page 65** **Chapter 4, Lesson 1, Math in Science, SE page 73; Process Skill, SE page 73** **Chapter 5, Lesson 2 Math in Science, SE page 103; Process Skill, SE page 103** **Chapter 7, Lesson 2, Math in Science, SE page147** **Chapter 9, Lesson 2, Math in Science, SE page 191** **The Metric System, SE pages 200-201**

Standard 2: Science as Inquiry
SC.3.2.7 Students will interpret data presented in a table, graph, map or diagram and use it to answer questions and make predictions and inferences based on patterns of evidence.
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**

Standard 2: Science as Inquiry
SC.3.2.8 Students will test variables (e.g., those that affect plant growth; speed; action of water on soil; shadow formation).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 3: Unifying Themes
SC.3.3.1 Students will identify that systems are made of parts that interact with 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**

Standard 3: Unifying Themes
SC.3.3.2 Students will use models as representations of real things.
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**

Standard 3: Unifying Themes
SC.3.3.3 Students will observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes.
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 **Chapter 5, Lesson 2, Video B, SE page 100** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120**

Standard 3: Unifying Themes
SC.3.3.4 Students will given a set of objects, group or order the objects according to an established scheme (e.g., celestial objects, patterns of motion, constellations).
Chapter 1, Lesson 2, 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 2, Process Skill, SE page 197**

Standard 3: Unifying Themes
SC.3.3.5 Students will, given a set of events, objects, shapes, designs, or numbers, find patterns or constancy or regularity.
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**

Standard 4: Science Subject Matter/Concepts
Characteristics of Organisms
SC.3.4.1 Students will identify the structure of living things, including their systems and explain their functions (e.g., roots absorb water, circulatory system to move materials).
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video C, SE page 19 **Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43**

Standard 4: Science Subject Matter/Concepts
Life Cycles of Organisms
SC.3.4.2 Students will observe, measure and record changes in living things (e.g., growth and development, variation in species).
Chapter 1, 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; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, 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** **Chapter 3, KnowZone, SE pages 52-53; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 4: Science Subject Matter/Concepts
Organisms and Environments
SC.3.4.3 Students will compare physical characteristics and behaviors of living organisms and explain how they are adapted to a specific environment (e.g., beaks and feet in birds, seed dispersal, camouflage, different types of flowers).
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

Standard 4: Science Subject Matter/Concepts
Organisms and Environments
SC.3.4.4 Students will observe and describe relationships among organisms in an ecosystem (e.g., sequencing food chains, behavior, adaptations, factors that influence populations, predator-prey relationships).
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**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.3.4.5 Students will relate the buoyancy of an object to its density.
See Level B: **Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video C, SE page 145**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.3.4.6 Students will identify physical and chemical properties.
Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.3.4.7 Students will relate changes in states of matter to changes in temperature.
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.3.4.8 Students will investigate the dissolving of solids in liquids.
See Level C: **Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139**

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.3.4.9 Students will investigate the absorption, reflection, and refraction of light by objects.
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

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.3.4.10 Students will relate how the color of an object is based upon the absorption or reflection of light.
Chapter 9, Lesson 1, Video B, SE page 180; Critical Thinking, SE page 183

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.3.4.11 Students will recognize that it takes work to move objects over a distance.
Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.3.4.12. Students will recognize that speed, distance, and time are interrelated.
See Level C: **Chapter 9, KnowZone, SE pages 184-185; Lesson 2, Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191**

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.3.4.13 Students will recognize that the greater the force is exerted on an object, the greater the change of its motion will be.
Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.3.4.14 Students will identify examples of potential and kinetic energy.
See Level C: **Chapter 8, Lesson 1, Video B, SE page 158; Critical Thinking, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156**

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.3.4.15 Students will identify fossils as a record of time (e.g., what organisms once lived on Earth, where they lived).
Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.3.4.16 Students will explore the eroding of different materials by water and wind (e.g., sand, mud pile and rocks).
Chapter 4, Lesson 1, Video B, SE page 70; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.3.4.17 Students will describe how volcanoes and earthquakes change the Earth.
Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 71; Process Skill, SE page 71

Standard 4: Science Subject Matter/Concepts
Objects in the Sky
SC.3.4.18 Students will recognize the relative movement of the Sun and Moon in relationship to the Earth's position.
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 **Earth in Space, SE page 205**

Standard 4: Science Subject Matter/Concepts
Objects in the Sky
SC.3.4.19 Students will describe the similarities and differences among the planets.
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.3.4.20 Students will identify properties of minerals and recognize that rocks are composed of different minerals.
Chapter 4, Lesson 2, Video A, SE page 75

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.3.4.21 Students will explain how igneous, sedimentary and metamorphic rocks are formed.
Chapter 4, Lesson 2, Video A, SE page 75

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.3.4.22 Students will identify geographical features using a model or map (e.g., mountains, rivers, valleys, lakes, glaciers, volcanoes).
Chapter 4, Lesson 1, Video A, SE page 69

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.3.4.23 Students will describe the layers of the Earth and their various features.
See Level B: **Chapter 4, Lesson 1, Video A, SE page 69; Video C, SE page 71; Process Skill, SE page 73** **Earth's Layers, SE page 204**

Standard 5: Scientific Design and Application
SC.3.5.1 Students will cite examples of the uses of science and technology in common daily events and in the community.
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Math in Science, SE page 59 **Chapter 4, Lesson 1, Process Skill, SE page 73** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, 105** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 8, KnowZone, SE pages 168-169**

Standard 5: Scientific Design and Application
SC.3.5.2 Students will explain a simple problem and identify a specific solution describing the use of tools and/or materials to solve the problem or to complete the task.
Chapter 5, LabTime Hands-On Activity, TRB pages 87-89, TG page 102 **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 6: Science in Personal and Social Perspectives
SC.3.6.1 Students will recognize that a solution to one scientific problem often creates new problems (e.g., recycling, pollution, conservation, waste disposal).
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**

Standard 6: Science in Personal and Social Perspectives
SC.3.6.2 Students will listen to and be tolerant of different viewpoints by engaging in collaborative activities and be willing to modify ideas when new and valid information is presented.
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**

Standard 6: Science in Personal and Social Perspectives
SC.3.6.3 Students will develop respect and responsibility for the environment by engaging in conservation practices.
Chapter 3, Lesson 3, Video A, SE page 61; Video C, SE page 63; Process Skill, SE page 65 **Chapter 4, Lesson 2, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85** **Chapter 5, Lesson 2, Video C, SE page 101** **Chapter 9, Lesson 3, video C, SE page 195**

Standard 6: Science in Personal and Social Perspectives
SC.3.6.4 Students will describe how modern tools and appliances have positively and/or negatively impacted their daily lives.
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; Critical Thinking, SE page 87; Process Skill, SE page 87** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105; Video C, SE page 107** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 7, KnowZone, SE pages 140-141; Lesson 2, Video C, SE page 145; Critical Thinking, SE page 147; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153** **Chapter 8, KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; Lesson 3, Video C, SE page 195; Process Skill, SE page 197**

SRA Snapshots Video Science™: Level B
correlation to
West Virginia Science Content Standards and Objectives
Grade 4

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

KEY:

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

Standard 1: History and the Nature of Science
SC.4.1.1 Students will contrast changes in scientific knowledge resulting from new discoveries (e.g., new knowledge leads to new questions).
Chapter 4, Lesson 1, Video B, SE page 70; Lesson 3, Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Process Skill, SE page 129** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2, Video C, SE page 187; Process Skill, SE page 189; Lesson 3, Video A, SE page 191; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Standard 1: History and the Nature of Science
SC.4.1.2 Students will study the lives and discoveries of scientists of different cultures and backgrounds.
Chapter 4, Lesson 2, Video C, SE page 77 **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Math in Science, SE page 129; KnowZone, SE pages 130-131** **Chapter 7, Lesson 3, Video A, SE page 149** **Chapter 8 KnowZone, SE pages 168-169** **Chapter 9 KnowZone, SE pages 196-197**

Standard 1: History and the Nature of Science
SC.4.1.3 Students will explore science careers in West Virginia.
Chapter 2, Lesson 1, Process Skill, SE page 29; Lesson 3, Process Skill, SE page 43 **Chapter 5, Lesson 2, Video C, SE page 99** **Chapter 6, Lesson 2, Video C, SE page 121**

Standard 2: Science as Inquiry
SC.4.2.1 Students will demonstrate curiosity, initiative and creativity by developing questions that lead to investigations; designing simple experiments; and trusting observations of discoveries when trying new tasks and 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, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.4.2.2 Students will recognize that developing solutions to problems requires persistence, flexibility, open-mindedness, and alertness for the unexpected.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.4.2.3 Students will support statements with facts found through research in reference books, science-related magazines, multimedia and the Internet.
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 86-87** **Chapter 5, Lesson 3 Process Skill, SE page 109; KnowZone, SE pages 101-103** **Chapter 6, KnowZone, SE pages 130-131** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, KnowZone, SE pages 168-169** **Chapter 9, KnowZone, SE pages 196-197**

Standard 2: Science as Inquiry
SC.4.2.4 Students will use scientific instruments and everyday materials to investigate the natural world (e.g., hand lens, telescope, thermometer, balances, magnets, tuning fork, bulbs and batteries, graduated cylinders, calculators, computers).
Chapter 1, Lesson 1, Video A, SE page 3 **Chapter 4, Lesson 2, Video C, SE page 77** **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 105-107; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9 KnowZone, SE pages 196-197**

Standard 2: Science as Inquiry
SC.4.2.5 Students will demonstrate safe and proper techniques for handling, manipulating and caring for science materials.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Video C, SE page 193; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.4.2.6 Students will construct a hypothesis when provided a problem.
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**

Standard 2: Science as Inquiry
SC.4.2.7 Students will establish variables and controls in an experiment; test variables through experimentation.
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard 2: Science as Inquiry
SC.4.2.8 Students will interpret data presented in a table, graph, or diagram and use it to answer questions and make decisions.
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**

Standard 2: Science as Inquiry
SC.4.2.9 Students will draw and support conclusions, make predictions and inferences based on patterns of evidence (e.g., weather maps, change of speed in a given amount of time, change in wave motions with changes in energy, variations of plants).
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**

Standard 2: Science as Inquiry
SC.4.2.10 Students will apply mathematical skills and use metric units in measurements and calculations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147** **Chapter 8, Lesson 3, Process Skill, SE page 175** **The Metric System, SE pages 200-201**

Standard 3: Unifying Themes
SC.4.3.1 Students will identify that systems are made of parts that interact with 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 63; Critical Thinking, 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**

Standard 3: Unifying Themes
SC.4.3.2 Students will use models as representations of real things.
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**

Standard 3: Unifying Themes
SC.4.3.3 Students will observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes.
Chapter 1, Lesson 1, Video A, SE page 3 **Chapter 4, Lesson 2, Video C, SE page 77** **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 105-107; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9 KnowZone, SE pages 196-197**

Standard 3: Unifying Themes
SC.4.3.4 Students will given a set of objects, group or order the objects according to an established scheme.
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**

Standard 3: Unifying Themes
SC.4.3.5 Students will, given a set of events, objects, shapes, designs, or numbers, find patterns or constancy or regularity.
Chapter 1, Lesson 3, Video C, SE page 13 **Chapter 3, Lesson 2, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41** **Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115** **The Water Cycle, SE page 204** **Earth in Space, SE page 205**

Standard 4: Science Subject Matter/Concepts
Characteristics of Organisms
SC.4.4.1 Students will describe the different characteristics of plants and animals which help them to survive in different niches and environments.
Chapter 1, Lesson 2, Video C, SE page 11; KnowZone, SE pages 14-15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, KnowZone, SE pages 36-37** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video B, SE page 56**

Standard 4: Science Subject Matter/Concepts
Characteristics of Organisms
SC.4.4.2 Students will associate the behaviors of living organisms to external and internal influences (e.g., hunger, climate, seasons).
Chapter 1, Lesson 2, Video B, SE page 10 **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49**

Standard 4: Science Subject Matter/Concepts
Characteristics of Organisms
SC.4.4.3 Students will identify and classify variations in structures of living things including their systems and explain their functions (e.g., skeletons, teeth, plant needles, leaves).
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**

Standard 4: Science Subject Matter/Concepts
Life Cycles of Organisms
SC.4.4.4 Students will compare and sequence changes in plant and animal life cycles.
Level B: **Chapter 1, Lesson 3, Video C, SE page 19** **See also Level A:** **Chapter 1, Lesson 3, Video B, SE page 18; Process Skill, SE page 21** **See also Level C:** **Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37**

Standard 4: Science Subject Matter/Concepts
Life Cycles of Organisms
SC.4.4.5 Students will understand that plants and animals closely resemble their parents and that some characteristics are inherited from the parents and others result from interaction with the environment.
Chapter 1, Lesson 2, Video B, SE page 10

Standard 4: Science Subject Matter/Concepts
Organisms and Environments
SC.4.4.6 Students will identify human uses of plants and animals (e.g., food sources, medicines).
Chapter 2, Lesson 2, Video A, SE page 31; Lesson 2, Video A, SE page 39

Standard 4: Science Subject Matter/Concepts
Organisms and Environments
SC.4.4.7 Students will describe environmental barriers to the migration of animals.
Chapter 3, Lesson 1, Video C, SE page 49

Standard 4: Science Subject Matter/Concepts
Organisms and Environments
SC.4.4.8 Students will conduct and explain models of habitats, food chains, and 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

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.9 Students will investigate how properties can be used to identify substances.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.10 Students will investigate and compare the dissolving of different solids in a given liquid.
Level B: **Chapter 4, Lesson 2, Video A, SE page 75** **See also Level C:** **Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.11 Students will examine simple chemical changes (e.g., tarnishing, rusting, burning).
Level B: **Chapter 7, Lesson 3, Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **See also Level A:** **Chapter 8, Lesson 2, Video C, SE page 165** **See also Level C:** **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; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.12 Students will understand that materials, including air, have mass, take up space and are made of parts that are too small to be seen without magnification.
Chapter 7, Lesson 1, Video A, SE page 136; Video B, SE page 136; Video C, SE page 137; Lesson 3, Video A, SE page 149

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.13 Students will identify various changes in states of matter to heat loss or gain.
Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video C, SE page 151

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.14 Students will investigate variables that affect the rate of evaporation of a liquid.
Chapter 5, Lesson 1, Video A, SE page 91 **Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.4.4.15 Students will investigate the density of liquids.
Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video C, SE page 145

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.4.4.16 Students will identify different forms of energy and describe energy transformations that occur between them (e.g., electrical to heat, light to mechanical).
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Video A, SE page 163; Video C, SE page 165; LabTime Hands-On Activity 8, TRB Pages 141-143; TG Page 156 **Chapter 9, Lesson 1, Video C, SE page 181; Lesson 2, Video A, SE page 185**

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.4.4.17 Students will examine types and properties of waves (e.g., transverse, longitudinal, frequency, wavelengths).
Chapter 8, Lesson 1, Video A, SE page 157; Video C, SE page 159; Lesson 2, Video A, SE page 163; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.4.4.18 Students will investigate static electricity and conductors/nonconductors of electricity.
Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180Critical Thinking, SE page 183; Process Skill, SE page 183 **Electromagnetic Energy, SE pages 206-207**

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.4.4.19 Students will construct simple electrical circuits.
Chapter 9, Lesson 1, Video C, SE page 181

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.4.4.20 Students will understand the relationship between a compass and a magnetic field.
Chapter 9, Lesson 2, Video A, SE page 185

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.4.4.21 Students will relate motion of an object to its frame of reference.
See Level A: **Chapter 7, Lesson 1, Video A, SE page 135** **See also Level C:** **Chapter 9, Lesson 2, Video A, SE page 187**

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.4.4.22 Students will predict and investigate the motion of an object if the applied force is changed.
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**

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.4.4.23 Students will explore that sounds are produced by vibrating objects and columns of air and explore the relationship between frequency and pitch of sound.
Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB Pages 141-143; TG Page 156

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.4.4.24 Students will investigate the change in the length, tension, or thickness of the vibrating object on the frequency of vibration (e.g., string, wire, rubber band).
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

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.4.4.25 Students will become familiar with the geologic time scale.
Level B: **Chapter 4, Lesson 2, Video B, SE page 76; Critical Thinking, SE page 79** **See also Level C:** **Chapter 4, Lesson 1, Video B, SE page 70**

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.4.4.26 Students will locate and identify patterns of stars and their seasonal changes.
See Level A: **Chapter 6, Lesson 3, Video A, SE page 127; Critical Thinking, SE page 131; Process Skill, SE page 131**

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.4.4.27 Students will compare and explain the relative time differences to erode materials (e.g., a sand pile, mud pile, rock pile).
Chapter 4, Lesson 2, Video A, SE page 75

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.4.4.28 Students will investigate the cause and effects of volcanoes, earthquakes, and landslides.
Level B: **Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical thinking, SE page 73; Lesson 2, Video B, SE page 76** **See also Level C:** **Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; Process Skill, SE page 73; KnowZone, SE pages 74-75**

Standard 4: Science Subject Matter/Concepts
Changes in Earth and Sky
SC.4.4.29 Students will interpret a weather chart or map.
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

Standard 4: Science Subject Matter/Concepts
Objects in the Sky
SC.4.4.30 Students will identify the sun as a star.
Chapter 6, Lesson 1, Video A, SE page 113

Standard 4: Science Subject Matter/Concepts
Objects in the Sky
SC.4.4.31 Students will describe the orbits of the Sun and Moon.
Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115; Process Skill, SE page 117

Standard 4: Science Subject Matter/Concepts
Objects in the Sky
SC.4.4.32 Students will describe and explain the planets' orbital paths.
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.4.4.33 Students will describe the rock cycle.
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

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.4.4.34 Students will explain the relationship between the rate of cooling and crystal size of igneous rocks.
See Level C: **Chapter 4, Lesson 2, Video B, SE page 84**

Standard 4: Science Subject Matter/Concepts
Properties of Earth Materials
SC.4.4.35 Students will compare ocean water with fresh water.
Chapter 3, Lesson 2, Video A, SE page 55 **Chapter 4, Lesson 1, Video A, SE page 69**

Standard 5: Scientific Design and Application
SC.4.5.1 Students will identify and explain a simple problem or task to be completed; identify a specific solution; and list task requirements.
Chapter 6, Lesson 1 Process Skill, SE page 117 **Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174**

Standard 5: Scientific Design and Application
SC.4.5.2 Students will use an appropriate engineering design to solve a problem or complete a task.
Chapter 6, Lesson 1 Process Skill, SE page 117 **Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174**

Standard 6: Science in Personal and Social Perspectives
SC.4.6.1 Students will recognize that a solution to one scientific problem often creates new problems (e.g., recycling, pollution, conservation, waste disposal, need for technology).
Chapter 4, Lesson 1, Video B, SE page 70; Lesson 3, Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Process Skill, SE page 129** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2, Video C, SE page 187; Process Skill, SE page 189; Lesson 3, Video A, SE page 191; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Standard 6: Science in Personal and Social Perspectives
SC.4.6.2 Students will listen to and be tolerant of different viewpoints by engaging in collaborative activities and be willing to modify ideas when new and valid information is presented from a variety of resources.
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**

Standard 6: Science in Personal and Social Perspectives
SC.4.6.3 Students will describe the positive and negative consequences of the application of technology on personal health and the environment.
Chapter 2, Lesson 1, Video B, SE page 26; Lesson 2, Critical Thinking, SE page 25; Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43 **Chapter 3, Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 6: Science in Personal and Social Perspectives
SC.4.6.4 Students will develop respect and responsibility for the environment by engaging in conservation practices.
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**

SRA Snapshots Video Science™: Level C
correlation to
West Virginia Science Content Standards and Objectives
Grade 5

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

KEY:

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

Standard 1: History and the Nature of Science
SC.5.1.1 Students will realize that scientists formulate and test their explanations of nature using observation and 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**

Standard 1: History and the Nature of Science
SC.5.1.2 Students will recognize scientific knowledge is subject to modification as new scientific information challenges current explanations.
Chapter 2, Lesson 1, Critical Thinking, SE page 29 **Chapter 6, KnowZone, SE pages 118-119; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129**

Standard 1: History and the Nature of Science
SC.5.1.3 Students will examine the careers and contributions of men and women of diverse cultures to the development of science.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 1: History and the Nature of Science
SC.5.1.4 Students will articulate the historical significance of scientific discoveries.
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**

Standard 2: Science as Inquiry
SC.5.2.1 Students will cooperate and collaborate to ask questions, find answers, solve problems, conduct investigations to further an appreciation of scientific discovery.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.5.2.2 Students will formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.5.2.3 Students will apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 3, Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.5.2.4 Students will use a variety of materials and scientific instruments to conduct explorations, investigations, and experiments of the natural world (e.g., barometer, anemometer, microscope, computer).
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**

Standard 2: Science as Inquiry
SC.5.2.5 Students will demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms.
Chapter 1, 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, 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** **See also Level C:** **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48**

Standard 2: Science as Inquiry
SC.5.2.6 Students will utilize experimentation to demonstrate scientific processes and thinking skills (e.g., formulating questions, predicting, forming hypotheses, quantifying, identifying dependent and independent variables).
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Science as Inquiry
SC.5.2.7 Students will construct and use charts, graphs, and tables to organize, display, interpret, 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**

Standard 2: Science as Inquiry
SC.5.2.8 Students will use inferential reasoning to make logical conclusions from collected data.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 3: Unifying Themes
SC.5.3.1 Students will compare and contrast the relationship between the parts of a system to the whole system (e.g., take apart or build mechanical, electrical, or biological systems).
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**

Standard 3: Unifying Themes
SC.5.3.2 Students will construct a variety of useful models of an object, event, or process.
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**

Standard 3: Unifying Themes
SC.5.3.3 Students will compare and contrast changes that occur in an object or a system to its original state.
Chapter 1, Lesson 3, Critical Thinking, SE page 19; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 2, Video A, SE page 31; Lesson 3, Critical Thinking, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Critical Thinking, SE page 51l Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 57; Lesson 3, Video A, 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Process Skill, SE page 81; Lesson 3, Process Skill, SE page 87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 2, Video B, SE page 98; Process Skill, SE page 101; Lesson 3, Video B, SE page 104; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123** **Chapter 7, Lesson 2, Video C, SE page 145; Process Skill, 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; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 2, Video C, SE page 165** **Chapter 9, Lesson 1, Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 3: Unifying Themes
SC.5.3.4 Students will identify the influence that a variation in scale will have on the way an object or system works (e.g., cooling rates of different-sized containers of water, strength of different-sized constructions from the same material, flight characteristics of different-sized model airplanes).
Chapter 1, Lesson 1, Process Skill, SE page 7 **Chapter 6, KnowZone, SE pages 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191**

Standard 4: Science Subject Matter/Concepts
SC.5.4.1 Students will demonstrate an understanding of the interconnections of biological, earth and space, and physical science concepts.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; Process Skill, SE page 57; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61** **Chapter 4, Lesson 1, Video A, SE page 69; Video C, SE page 71; 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, Video C, SE page 85; Critical Thinking, SE page 87; Process Skill, SE page 87** **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video A, SE page 97; Video B, SE page 98' Critical Thinking, SE page 101; Process Skill, SE page 101; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105** **Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE p[age 123; Process Skill, SE page 125; Lesson 3, Critical Thinking, SE page 131** **Chapter 8, Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**

Standard 4: Science Subject Matter/Concepts
Structure and Function in Living Systems
SC.5.4.2 Students will identify and explain common energy conversions in cycles of matter including photosynthesis and carbon dioxide cycle.
Level C: **Chapter 1, Lesson 2, Video A, SE page 9** **Chapter 3, Lesson 1, Video A, SE page 49** **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**

Standard 4: Science Subject Matter/Concepts
Structure and Function in Living Systems
SC.5.4.3 Students will identify the structures of living organisms and explain their function.
Chapter 1, Lesson 1, Video C, SE page 5; Critical Thinking, SE page 7; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Process Skill, SE page 13; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Standard 4: Science Subject Matter/Concepts
Structure and Function in Living Systems
SC.5.4.4 Students will observe and identify cells of organisms using a microscope.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5

Standard 4: Science Subject Matter/Concepts
Life Cycles of Organisms: Reproduction and Heredity
SC.5.4.5 Students will compare variations of plant growth and reproduction.
Chapter 2, Lesson 2, Video A, SE page 31

Standard 4: Science Subject Matter/Concepts
Populations and Ecosystems
SC.5.4.6 Students will explain how the different characteristics of plants and animals help them to survive in different niches and environments including adaptation, natural selection, extinction.
Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; KnowZone, SE pages 36-37 **Chapter 3, Lesson 1, Video B, SE page 48; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 4: Science Subject Matter/Concepts
Populations and Ecosystems
SC.5.4.7 Students will explore the extinction of a species due to environmental conditions.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 4, Lesson 3, Video A, SE page 83**

Standard 4: Science Subject Matter/Concepts
Populations and Ecosystems
SC.5.4.8 Students will trace and describe the pathways of the sun's energy through producers, consumers and decomposers using food webs and pyramids.
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **Food Web, SE page 203** **Energy Pyramid, SE page 203** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Food Web, SE page 203** **Energy Pyramid, SE page 203**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.5.4.9 Students will explain that the mass of a material is conserved whether it is together, in parts, or in a different state.
Chapter 7, Lesson 2, Video B, SE page 144

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.5.4.10 Students will recognize that elements are composed of only one type of matter.
Chapter 7, Lesson 1, Video A, SE page 135; Critical Thinking, SE page 139; KnowZone, SE pages 140-141; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **The Periodic Table, SE pages 206-207**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.5.4.11 Students will, using the periodic table, identify common elements according to their symbols.
Chapter 7, Lesson 1, Video A, SE page 135; KnowZone, SE pages 140-141 **Periodic Table of the Elements, SE pages 206-207**

Standard 4: Science Subject Matter/Concepts
Properties of Objects and Materials
SC.5.4.12 Students will identify substances by their relative densities (e.g., floating; sinking).
Chapter 7, Lesson 2, Video A, SE page 143; Critical Thinking, SE page 147; Process Skill, SE page 147

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.5.4.13 Students will analyze diagrams of electrical circuits.
Level C: **Chapter 9, Lesson 1, Video A, SE page 171; Video B, SE page 172** **See also Level B:** **Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183**

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.5.4.14 Students will use SI (metric) measurement units of volts, amps and watts as they apply to electricity.
Chapter 8, Lesson 2, Video B, SE page 1 72; Critical Thinking, SE page 175; Math in Science, SE page 1785; Process Skill, SE page 175

Standard 4: Science Subject Matter/Concepts
Light, Heat, Electricity and Magnetism
SC.5.4.15 Students will investigate the properties of an electromagnet.
See Level B: **Chapter 9, Lesson 2, Video B, SE page 186; Video V, SE page 187; Writing in Science, SE page 189; Process Skill, SE page 189; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.5.4.16 Students will describe how the variables of gravity and friction affect the motion of objects.
Chapter 9, Lesson 1, Video C, SE page 181; Lesson 3, Video B, SE page 194

Standard 4: Science Subject Matter/Concepts
Position and Motion of Objects
SC.5.4.17 Students will compare and contrast the change in length, tension, or thickness of a vibrating object on the frequency of vibrations.
See Level B: **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skill, SE page 161**

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.18 Students will describe the layers of the earth and their various features.
Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70 **Earth's Layers, SE page 204**

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.19 Students will identify and describe natural landforms, how they change and impact weather and climate.
Chapter 4, Lesson 1, Video A, SE page 69; Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.20 Students will use a variety of instruments and sources to collect and display weather data to describe weather patterns (e.g., temperatures, wind direction, wind speed, precipitation).
Chapter 4, Lesson 3, Video A, SE page 103; Video B, SE page 104; Process Skill, SE page 107

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.21 Students will compare and explain the different rates of weathering, erosion and deposition in certain materials.
Chapter 4, 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, Writing in Science, SE page 87; Process Skill, SE page 87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.22 Students will identify land features and elevations on a topographical map.
Chapter 4, Lesson 1, Video B, SE page 70

Standard 4: Science Subject Matter/Concepts
Structure of the Earth System
SC.5.4.23 Students will identify resources as being renewable or non-renewable.
Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175

Standard 4: Science Subject Matter/Concepts
Earth's History
SC.5.4.24 Students will explore and explain how fossils and geologic features can be used to determine the relative age of rocks and rock layers.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 4, Lesson 3, Video A, SE page 83**

Standard 4: Science Subject Matter/Concepts
Earth's History
SC.5.4.25 Students will identify that the Earth is made of plates (plate tectonics).
Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73; Process Skill, SE page 73; KnowZone, SE pages 74-75

Standard 5: Scientific Design and Application
SC.5.5.1 Students will research everyday applications and interactions of science and technology.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, 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, SE page 81** **Chapter 5, Lesson 3, Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **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 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174** **The Metric System, SE pages 200-201**

Standard 5: Scientific Design and Application
SC.5.5.2 Students will implement engineering solutions for given tasks and measure their effectiveness.
Chapter 9 LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 6: Science in Personal and Social Perspectives
SC.5.6.1 Students will use scientific reasoning and the knowledge of science and technology to make informed personal decisions at the local and global levels.
Chapter 3, Lesson 3, Video B, SE page 62 **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video A, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173**

Standard 6: Science in Personal and Social Perspectives
SC.5.6.2 Students will evaluate and critically analyze mass media reports of scientific developments and events.
Chapter 3, Lesson 3, Enrichment, TG page 64 **Chapter 4, Lesson 2, Enrichment, TG page 78** **Chapter 5, Lesson 1, Enrichment, TG page 92** **Chapter 8, Lesson 2, TG page 150**

Standard 6: Science in Personal and Social Perspectives
SC.5.6.3 Students will critically analyze the effects and impacts of science and technology on global and local problems (e.g., mining, manufacturing, recycling, farming, water quality).
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 2, Video A, SE page 77; Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 8, Lesson 1, Video C, SE page 158; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**

Standard 6: Science in Personal and Social Perspectives
SC.5.6.4 Students will explore the connections between science, technology, society and career opportunities.
Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87 **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173**

Standard 6: Science in Personal and Social Perspectives
SC.5.6.5 Students will analyze the positive and negative effects of technology on society and the influence of societal pressures on the direction of technological advances.
Chapter 1, Lesson 3, Critical Thinking, SE page 19 **Chapter 3, Lesson 3, Video C, SE page 62; Video C, SE page 63** **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Vide C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173**