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

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

KEY:

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

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
1. Students will plan and safely conduct scientific investigations when given a question, identified variables, and a testable hypothesis.
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
2. Students will select and accurately use appropriate tools including technology to make measurements (in metric units) and represent results of basic scientific investigations.
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
3. Students will describe and communicate the results of scientific 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, 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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
4. Students will use models that illustrate simple concepts and compare those models to the actual phenomena.
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**

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
5. Students will identify a valid test in an investigation.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
1. Students will create mixtures and separate them based on different properties (e.g., salt and sand, iron fillings and soil, oil and water).
See Level B: **Chapter 7, Lesson 3, Video B, SE page 150**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
2. Students will examine, describe, compare and classify objects in terms of common physical 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

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
3. Students will identify the basic characteristics of light, heat, motion, magnetism, electricity and sound.
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; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147 **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** **Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
4. Student will identify that matter and energy can change from one state to another, and identify and predict what changes and what remains unchanged when matter experiences an external force or energy change.
Chapter 8, Lesson 3, Video A, SE page 171; Lesson 2, Video A, SE page 163; Process Skill, SE page 167; 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**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
5. Students will identify, build, and describe mechanical systems (e.g., identify the forces acting within those systems).
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 **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**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
6. Students will utilize classification schemes to order objects.
Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
1. Students will identify that plants and animals have structures and systems, which serve different functions.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video C, SE page 19 **Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
2. Students will identify and describe basic requirements of energy needed and nutritional needs for each human body system.
Chapter 3, Lesson 3, 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; KnowZone, SE pages 52-53

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
3. Students will describe models that trace the life cycles of different plants and animals and discuss how they differ from species to species.
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
4. Students will explain cause and effect relationships between nonliving and living components within ecosystems; and explain individual response to the changes in the environment.
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**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
5. Students will create and use a classification system to group a variety of plants and animals according to their similarities and differences, preferably using indigenous plants and animals.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Math in Science, SE page 13 Classification, SE page 202

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
6. Students will utilize classification schemes to order objects in biologically relevant contexts.
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Math in Science, SE page 13 Classification, SE page 202

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
1. Students will describe and give examples of earth's changing features.
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**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
2. Students will describe the physical properties of earth's basic materials (including soil, rocks, water and gases).
Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; Lesson 3, Video A, SE page 83; Video B, SE page 84 **Chapter 5, Lesson 1, Video A, SE page 91; Lesson 2, Video A, SE page 99** **Chapter 9, Lesson 3, Video C, SE page 195**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
3. Students will investigate fossils and make inferences about life and the environment long ago.
Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
4. Students will observe and describe local weather and demonstrate how weather conditions are measured.
Chapter 5, KnowZone, SE pages 96-97; Lesson 2, Process Skill, SE page 103; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
5. Students will identify seasons and explain the difference between weather and climate.
Level A: **Chapter 6, Lesson 1, Video B, SE page 114; Critical Thinking, SE page 117** **See Level B:** **Chapter 5, Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video A, SE page 105; Video B, SE page 106; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
6. Students will identify objects (e.g., moon, stars, meteors) in the sky and explain that light and heat comes from a star called the sun.
Chapter 6, Lesson 1, Video A, SE page 113; Lesson 2, Video A, SE page 119; Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
7. Students will identify technology and methods used for space exploration (e.g., also use star patterns, space shuttles, telescopes).
Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131; Process Skill, SE page 131

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
1. Students will describe and discuss examples of how people use science and technology.
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Math in Science, SE page 59 **Chapter 4, Lesson 1, Process Skill, SE page 73** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, 105** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 8, KnowZone, SE pages 168-169**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
2. Students will describe a scientific or technological innovation that impacts communities, cultures, and societies.
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Math in Science, SE page 59 **Chapter 4, Lesson 1, Process Skill, SE page 73** **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, 105** **Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 8, KnowZone, SE pages 168-169**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
3. Students will simulate scientific collaboration by sharing and communicating ideas to identify and describe 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, 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 Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
4. Students will use scientific knowledge to make inferences and propose solutions for simple environmental problems (e.g., recycling, waste management).
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 3, Video A, SE page 61; Video C, SE page 63; Process Skill, SE page 65** **Chapter 4, Lesson 3, Video A, SE page 83; 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** **Chapter 9, Lesson 3, video C, SE page 195**

Science Content Standard 6
Students understand historical developments in science and technology.
1. Students will give historical examples of scientific and technological contributions to communities, cultures, and societies.
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, KnowZone, SE pages 124-125; Lesson 3, Video A, SE page 127; 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 Content Standard 6
Students understand historical developments in science and technology.
2. Students will describe how scientific inquiry has produced much knowledge about the world.
Chapter 3, Lesson 2, Process Skill, SE page 59 **Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; Lesson 3, Critical Thinking, SE page 87** **Chapter 5, Lesson 3, Video B, SE page 106; Video C, SE page 107; Process Skill, SE page 109** **Chapter 6, KnowZone, SE pages 124-125; Lesson 2, Video A, SE page 118; Video B, SE page 1 20; Critical thinking, SE page 123; Lesson 3, Video B, SE page 128; Video C, SE page 129**

Science Content Standard 6
Students understand historical developments in science and technology.
3. Students will describe science as a human endeavor.
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**

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

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

KEY:

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

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
1. Students will plan and safely conduct scientific investigations when given a question, identified variables, and a testable hypothesis.
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
2. Students will select and accurately use appropriate tools including technology to make measurements (in metric units) and represent results of basic scientific investigations.
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
3. Students will describe and communicate the results of scientific 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, 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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
4. Students will use models that illustrate simple concepts and compare those models to the actual phenomena.
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
5. Students will identify a valid test in an 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 Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
1. Students will create mixtures and separate them based on different properties (e.g., salt and sand, iron fillings and soil, oil and water).
Chapter 7, Lesson 3, Video B, SE page 150

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
2. Students will examine, describe, compare and classify objects in terms of common physical properties.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
3. Students will identify the basic characteristics of light, heat, motion, magnetism, electricity and sound.
Level B: **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** **See Level A:** **Chapter 7, Lesson 1, Video C, SE page 135; Video B, SE page 136; Video C, SE page 137** **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** **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**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
4. Student will identify that matter and energy can change from one state to another, and identify and predict what changes and what remains unchanged when matter experiences an external force or energy change.
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 **Chapter 8, Lesson 1, Video A, SE page 157; Lesson 2, Video A, SE page 163; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Video C, SE page 187; KnowZone, SE pages 196-197**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
5. Students will identify, build, and describe mechanical systems (e.g., identify the forces acting within those systems).
Chapter 8, Lesson 3, 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; Lesson 2, Video C, SE page 186; Video C, SE page 187; Critical Thinking, SE page 189; Process Skill, SE page 189; KnowZone, SE pages 196-197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
6. Students will utilize classification schemes to order objects.
Chapter 7, Lesson 1, Video B, SE page 136; Lesson 3, Video B, SE page150

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
1. Students will identify that plants and animals have structures and systems, which serve different functions.
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**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
2. Students will identify and describe basic requirements of energy needed and nutritional needs for each human body system.
See Level A: **Lesson 3, 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; KnowZone, SE pages 52-53**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
3. Students will describe models that trace the life cycles of different plants and animals and discuss how they differ from species to species.
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**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
4. Students will explain cause and effect relationships between nonliving and living components within ecosystems; and explain individual response to the changes in the environment.
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; Lesson **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
5. Students will create and use a classification system to group a variety of plants and animals according to their similarities and differences, preferably using indigenous plants and animals.
Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
6. Students will utilize classification schemes to order objects in biologically relevant contexts.
Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
1. Students will describe and give examples of earth's changing features.
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
2. Students will describe the physical properties of earth's basic materials (including soil, rocks, water and gases).
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**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
3. Students will investigate fossils and make inferences about life and the environment 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**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
4. Students will observe and describe local weather and demonstrate how weather conditions are measured.
Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
5. Students will identify seasons and explain the difference between weather and climate.
Chapter 5, Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, video A, SE page 105; Video B, SE page 106; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 **Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE page 117**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
6. Students will identify objects (e.g., moon, stars, meteors) in the sky and explain that light and heat comes from a star called the sun.
Level B: **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** **See also Level A:** **Chapter 6, Lesson 3, Video A, SE page 127**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
7. Students will identify technology and methods used for space exploration (e.g., also use star patterns, space shuttles, telescopes).
Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; Math in Science, SE page 129; Process Skill, SE page 129; KnowZone, SE pages 130-131

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
1. Students will describe and discuss examples of how people use science and technology.
Chapter 4, Lesson 3, Video B, SE page 82; Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 27; KnowZone, SE pages 130-131** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video C, SE page 173** **Chapter 9, Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
2. Students will describe a scientific or technological innovation that impacts communities, cultures, and societies.
Chapter 4, Lesson 3, Video B, SE page 82; Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 27; KnowZone, SE pages 130-131** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video C, SE page 173** **Chapter 9, Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
3. Students will simulate scientific collaboration by sharing and communicating ideas to identify and describe 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, 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 Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
4. Students will use scientific knowledge to make inferences and propose solutions for simple environmental problems (e.g., recycling, waste management).
Chapter 2, Lesson 3, Process Skill, SE page 43 **Chapter 3, Lesson 1, Video C, SE page 49; Lesson 2, Video C, SE page 57; Lesson 3, 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** **Chapter 4, Lesson 3, Video B, SE page 82; Video C, SE page 83; KnowZone, SE pages 86-87** **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192; Lesson 3, Process Skill, SE page 195**

Science Content Standard 6
Students understand historical developments in science and technology.
1. Students will give historical examples of scientific and technological contributions to communities, cultures, and societies.
Chapter 4, Lesson 3, Video B, SE page 82; Video C, SE page 83 **Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 27; KnowZone, SE pages 130-131** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video C, SE page 173** **Chapter 9, Lesson 2, Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Process Skill, SE page 195; KnowZone, SE pages 196-197**

Science Content Standard 6
Students understand historical developments in science and technology.
2. Students will describe how scientific inquiry has produced much knowledge about the world.
Chapter 1, Lesson 1, Process Skill, SE page 7 **Chapter 2, Lesson 3, Process Skill, SE page 43** **Chapter 3, Lesson 3, Critical Thinking, SE page 65** **Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73** **Chapter 5, KnowZone, SE pages 102-103** **Chapter 6, Lesson 2, Video C, SE page 121; Lesson 3. Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; Process Skill, SE page 129** **Chapter 7, KnowZone, SE pages 140-141** **Chapter 9, Lesson 3, Video B, SE page 192**

Science Content Standard 6
Students understand historical developments in science and technology.
3. Students will describe science as a human endeavor.
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**

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

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

KEY:

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

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
1. Students will identify a question, determine relevant variables, formulate a testable hypothesis, plan and predict the outcome of an investigation, safely conduct scientific investigation, and compare and analyze data.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
2. Students will select and accurately use appropriate tools including technology to make measurements (in metric units), gather, process and analyze data from scientific 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**

Science Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
3. Students will critically review, communicate and defend results of 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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
4. Students will create models to illustrate scientific concepts and use the model to predict change (e.g., computer simulation, stream table, graphic representation).
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 Content Standard 1
Students design, conduct, evaluate, and communicate processes and results of scientific investigations, and demonstrate thinking skills associated with this procedural knowledge.
5. Students will identify strengths and weaknesses in an investigation design.
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 Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
1. Students will classify, describe, and manipulate physical models of matter in terms of elements, compounds, pure substances and mixtures, atoms, and molecules.
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Critical Thinking, SE page 139; 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; Critical Thinking, SE page 147; 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 **The Periodic Table, SE pages 206-207**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
2. Students will examine, describe, compare and classify objects and substances based on common physical properties and simple chemical properties.
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**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
3. Students will describe energy and compare and contrast the characteristics of light, heat, motion, magnetism, electricity, sound, and mechanical waves.
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; Critical Thinking, SE page 167; Process Skill, SE page 167; 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 **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** **See also Level A:** **Chapter 9, Lesson 1, Video A, SE page 179; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174** **See also Level B:** **Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165** **Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
4. Student will model and explain the states of matter are dependent upon the quantity of energy present in the system and describe what will change and what will remain unchanged at the particulate level when matter experiences an external force or energy change.
Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
5. Students will identify, build, describe, measure, and analyze mechanical systems (e.g., simple and complex machines) and describe the forces acting within those systems).
See Level A: **Chapter 8, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Writing in Science, SE page 153; Process Skill, SE page 153** **See also Level B:** **Chapter 8, Lesson 3, Video C, SE page 173; Math in Science, SE page 175; Process Skill, SE page 175**

Science Content Standard 2
Students demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems, and demonstrate thinking skills associated with this knowledge.
6. Students will analyze data in simple scientific contexts (e.g., density).
Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Math in Science, SE page 147 **The Metric System, SE pages 200-201**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
1. Students will compare the structure and function of prokaryotic cells (bacteria) and eukaryotic cells (plants, animal, etc.).
Chapter 1, Lesson 1, 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; Writing in Science, 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; KnowZone, SE pages 20-21

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
2. Students will explain how organisms and systems of organisms obtain and use energy resources to maintain stable conditions (e.g., photosynthesis, respiration).
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**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
3. Students will communicate the differences in the reproductive processes of a variety of plants and animals using the principles of genetic modeling (e.g., Punnett squares).
This concept is not covered at this level.

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
4. Students will investigate and explain the interdependent nature of both the individuals and species in the environment and explain how they are affected by human interaction.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 2, Video A, SE page 77; Video B, SE page 78** **Chapter 5, Lesson 1, Video C, SE page 93; Critical thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 7, Lesson 3, Video B, SE page 150** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
5. Students will create and use a basic classification system to identify plants and animals, preferably using indigenous plants and animals.
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Process Skill, SE page 29

Science Content Standard 3
Students demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment, and demonstrate thinking skills associated with this knowledge.
6. Students will utilize correlational (e.g., population growth) and probabilistic (e.g., genetic sampling) thinking skills in simple contexts.
Chapter 1, Lesson 2, Critical Thinking, SE page 13; KnowZone, SE pages 20-21 **Chapter 2, Lesson 2, Critical Thinking, SE page 35; Lesson 3, Critical Thinking, SE page 43; Process Skill, SE page 43** **Chapter 3, Lesson 1, Critical Thinking, SE page 51; Process Skill, SE page 51**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
1. Students will model and explain the internal structure of the earth and describe the formation and composition of earth's external features in terms of the rock cycle and 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; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Video A, SE page 83; Video B, SE page 84; Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87 **Earth's Layers, SE page 204**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
2. Students will differentiate between both rock types and mineral types and classify both by how they are formed and the utilization by humans (e.g., arrowheads, cooking tools).
Level C: **Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84** **See also Level B:** **Chapter 4, Lesson 2, Video B, SE page 76l Video C, SE page 77; Critical Thinking, SE page 79; 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; Critical Thinking, SE page 85; Writing in Science, SE page 85; Process Skill, SE page 85; KnowZone, SE pages 86-87**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
3. Students will explain scientific theories about how fossils are used as evidence of changes over time.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 4, Lesson 3, Video A, SE page 83**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
4. Students will describe the water cycle, the composition and structure of the atmosphere and the impact of oceans on large scale weather patterns.
Chapter 4, Lesson 1, Video A, SE page 69 **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Critical Thinking, SE page 95; Process Skill, SE page 95; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **The Water Cycle, SE page 204**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
5. Students will describe and model the motion and tilt of earth in relation to the sun, and explain the concepts of day, night, seasons, year, and climatic changes.
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**

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
6. Students will describe the earth, moon, planets and other objects in space in terms of size, structure, and movement in relation to the sun.
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; KnowZone, SE pages 118-119

Science Content Standard 4
Students demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space, and demonstrate thinking skills associated with this knowledge.
7. Students will identify scientific theories about the origin and evolution of the earth and solar system.
Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE pages 74-75

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
1. Students will describe the specific fields of science and technology as they relate to occupations within those fields.
Chapter 1, Lesson 1, Video C, SE page 5; Critical Thinking, SE page 7; Lesson 2, Video C, SE page 11 **Chapter 2, Lesson 1, Critical Thinking, SE page 29** **Chapter 3, Lesson 2, Critical Thinking, SE page 57** **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 6, KnowZone, SE pages 118-119; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
2. Students will apply scientific knowledge and process skills to understand issues and everyday events.
Chapter 1, Lesson 1, Critical Thinking, SE page 7; Lesson 3, Critical Thinking, SE page 19; KnowZone, SE pages 20-21 **Chapter 2, Lesson 1, Critical Thinking, SE page 29; Lesson 2, Critical Thinking, SE page 35; Lesson 3, Critical Thinking, SE page 43** **Chapter 3, Lesson 1, Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 57; KnowZone, SE pages 58-59; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 2, Critical Thinking, SE page 81; Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; Lesson 3, Critical Thinking, SE page 107; KnowZone, SE pages 108-109** **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; Critical Thinking, SE page 175; Process Skill, SE page 175** **Chapter 9, Lesson 1, Critical Thinking, SE page 183; Lesson 3, Critical Thinking, SE page 197; Process Skill, SE page 197**

Science Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
3. Students will simulate collaborative problem solving and give examples of how scientific knowledge and technology are shared with other scientists and the public.
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 Content Standard 5
Students understand how scientific knowledge and technological developments impact today's societies and cultures.
4. Students will use scientific knowledge to investigate problems and their proposed solutions and evaluate those solutions while considering environmental impacts.
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**

Science Content Standard 6
Students understand historical developments in science and technology.
1. Students will trace development that demonstrate scientific knowledge is subject to change as new evidence becomes available.
Chapter 1, Lesson 3, Critical Thinking, SE page 19; KnowZone, SE pages 20-21 **Chapter 2, Lesson 1, Critical Thinking, SE page 29** **Chapter 3, KnowZone, SE page 58-59; Lesson 3, Critical Thinking, SE page 65** **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 6, Lesson 1, Video B, SE page 114; KnowZone, SE pages 118-119; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129**

Science Content Standard 6
Students understand historical developments in science and technology.
2. Students will identify major milestones in science that have impacted science, technology, and society.
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 Content Standard 6
Students understand historical developments in science and technology.
3. Students will describe and explain science as a human endeavor.
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**