SRA Snapshots Video ScienceTM: Level A correlation to Utah Elementary Science Core Curriculum Grade 3

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

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

1. Use Science Process and Thinking Skills

a. Observe simple objects and patterns and report their observations.

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

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

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

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

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

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

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

Chapter 8, Lesson 3 Process Skill, SE page 175; LabTime Hands-On Activity, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1 Process Skill, SE page 183; LabTime Hands-On Activity, TRB pages 159-161, TG page 174

1. Use Science Process and Thinking Skills

b. Sort and sequence data according to a given criteria.

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

1. Use Science Process and Thinking Skills c. Make simple predictions and inferences based upon observations. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174 1. Use Science Process and Thinking Skills

d. Compare things and events.

Chapter 4, Lesson 1, Video A, SE page 75; Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

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

Chapter 7, Lesson 3, Writing in Science, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 2, Video A, SE page 163; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

1. Use Science Process and Thinking Skills

e. Use instruments to measure length, temperature, volume, and weight using appropriate units.

Chapter 3, Lesson 2, Math in Science, SE page 59; Lesson 3, Process Skill, SE page 65

Chapter 4, Lesson 3, Video C, SE page 85

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

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

Chapter 8, Lesson 1, Video C, SE page 159; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

The Metric System, SE pages 200-201

1. Use Science Process and Thinking Skills

f. Conduct a simple investigation when given directions. 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

1. Use Science Process and Thinking Skills

g. Develop and use simple classification systems.

Chapter 1, Lesson 1, Process Skill, 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 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 4, Lesson 3, Video C, SE page 85 Chapter 8, Lesson 1, Process Skill, SE page 161; Lesson 2, Video A, SE page 163 Chapter 9, Lesson 3, Process Skill, SE page 197 Classification, SE page 202

Use Science Process and Thinking Skills
 Use observations to construct a reasonable explanation.
 Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
 Chapter 3, Lesson 2, Process Skill, SE page 59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
 Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
 Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
 Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120
 Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
 Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
 Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

2. Manifest Scientific Attitudes and Interests

a. Demonstrate a sense of curiosity about nature.

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; KnowZone, SE pages 14-15; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 55; Video B, SE page 56; Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; KnowZone, SE pages 80-81; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; KnowZone, SE pages 96-97; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; 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 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; KnowZone, SE pages 124-125; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

2. Manifest Scientific Attitudes and Interests
b. Voluntarily read or look at books and other materials about science.
Chapter 1, KnowZone, SE pages 14-15; TG page 17
Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Process Skill SE page 43; TG page 35
Chapter 3, KnowZone, SE pages 52-53; TG page 53
Chapter 4, KnowZone, SE pages 80-81' TG page 71
Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill, SE page 109; TG page 89
Chapter 6, KnowZone, SE pages 124-125; TG page 107
Chapter 7, KnowZone, SE pages 140-141; TG page 125
Chapter 8, KnowZone, SE pages 168-169; TG page 143
Chapter 9, KnowZone, SE pages 184-185; TG page 161

2. Manifest Scientific Attitudes and Interests
c. Pose questions about objects, events, and processes.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, 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

3. Understand Science Concepts and Principles

a. Know science information specified for their grade level. 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; KnowZone, SE pages 14-15; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 55; Video B, SE page 56; Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; KnowZone, SE pages 80-81; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; KnowZone, SE pages 96-97; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107 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; 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 1, Video A, SE page 135: Video B, SE page 136: Video C, SE page 137: KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195 2 11.1

3. Understand Science Concepts and Principles
b. Distinguish between examples and non-examples of science concepts taught.
Chapter 1, Standardized Test Practice 1, SE page 22
Chapter 2, Standardized Test Practice 2, SE page 44
Chapter 3, Standardized Test Practice 3, SE page 66
Chapter 4, Standardized Test Practice 4, SE page 88
Chapter 5, Standardized Test Practice 5, SE page 110
Chapter 6, Standardized Test Practice 6, SE page 132
Chapter 7, Standardized Test Practice 7, SE page 154
Chapter 8, Standardized Test Practice 8, SE page 176
Chapter 9, Standardized Test Practice 9, SE page 198

3. Understand Science Concepts and Principles

c. Explain science concepts and principles using their own words and explanations.

Chapter 1, Lesson 1, Critical Thinking, SE page 7; Writing in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Math in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 21; Words in Science, SE page 21Process Skill, SE page 21

Chapter 2, Lesson 1, Critical Thinking, SE page 29; Words in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Math in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Writing in Science, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 1, Critical Thinking, SE page 51; Words in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 59; Math in Science, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Writing in Science, SE page 65; Process Skill, SE page 65

Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 79; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87

Chapter 5, Lesson 1, Critical Thinking, SE page 95; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 103; Math in Science, SE page 103; Process Skill, SE page 103; Lesson 3, Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109

Chapter 6, Lesson 1, Critical Thinking, SE page 117; Words in Science, SE page 117; Process Skill, SE page 107; Lesson 2, Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; Lesson 3,

Critical Thinking, SE page 131; Writing in Science, SE page 131; Process Skill, SE page 131

Chapter 7, Lesson 1, Critical Thinking, SE page ; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page147; Math in Science, SE page 147 ; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Writing in Science, SE page 153; Process Skill, SE page 153

Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161;

Lesson 2, Critical Thinking, SE page 167; Words in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Words in Science, SE page 175; Process Skill, SE page 175

Chapter 9, Lesson 1, Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 191; Math in Science, SE page 191; Process Skill, SE page 191; Lesson 3, Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197

4. Communicate Effectively Using Science Language ad Reasoning

a. Record data accurately when given the appropriate form and format (e.g., table, graph, chart).

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

Chapter 2, Lesson 3, Process Skill, SE page 35

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

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

Chapter 5, Lesson 2, Math in Science, SE page 103

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

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

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

4. Communicate Effectively Using Science Language ad Reasoning

b. Report observations with pictures, sentences, and models.

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

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

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

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

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

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

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

Chapter 8, Lesson 3 Process Skill, SE page 175; LabTime Hands-On Activity, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1 Process Skill, SE page 183; LabTime Hands-On Activity, TRB pages 159-161, TG page 174 4. Communicate Effectively Using Science Language ad Reasoning

c. Use scientific language appropriate to grade level in oral and written communication. Chapter 1, Lesson 1, Critical Thinking, SE page 7; Writing in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Math in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 21; Words in Science, SE page 21Process Skill, SE page 21 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Words in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Math in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Writing in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Words in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 59; Math in Science, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Writing in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 79; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 103; Math in Science, SE page 103; Process Skill, SE page 103; Lesson 3, Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Words in Science, SE page 117; Process Skill, SE page 107; Lesson 2, Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; Lesson 3, Critical Thinking, SE page 131; Writing in Science, SE page 131; Process Skill, SE page 131 Chapter 7, Lesson 1, Critical Thinking, SE page ; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Writing in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Words in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Words in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 191; Math in Science, SE page 191; Process Skill, SE page 191; Lesson 3, Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197

4. Communicate Effectively Using Science Language ad Reasoning
d. Use available reference sources to obtain information.
Chapter 1, KnowZone, SE pages 14-15
Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Process Skill SE page 43
Chapter 3, KnowZone, SE pages 52-53
Chapter 4, KnowZone, SE pages 80-81
Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Process Skill, SE page 109
Chapter 6, KnowZone, SE pages 124-125
Chapter 7, KnowZone, SE pages 140-141
Chapter 8, KnowZone, SE pages 168-169
Chapter 9, KnowZone, SE pages 184-185

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 1: Describe the appearance of Earth and the moon.

a. Describe the shape of Earth and the moon as spherical.

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

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 1: Describe the appearance of Earth and the moon.

b. Explain that the sun is the source of light that lights the moon.

Chapter 6, Lesson 3, Video C, SE page 115

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 1: Describe the appearance of Earth and the moon.

c. List the differences in the physical appearance of Earth and the moon as viewed from space.

Chapter 6, Lesson 1, Video C, SE page 115; Lesson 3, Video B, SE page 128

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 2: Describe the movement of Earth and the moon and the apparent movement of other bodies through the sky.

a. Describe the motions of Earth (i.e., the rotation [spinning] of Earth on its axis, the revolution [orbit] of Earth around the sun). Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 2: Describe the movement of Earth and the moon and the apparent movement of other bodies through the sky. b. Use a chart to show that the moon orbits Earth approximately every 28 days.

Chapter 6, Lesson 1, Video C, SE page 115; Lesson 3, Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity, TRB pages 105-107, TG page 120

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 2: Describe the movement of Earth and the moon and the apparent movement of other bodies through the sky.

c. Use a model of Earth to demonstrate that Earth rotates on its axis every 24 hours to produce the night and day cycle.

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

Standard I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.

Objective 2: Describe the movement of Earth and the moon and the apparent movement of other bodies through the sky.

d. Use a model to demonstrate why it seems to a person on Earth that the sun, planets, and stars appear to move across the sky. Chapter 6, Lesson 1, Video A, SE page 113; Process Skill, SE page 117; Lesson 3, Video A, SE page 127; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Standard II: Students will understand that organisms depend on living and nonliving things within their environment.

Objective 1: Classify living and nonliving things in an environment.

a. Identify characteristics of living things (i.e., growth, movement, reproduction).

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Process Skill, SE page 29

Standard II: Students will understand that organisms depend on living and nonliving things within their environment. Objective 1: Classify living and nonliving things in an environment.

b. Identify characteristics of nonliving things.

Chapter 1, Lesson 1, Critical Thinking, SE page 7

Chapter 2, Lesson 1, Video A, SE page 25; Process Skill, SE page 29

Standard II: Students will understand that organisms depend on living and nonliving things within their environment. Objective 1: Classify living and nonliving things in an environment.

c. Classify living and nonliving things in an environment.

Chapter 1, Lesson 1, Critical Thinking, SE page 7

Chapter 2, Lesson 1, Video A, SE page 25; Process Skill, SE page 29

Standard II: Students will understand that organisms depend on living and nonliving things within their environment.

Objective 2: Describe the interactions between living and nonliving things in a small environment.

a. Identify living and nonliving things in a small environment (e.g., terrarium, aquarium, flowerbed) composed of living and nonliving things.

Chapter 1, Lesson 1, Critical Thinking, SE page 7

Chapter 2, Lesson 1, Video A, SE page 25; Process Skill, SE page 29

Standard II: Students will understand that organisms depend on living and nonliving things within their environment. Objective 2: Describe the interactions between living and nonliving things in a small environment.

b. Predict the effects of changes in the environment (e.g., temperature, light, moisture) on a living organism.

Chapter 2, Lesson 1, Video C, SE page 27; Critical Thinking, SE page 29; Lesson 2, Process Skill, SE page 35 Chapter 3, 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 1, Video B, SE page 70; Video C, SE page 71 Chapter 5, Lesson 2, Critical Thinking, SE page 103; Lesson 3, Video B, SE page 106

Standard II: Students will understand that organisms depend on living and nonliving things within their environment.

Objective 2: Describe the interactions between living and nonliving things in a small environment.

c. Observe and record the effect of changes (e.g., temperature, amount of water, light) upon the living organisms and nonliving things in a small-scale environment.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73

Standard II: Students will understand that organisms depend on living and nonliving things within their environment.Objective 2: Describe the interactions between living and nonliving things in a small environment.d. Compare a small-scale environment to a larger environment (e.g., aquarium to a pond, terrarium to a forest).

Chapter 3, Lesson 3, Critical Thinking, SE page 65

Standard II: Students will understand that organisms depend on living and nonliving things within their environment.

Objective 2: Describe the interactions between living and nonliving things in a small environment.

e. Pose a question about the interaction between living and nonliving things in the environment that could be investigated by observation.

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 1: Demonstrate how forces cause changes in speed or direction of objects.

a. Show that objects at rest will not move unless a force is applied to them.

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Writing in Science, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 1: Demonstrate how forces cause changes in speed or direction of objects.

b. Compare the forces of pushing and pulling.

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 1: Demonstrate how forces cause changes in speed or direction of objects.

c. Investigate how forces applied through simple machines affect the direction and/or amount of resulting force.

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.

a. Predict and observe what happens when a force is applied to an object (e.g., wind, flowing water).

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.

b. Compare and chart the relative effects of a force of the same strength on objects of different weight (e.g., the breeze from a fan will move a piece of paper but may not move a piece of cardboard).

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.

c. Compare the relative effects of forces of different strengths on an object (e.g., strong wind affects an object differently than a breeze).

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.

d. Conduct a simple investigation to show what happens when objects of various weights collide with one another (e.g., marbles, balls).

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

Standard III: Students will understand the relationship between the force applied to an object and resulting motion of the object.

Objective 2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.

e. Show how these concepts apply to various activities (e.g., batting a ball, kicking a ball, hitting a golf ball with a golf club) in terms of force, motion, speed, direction, and distance (e.g., slow, fast, hit hard, hit soft). Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136

Standard IV: Students will understand that objects near Earth are pulled toward Earth by gravity.

Objective 1: Demonstrate that gravity is a force.

a. Demonstrate that a force is required to overcome gravity.

Chapter 7, Lesson , Video C, SE page 137

Standard IV: Students will understand that objects near Earth are pulled toward Earth by gravity.

Objective 1: Demonstrate that gravity is a force.

b. Use measurement to demonstrate that heavier objects require more force than lighter ones to overcome gravity.

Chapter 7, Lesson 1, Video B, SE page 136; Video C, SE page 137

Standard IV: Students will understand that objects near Earth are pulled toward Earth by gravity.

Objective 2: Describe the effects of gravity on the motion of an object.

a. Compare how the motion of an object rolling up or down a hill changes with the incline of the hill.

Chapter 7, KnowZone, SE pages 140-141

Standard IV: Students will understand that objects near Earth are pulled toward Earth by gravity.

Objective 2: Describe the effects of gravity on the motion of an object.

b. Observe, record, and compare the effect of gravity on several objects in motion (e.g., a thrown ball and a dropped ball falling to Earth).

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; KnowZone, SE pages 140-141; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard IV: Students will understand that objects near Earth are pulled toward Earth by gravity.

Objective 2: Describe the effects of gravity on the motion of an object.

c. Pose questions about gravity and forces.

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 1: Provide evidence showing that the sun is the source of heat and light for Earth.

a. Compare temperatures in sunny and shady places.

Chapter 5, Lesson 2, Process Skill, SE page 103

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

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 1: Provide evidence showing that the sun is the source of heat and light for Earth.

b. Observe and report how sunlight affects plant growth.

Chapter 1, Lesson 1, Video B, SE page 4

Chapter 2, Lesson 2, Video A, SE page 31; Lesson 3, Video A, SE page 39

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 1: Provide evidence showing that the sun is the source of heat and light for Earth.

c. Provide examples of how sunlight affects people and animals by providing heat and light.

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

Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; Lesson 3, Video A, SE page 39

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

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 1: Provide evidence showing that the sun is the source of heat and light for Earth.

d. Identify and discuss as a class some misconceptions about heat sources (e.g., clothes do not produce heat, ice cubes do not give off cold).

Chapter 8, Lesson 2, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; Critical Thinking, SE page 175; Process Skill, SE page 175

Chapter 9, KnowZone, SE pages 184-185

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 2: Demonstrate that mechanical and electrical machines produce heat and sometimes light.

a. Identify and classify mechanical and electrical sources of heat.

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

Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video B, SE page 194

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 2: Demonstrate that mechanical and electrical machines produce heat and sometimes light.

b. List examples of mechanical or electrical devices that produce light.

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

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 2: Demonstrate that mechanical and electrical machines produce heat and sometimes light.

c. Predict, measure, and graph the temperature changes produced by a variety of mechanical machines and electrical devices while they are operating.

This concept is not covered at this level.

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 3: Demonstrate that heat may be produced when objects are rubbed against one another.

a. Identify several examples of how rubbing one object against another produces heat.

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

Standard V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.

Objective 3: Demonstrate that heat may be produced when objects are rubbed against one another.

b. Compare relative differences in the amount of heat given off or force required to move an object over lubricated/nonlubricated surfaces and smooth/rough surfaces (e.g., waterslide with and without water, hands rubbing together with and without lotion).

Chapter 7, Lesson 1, Video B, SE page 136; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

SRA Snapshots Video ScienceTM: Level B correlation to Utah Elementary Science Core Curriculum Grade 4

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

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

1. Use Science Process and Thinking Skills

a. Observe simple objects and patterns and report their observations. 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

1. Use Science Process and Thinking Skills

b. Sort and sequence data according to a given criteria.

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

1. Use Science Process and Thinking Skills

c. Make simple predictions and inferences based upon observations. 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 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, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 2, Process Skill, SE page 167; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

SRA Snapshots Video ScienceTM: Level B correlation to Utah Elementary Science Core Curriculum Grade 4, page 1 1. Use Science Process and Thinking Skills

d. Compare things and events. Chapter 1, Lesson 2, Video B, SE page 10 Chapter 3, Lesson 2, Process Skill, SE page 59 Chapter 4, Lesson 3, Video A, SE page 81 Chapter 5, Lesson 3, Video C, SE page 107 Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139 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

1. Use Science Process and Thinking Skills

e. Use instruments to measure length, temperature, volume, and weight using appropriate units.

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

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

1. Use Science Process and Thinking Skills

f. Conduct a simple investigation when given directions.

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

1. Use Science Process and Thinking Skills

g. Develop and use simple classification systems.

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 Chapter 4, Lesson 2, Video B, SE page 76; Process Skill, SE page 79; Lesson 3, Video A, SE page 81 Chapter 5, Lesson 1, Video B, SE page 92 Chapter 6, Lesson 2, Process Skill, SE page 123 Chapter 8, Lesson 1, Process Skill, SE page 61 Chapter 9, Lesson 3, Video B, SE page 192 Classification, SE page 202

1. Use Science Process and Thinking Skills

h. Use observations to construct a reasonable explanation.

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 2. Manifest Scientific Attitudes and Interests

a. Demonstrate a sense of curiosity about nature.

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; KnowZone, SE pages 14-15; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 55; Video B, SE page 56; Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; 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 A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; KnowZone, SE pages 102-103; 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 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 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 130-131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135: Video B, SE page 136: Video C, SE page 137: KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 185; Video B, SE page 186; Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Video C, SE page 193; KnowZone, SE pages 196-197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

2. Manifest Scientific Attitudes and Interests

b. Voluntarily read or look at books and other materials about science. Chapter 1, KnowZone, SE pages 14-15; TG page 17 Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Process Skill SE page 43; TG page 35 Chapter 3, KnowZone, SE pages 52-53; TG page 53 Chapter 4, Lesson 2, Process Skill, SE page 79; KnowZone, SE pages 86-87; TG page 71 Chapter 5, KnowZone, SE pages 102-103; Lesson 3, Process Skill, SE page 109; TG page 89 Chapter 6, Lesson 2, Math in Science, SE page 129; KnowZone, SE pages 130-131; TG page 107 Chapter 7, KnowZone, SE pages 140-141; TG page 125 Chapter 8, KnowZone, SE pages 168-169; TG page 143 Chapter 9, KnowZone, SE pages 196-197; TG page 161

2. Manifest Scientific Attitudes and Interests c. Pose questions about objects, events, and processes. Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, 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 3. Understand Science Concepts and Principles

a. Know science information specified for their grade level.

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; KnowZone, SE pages 14-15; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 55; Video B, SE page 56; Video C, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; 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 A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; KnowZone, SE pages 102-103; 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 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 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 130-131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135: Video B, SE page 136: Video C, SE page 137: KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 185; Video B, SE page 186; Video C, SE page 187; Lesson 3, Video A, SE page 191; Video B, SE page 192; Video C, SE page 193; KnowZone, SE pages 196-197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

3. Understand Science Concepts and Principles
b. Distinguish between examples and non-examples of science concepts taught.
Chapter 1, Standardized Test Practice 1, SE page 22
Chapter 2, Standardized Test Practice 2, SE page 44
Chapter 3, Standardized Test Practice 3, SE page 66
Chapter 4, Standardized Test Practice 4, SE page 88
Chapter 5, Standardized Test Practice 5, SE page 110
Chapter 6, Standardized Test Practice 6, SE page 132
Chapter 7, Standardized Test Practice 7, SE page 154
Chapter 8, Standardized Test Practice 8, SE page 176
Chapter 9, Standardized Test Practice 9, SE page 198

3. Understand Science Concepts and Principles

c. Explain science concepts and principles using their own words and explanations. Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 21; Words in Science, SE page 21; Process Skill, SE page 21 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Math in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Writing in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Words in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 59; Writing in Science, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Math in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 79; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Critical Thinking, SE page 85; Writing in Science, SE page 85; Process Skill, SE page 85 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Words in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 101; Writing in Science, SE page 101; Process Skill, SE page 101; Lesson 3, Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Writing in Science, SE page 117; Process Skill, SE page 107; Lesson 2, Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; Lesson 3, Critical Thinking, SE page 129: Math in Science, SE page 129: Process Skill, SE page 129 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Writing in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Words in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 189; Writing in Science, SE page 189; Process Skill, SE page 189; Lesson 3, Critical Thinking, SE page 195; Math in Science, SE page 195; Process Skill, SE page 195

4. Communicate Effectively Using Science Language ad Reasoning
a. Record data accurately when given the appropriate form and format (e.g., table, graph, chart).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-On
Activity 6, TRB pages 105-107, TG page 120
Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156
Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity
9, TRB pages 159-161, TG page 174

4. Communicate Effectively Using Science Language ad Reasoning

b. Report observations with pictures, sentences, and models.

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 4. Communicate Effectively Using Science Language ad Reasoning

c. Use scientific language appropriate to grade level in oral and written communication. Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 21; Words in Science, SE page 21; Process Skill, SE page 21 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Math in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Writing in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Words in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 59; Writing in Science, SE page 59; Process Skill, SE page 59; Lesson 3, Critical Thinking, SE page 65; Math in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 79; Writing in Science, SE page 79; Process Skill, SE page 79; Lesson 3, Critical Thinking, SE page 85; Writing in Science, SE page 85; Process Skill, SE page 85 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Words in Science, SE page 95; Process Skill, SE page 95; Lesson 2, Critical Thinking, SE page 101; Writing in Science, SE page 101; Process Skill, SE page 101; Lesson 3, Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Writing in Science, SE page 117; Process Skill, SE page 107; Lesson 2, Critical Thinking, SE page 123; Writing in Science, SE page 123; Process Skill, SE page 123; Lesson 3, Critical Thinking, SE page 129; Math in Science, SE page 129; Process Skill, SE page 129 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Writing in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Words in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 189; Writing in Science, SE page 189; Process Skill, SE page 189; Lesson 3, Critical Thinking, SE page 195; Math in Science, SE page 195; Process Skill, SE page 195

4. Communicate Effectively Using Science Language ad Reasoning d. Use available reference sources to obtain information.

Chapter 1 KnowZone, SE pages 14-15; Lesson 3 Process Skill, SE page 21
Chapter 2 KnowZone, SE pages 36-37; Lesson 3 Process Skill, SE page 43
Chapter 3 KnowZone, SE pages 52-53; Lesson 2 Process Skill, SE page 59
Chapter 4, Lesson 2 Process Skill, SE page 79; KnowZone, SE pages 86-87
Chapter 5 KnowZone, SE pages 102-103
Chapter 6, Lesson 3 Math in Science, SE page 129; KnowZone, SE pages 130-131
Chapter 7 KnowZone, SE pages 140-141
Chapter 8 KnowZone, SE pages 168-169
Chapter 9 KnowZone, SE pages 196-198

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 1: Describe the relationship between heat energy, evaporation, and condensation pf water on Earth.

a. Identify the relative amount and kind of water found in various locations on Earth (e.g., oceans have most of the water, glaciers and snowfields contain most fresh water)

Chapter 4, Lesson 1, Video A, SE page 69 Chapter 5, Lesson 1, Video C, SE page 93 The Water Cycle, SE page 204

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 1: Describe the relationship between heat energy, evaporation, and condensation pf water on Earth.

b. Identify the sun as the source of energy that evaporates water from the surface of Earth.

Chapter 5, Lesson 1, Video B, SE page 92 The Water Cycle, SE page 204 Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 1: Describe the relationship between heat energy, evaporation, and condensation pf water on Earth.

c. Compare the processes of evaporation and condensation of water.

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

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 1: Describe the relationship between heat energy, evaporation, and condensation pf water on Earth.

d. Investigate and record temperature data to show the effects of heat energy on changing the states of water.

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

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 2: Describe the water cycle.

a. Locate examples of evaporation and condensation in the water cycle (e.g., water evaporates when heated and clouds or dew forms when vapor is cooled).

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

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 2: Describe the water cycle.

b. Describe the processes of evaporation, condensation, and precipitation as they relate to the water cycle.

Chapter 5, Lesson 1, Video A, SE page 91 The Water Cycle, SE page 202

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 2: Describe the water cycle.

c. Identify locations that hold water as it passes through the water cycle (e.g., oceans, atmosphere, fresh surface water, ice, and ground water).

Chapter 4, Lesson 1, Video A, SE page 69 Chapter 5, Lesson 1, Video B, SE page 29; Video C, SE page 93 The Water Cycle, SE page 204

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 2: Describe the water cycle.

d. Construct a model or diagram to show how water continuously moves through the water cycle over time.

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

The Water Cycle, SE page 204

Standard I: Students will understand that water changes state as it moves through the water cycle.

Objective 2: Describe the water cycle.

e. Describe how the water cycle relates to the water supply in your community.

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

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 1: Observe, measure, and record the basic elements of weather.

a. Identify basic cloud types (i.e., cumulus, cirrus, stratus clouds).

Chapter 5, Lesson 1, Video B, SE page 92; Process Skill, SE page 95

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 1: Observe, measure, and record the basic elements of weather.

b. Observe, measure, and record data on the basic elements of weather over a period of time (i.e., precipitation, air temperature, wind speed, and direction, and air pressure).

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 1: Observe, measure, and record the basic elements of weather.

c. Investigate evidence that air is a substance (e.g., takes up space, moves as wind, temperature can be measured).

Chapter 5, Lesson 2, Video A, SE page 97; KnowZone, SE pages 102-103

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 1: Observe, measure, and record the basic elements of weather.

d. Compare the components of severe weather phenomena to normal weather conditions (e.g., thunderstorm with lightning and high winds compared to rainstorm with rain showers and breezes).

Chapter 5, Lesson 1, Video B, SE page 92; Lesson 3, video C, SE page 107; Critical Thinking, SE page 109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 2: Interpret recorded weather data for simple patterns.

a. Observe and record effects of air temperature on precipitation (below freezing results in snow, above freezing results in rain).

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

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 2: Interpret recorded weather data for simple patterns.

b. Graph recorded data to show daily and seasonal patterns in weather.

Chapter 5, Lesson 1, Process Skill, SE page 95; Lesson 2, Process Skill, SE page 101

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 2: Interpret recorded weather data for simple patterns.

c. Infer relationships between wind and weather changes (e.g., windy days often precede changes in the weather, south winds in Utah often precede a cold front coming from the north).

Chapter 5, Lesson 2, Video B, SE page 98; Lesson 2, Video B, SE page 106; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 3: Evaluate weather predictions based upon observational data.

a. Identify and use tools of a meteorologist (e.g., measure rainfall using rain gauge, measure air pressure using barometer, measure temperature using a thermometer).

Chapter 5, Lesson 2, Video C, SE page 99; Process Skill, SE page 101

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 3: Evaluate weather predictions based upon observational data.

b. Describe how weather and forecasts affects people's lives.

Chapter 5, Lesson 2, Video B, SE page 98; Critical Thinking, SE page 101; Lesson 3, Video B, SE page 106

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 3: Evaluate weather predictions based upon observational data.

c. Predict weather and justify prediction with observable evidence.

Chapter 5, Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; Critical Thinking, SE page 109

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 3: Evaluate weather predictions based upon observational data.

d. Evaluate the accuracy of student and professional weather forecasts.

Chapter 5, Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; Critical Thinking, SE page 109

Standard II: Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Objective 3: Evaluate weather predictions based upon observational data.

e. Relate weather forecast accuracy to evidence or tools used to make the forecast (e.g., feels like rain vs. barometer is dropping).

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

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 1: Identify basic properties of minerals and rocks.

a. Describe the differences between minerals and rocks.

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

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 1: Identify basic properties of minerals and rocks.

b. Observe rocks using a magnifying glass and draw shapes and colors of the minerals.

Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Lesson 3, Video A, SE page 81; Critical Thinking, SE page 85; Process Skill, SE page 85

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 1: Identify basic properties of minerals and rocks.

c. Sort rocks by appearance according to the three basic types: sedimentary, igneous, and metamorphic (e.g., sedimentaryrounded-appearing mineral and rock particles that are cemented together, often in layers; igneous-with or without observable crystals that are not in layers or with air holes or glasslike; metamorphic-crystals/minerals, often in layers).

Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 1: Identify basic properties of minerals and rocks.

d. Classify common rocks found in Utah as sedimentary (i.e., sandstone, conglomerate, shale), igneous (i.e., basalt, granite, obsidian, pumice), and metamorphic (i.e., marble, gneiss, schist).

Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; Process Skill, SE page 79

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 2: Explain how the processes of physical weathering and erosion change and move materials that become soil. a. Identify the processes of physical weathering that break down rocks at Earth's surface (i.e., water movement, freezing, plant

a. Identify the processes of physical weathering that break down rocks at Earth's surface (i.e., water movement, freezing, plant growth, wind).

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

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 2: Explain how the processes of physical weathering and erosion change and move materials that become soil. b. Distinguish between weathering (i.e., wearing down and breaking of rock surfaces) and erosion (i.e., the movement of materials).

Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 2: Explain how the processes of physical weathering and erosion change and move materials that become soil.

c. Model erosion of Earth materials and collection of these materials as part of the process that leads to soil (e.g., water moving sand in a playground and depositing this sand in another area).

Chapter 4, Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 2: Explain how the processes of physical weathering and erosion change and move materials that become soil. d. Investigate layers of soil in the local area and predict the sources of the sand and rocks in the soil.

See Level A:

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

See also Level C: Chapter 4, Lesson 3, Video C, SE page 85

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 3: Observe the basic components of soil and relate the components to plant growth.

a. Observe and list the components of soil (i.e., minerals, rocks, air, water, living and dead organisms) and distinguish between the living, nonliving, and once living components of soil.

See Level A:

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

See also Level C: Chapter 4, Lesson 3, Video C, SE page 85 Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 3: Observe the basic components of soil and relate the components to plant growth.

b. Diagram or model a soil profile showing topsoil, subsoil, and bedrock, and how the layers differ in composition.

See Level A:

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

See also Level C: Chapter 4, Lesson 3, Video C, SE page 85

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 3: Observe the basic components of soil and relate the components to plant growth.

c. Relate the components of soil to the growth of plants in soil (e.g., mineral nutrients, water).

See Level A:

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

See also Level C: Chapter 4, Lesson 3, Video C, SE page 85

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 3: Observe the basic components of soil and relate the components to plant growth.

d. Explain how plants may help control the erosion of soil.

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

Standard III: Students will understand the basic properties of rocks, the process involved in the formation of soils, and the needs of plants provided by soil.

Objective 3: Observe the basic components of soil and relate the components to plant growth.

e. Research and investigate ways to provide mineral nutrients for plants to grow without soil (e.g., grow plants in wet towels, grow plants in water).

Chapter 1, Lesson 3, Video B, SE page 18 Chapter 2, Lesson 1, Video A, SE page 25

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 1: Describe Utah fossils and explain how they were formed.

a. Identify features of fossils that can be used to compare them to living organisms that are familiar (e.g., shape and structure of skeleton, pattern of leaves).

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 1: Describe Utah fossils and explain how they were formed.

b. Describe three ways fossils are formed in sedimentary rock (i.e., preserved organisms, mineral replacements of organisms, impressions or tracks).

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 1: Describe Utah fossils and explain how they were formed.

c. Research locations where fossils are found in Utah and construct a simple fossil map.

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

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

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 2: Explain how fossils can be used to make inferences about past life, climate, geology, and environments. a. Explain why fossils are usually found in sedimentary rock.

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 2: Explain how fossils can be used to make inferences about past life, climate, geology, and environments.

b. Based on the fossils found in various locations, infer how Utah environments was once covered by a large shallow ocean (e.g., trilobite fossils indicate that Millard County was once covered by a large shallow ocean; dinosaur fossils and coal indicate the Emery and Uintah Country were once tropical and swampy).

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 2: Explain how fossils can be used to make inferences about past life, climate, geology, and environments.

c. Research information on two scientific explanations for the extinction of dinosaurs and other prehistoric organisms. Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7

Chapter 1, Lesson 1, Video C, SE page 5, Wath In Science, SE page 7, Flocess Skin, SE page 7 Chapter 4 Losson 2, Video P, SE page 76, LabTime Hands On Activity 4, TDP pages 60, 71, TC page

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

Standard IV: Students will understand how fossils were formed, where they may be found in Utah, and how they can be used to make inferences.

Objective 2: Explain how fossils can be used to make inferences about past life, climate, geology, and environments.

d. Formulate questions that can be answered using information gathered on the extinction of dinosaurs.

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

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 1: Describe the physical characteristics of Utah's wetlands, forests, and deserts.

a. Compare the physical characteristics (e.g., precipitation, temperature, and surface terrain) of Utah's wetlands, forests, and deserts.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 1: Describe the physical characteristics of Utah's wetlands, forests, and deserts.

b. Describe Utah's wetlands (e.g., river, lake, stream, and marsh areas where water is a major feature of the environment), forest (e.g., oak, pine, aspen, juniper areas where trees are a major feature of the environment), and deserts (e.g., areas where the lack of water provided an environment where plants needing little water are a major feature of the environment).

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 1: Describe the physical characteristics of Utah's wetlands, forests, and deserts.

c. Locate examples of areas that have characteristics of wetlands, forests, or deserts in Utah.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 1: Describe the physical characteristics of Utah's wetlands, forests, and deserts.

d. Based upon information gathered, classify areas of Utah that are generally identified as wetlands, forests, or deserts.
 Chapter 3, Lesson 2, Video B, SE page 56; Video C, SE page 57; Critical Thinking, SE page 59; Process Skill, SE page 59

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 1: Describe the physical characteristics of Utah's wetlands, forests, and deserts.

e. Create models of wetlands, forests, and deserts.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 2: Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environment in which they live.

a. Identify common plants and animals that in habit Utah's forests, wetlands, and deserts.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 2: Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environment in which they live.

b. Cite examples of physical features that allow particular plants and animals to live in specific environments (e.g., duck has webbed feet, cactus has waxy coating).

Chapter 1, Lesson 2, Video C, SE page 11; Critical Thinking, SE page 13; Writing in Science, SE page 13; 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; Lesson 2, Video A, SE page 55; Video B, SE page 56

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 2: Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environment in which they live.

c. Describe some of the interactions between animals and plants of a given environment (e.g., woodpecker eats insects that live on trees of a forest, brine shrimp of the Great Salt Lake eat algae and birds feed on brine shrimp).

Chapter 1, Lesson 3, Video C, SE page 19; Critical thinking, SE page 31

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Critical Thinking, SE page 29; Process Skill, SE page 29; 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; 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

Chapter 3, Lesson 1, Video B, SE page 48; Process Skill, SE page 51; Lesson 3, Video B, SE page 62

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 2: Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environment in which they live.

d. Identify the effect elevation has on types of plants and animals that live in specific wetland, forest, or desert.

Chapter 3, Lesson 2, Process Skill, SE page 59

Chapter 5, Lesson 3, Video B, SE page 106

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 2: Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environment in which they live.

e. Find examples of endangered Utah plants and animals and describe steps being taken to protect them.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 3: Use a simple scheme to classify Utah plants and animals.

a. Explain how scientists use classification schemes.

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 3: Use a simple scheme to classify Utah plants and animals.

b. Use a simple classification system to classify unfamiliar Utah plants or animals (e.g., fish/amphibian/retile/bird/ mammal, invertebrate/vertebrate, tree/shrub/grass, deciduous/conifers).

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

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 4: Observe and record the behavior of Utah animals.

a. Observe and record the behavior and adaptations of birds (caring for young, obtaining food, surviving winter).

Chapter 1, Lesson 1, Video B, SE page 4

Chapter 2, KnowZone, SE pages 36-37

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 4: Observe and record the behavior of Utah animals.

b. Describe how the behavior and adaptations of Utah mammals help them survive winter (e.g., obtaining food, building homes, hibernation, migration).

Chapter 1, Lesson 1, Video B, SE page 4

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 4: Observe and record the behavior of Utah animals.

c. Research and report on the behavior of a species of Utah fish (e.g., feeding on the bottom or surface, time of year and movement of fish to spawn, types of food and how it is obtained).

Chapter 1, Lesson 1, Video B, SE page 4

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 4: Observe and record the behavior of Utah animals.

d. Compare the structure and behavior of Utah amphibians and reptiles.

Chapter 1, Lesson 1, Video B, SE page 4

Chapter 2, KnowZone, SE pages 36-37

Standard V: Students will understand the physical characteristics of Utah's wetlands, forests and deserts and identify common organisms for each environment.

Objective 4: Observe and record the behavior of Utah animals.

e. Use simple classification schemes to sort Utah's common insects and spiders.

Chapter 1, Lesson 1, Video B, SE page 4; KnowZone, SE pages 14-15

Chapter 2, KnowZone, SE pages 36-37

SRA Snapshots Video Science[™]: Level C correlation to Utah Elementary Science Core Curriculum Grade 5

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

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

1. Use Science Process and Thinking Skills

a. Observe simple objects, patterns, and events and report their observations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30
Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48
Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66
Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84
Chapter 5, 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

1. Use Science Process and Thinking Skills

b. Sort and sequence data according to a given criteria.

Chapter 1, KnowZone, SE pages 20-21

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29; Lesson 2, Video A, SE page 31

Chapter 3, Lesson 1, Video C, SE page 49; Writing in Science, SE page 51

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

Chapter 5, Lesson 2, Video B, SE page 98; Process Skill, SE page 101

Chapter 6, Lesson 1, Process Skill, SE page 117; Lesson 2, Video C, SE page 123

Chapter 7, Lesson 1, Video B, SE page 136; Video C, SE page 137

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

1. Use Science Process and Thinking Skills

c. Given the appropriate instrument, measure length, temperature, volume, and mass in metric units as specified.

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, Process Skill, 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, Lesson 2, Video A, SE page 143; Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 2, Video C, SE page 165; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 2, Process Skill, SE page 191

The Metric Systems, SE pages 200-201

1. Use Science Process and Thinking Skills

d. Compare things, processes and events. Chapter 1, Lesson 2, Writing in Science, SE page 12; KnowZone, SE pages 20-21 Chapter 3, Lesson 3, Process Skill, SE page 65 Chapter 4, Lesson 2, Writing in Science, SE page 81; Lesson 3, Video A, SE page 83; Video B, SE page 84 Chapter 5, Lesson 3, Critical Thinking, SE page 107 Chapter 6, Lesson 1, Process Skill, SE page 117 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139 Chapter 8, Lesson 2, Process Skill, SE page 167; KnowZone, SE pages 168-169; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

1. Use Science Process and Thinking Skills

e. Use classification systems.

Chapter 1, KnowZone, SE pages 20-21

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Critical Thinking, SE page 29; Writing in Science, SE page 29; Process Skill, SE page 29 Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84

Chapter 6, Lesson 1, Process Skill, SE page 117

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

Classification, SE page 202

1. Use Science Process and Thinking Skills

f. Plan and conduct a simple experiment.

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

1. Use Science Process and Thinking Skills

g. Formulate simple research questions.

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, 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

Use Science Process and Thinking Skills
 h. Predict results of investigations based on prior knowledge.
 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

1. Use Science Process and Thinking Skills

i. Use data to construct a reasonable conclusion.

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

2. Manifest Scientific Attitudes and Interests

a. Demonstrate a sense of curiosity about nature.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17; KnowZone, SE pages 20-21; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 53; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; KnowZone, SE page 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

2. Manifest Scientific Attitudes and Interests b. Voluntarily read or look at books and other materials about science. Chapter 1, KnowZone, SE pages 20-21; TG page 17 Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Process Skill SE page 43; TG page 35 Chapter 3, KnowZone, SE pages 58-59; TG page 53 Chapter 4, KnowZone, SE pages 74-75; TG page 71 Chapter 5, KnowZone, SE pages 108-109; Lesson 3, Process Skill, SE page 109; TG page 89 Chapter 6, KnowZone, SE pages 118-1191; TG page 107 Chapter 7, KnowZone, SE pages 140-141; TG page 125 Chapter 8, KnowZone, SE pages 184-185; TG page 161

2. Manifest Scientific Attitudes and Interests

c. Pose science questions about objects, events, and processes.

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

2. Manifest Scientific Attitudes and Interests

d. Maintain an open and questioning mind toward new ideas and alternative points of view.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17; KnowZone, SE pages 20-21; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 53; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; KnowZone, SE page 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

2. Manifest Scientific Attitudes and Interests

e. Seek and weigh evidence before drawing conclusions. 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

2. Manifest Scientific Attitudes and Interests

f. Accept and use scientific evidence to help resolve ecological problems.

Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65

Chapter 4, Lesson 2, Video B, SE page 78; 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

3. Understand Science Concepts and Principles

a. Know and explain science information specified for the grade level.

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16; Video C, SE page 17; KnowZone, SE pages 20-21: LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 53; Video B, SE page 54; Video C, SE page 55; KnowZone, SE pages 58-59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66 Chapter 4, Lesson 1, Video A, SE page 69; Video B, SE page 70; Video C, SE page 71; KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; KnowZone, SE pages 108-109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102 Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; KnowZone, SE page 118-119; Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video B, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; KnowZone, SE pages 168-169; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

3. Understand Science Concepts and Principles
b. Distinguish between examples and non-examples of concepts that have been taught.
Chapter 1, Standardized Test Practice 1, SE page 22
Chapter 2, Standardized Test Practice 2, SE page 44
Chapter 3, Standardized Test Practice 3, SE page 66
Chapter 4, Standardized Test Practice 4, SE page 88
Chapter 5, Standardized Test Practice 5, SE page 110
Chapter 6, Standardized Test Practice 6, SE page 132
Chapter 7, Standardized Test Practice 7, SE page 154
Chapter 8, Standardized Test Practice 8, SE page 176
Chapter 9, Standardized Test Practice 9, SE page 198

3. Understand Science Concepts and Principles

c. Solve problems appropriate to grade level by applying science principles and procedures. Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 19; Words in Science, SE page 19; Process Skill, SE page 19 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Writing in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Math in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Writing in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 57; Math in Science, SE page 57; Process Skill, SE page 57; Lesson 3, Critical Thinking, SE page 65; Words in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 81; Writing in Science, SE page 81; Process Skill, SE page 81; Lesson 3, Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2. Critical Thinking, SE page 101: Math in Science, SE page 101: Process Skill, SE page 101: Lesson 3. Critical Thinking, SE page 107; Words in Science, SE page 107; Process Skill, SE page 107 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Math in Science, SE page 117; Process Skill, SE page 117; Lesson 2, Critical Thinking, SE page 125; Writing in Science, SE page 125; Process Skill, SE page 125; Lesson 3, Critical Thinking, SE page 131; Writing in Science, SE page 131; Process Skill, SE page 131 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Words in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 191; Words in Science, SE page 191; Process Skill, SE page 191; Lesson 3, Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197

4. Communicate Effectively Using Science Language ad Reasoning

a. Record data accurately when given the appropriate form and format (e.g., table, graph, chart).

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

Chapter 5, Lesson 3, Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102
Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138
Chapter 8, Lesson 2, process Skill, Se page 165; KnowZone, SE pages 168-169; LabTime Hands-On Activity 8, TRB
pages 141-143, TG page 156
Chapter 9, Lesson 2, Process Skill, SE page 191

The Metric System, SE pages 200-201

4. Communicate Effectively Using Science Language ad Reasoning
b. Describe or explain observations carefully and report with pictures, sentences, and models.
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

4. Communicate Effectively Using Science Language ad Reasoning

c. Use scientific language in oral and written communication. Chapter 1, Lesson 1, Critical Thinking, SE page 7; Math in Science, SE page 7; Process Skill, SE page 7; Lesson 2, Critical Thinking, SE page 13; Writing in Science, SE page 13; Process Skill, SE page 13; Lesson 3, Critical Thinking, SE page 19: Words in Science, SE page 19: Process Skill, SE page 19 Chapter 2, Lesson 1, Critical Thinking, SE page 29; Writing in Science, SE page 29; Process Skill, SE page 29; Lesson 2, Critical Thinking, SE page 35; Math in Science, SE page 35; Process Skill, SE page 35; Lesson 3, Critical Thinking, SE page 43; Words in Science, SE page 43; Process Skill, SE page 43 Chapter 3, Lesson 1, Critical Thinking, SE page 51; Writing in Science, SE page 51; Process Skill, SE page 51; Lesson 2, Critical Thinking, SE page 57; Math in Science, SE page 57; Process Skill, SE page 57; Lesson 3, Critical Thinking, SE page 65; Words in Science, SE page 65; Process Skill, SE page 65 Chapter 4, Lesson 1, Critical Thinking, SE page 73; Math in Science, SE page 73; Process Skill, SE page 73; Lesson 2, Critical Thinking, SE page 81; Writing in Science, SE page 81; Process Skill, SE page 81; Lesson 3, Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87 Chapter 5, Lesson 1, Critical Thinking, SE page 95; Writing in Science, SE page 95; Process Skill, SE page 95; Lesson 2. Critical Thinking, SE page 101: Math in Science, SE page 101: Process Skill, SE page 101: Lesson 3. Critical Thinking, SE page 107; Words in Science, SE page 107; Process Skill, SE page 107 Chapter 6, Lesson 1, Critical Thinking, SE page 117; Math in Science, SE page 117; Process Skill, SE page 117; Lesson 2, Critical Thinking, SE page 125; Writing in Science, SE page 125; Process Skill, SE page 125; Lesson 3, Critical Thinking, SE page 131; Writing in Science, SE page 131; Process Skill, SE page 131 Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Writing in Science, SE page 139; Lesson 2, Critical Thinking, SE page 147; Math in Science, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Words in Science, SE page 153; Process Skill, SE page 153 Chapter 8, Lesson 1, Critical Thinking, SE page 161; Writing in Science, SE page 161; Process Skill, SE page 161; Lesson 2, Critical Thinking, SE page 167; Words in Science, SE page 167; Process Skill, SE page 167; Lesson 3, Critical Thinking, SE page 175; Math in Science, SE page 175; Process Skill, SE page 175 Chapter 9, Lesson 1, Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183; Lesson 2, Critical Thinking, SE page 191: Words in Science, SE page 191: Process Skill, SE page 191: Lesson 3, Critical Thinking, SE page 197; Writing in Science, SE page 197; Process Skill, SE page 197

4. Communicate Effectively Using Science Language ad Reasoning
d. Use reference sources to obtain information and cite the source.
Chapter 1, KnowZone, SE pages 20-21
Chapter 2, KnowZone, SE pages 36-37
Chapter 3, KnowZone, SE pages 58-59
Chapter 4, KnowZone, SE pages 74-75
Chapter 5, KnowZone, SE pages 108-109
Chapter 6, KnowZone, SE pages 118-119
Chapter 7, KnowZone, SE pages 140-141
Chapter 8, KnowZone, SE pages 168-169
Chapter 9, KnowZone, SE pages 184-185

4. Communicate Effectively Using Science Language ad Reasoning

e. Use mathematical reasoning to communicate information.

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

Chapter 2, Lesson 2 Math in Science, SE page 35

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

Chapter 5, Lesson 2 Math in Science, SE page 101

Chapter 7, Lesson 2 Math in Science, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 Chapter 8, Lesson 3 Math in Science, SE page 175; Process Skill, SE page 175

The Metric System, SE pages 200-201

5. Demonstrate Awareness of Social and Historical Aspects of Science

a. Cite examples of how science affects life.

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

5. Demonstrate Awareness of Social and Historical Aspects of Science

b. Understand the cumulative nature of science knowledge.

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

6. Understand the Nature of Science

a. Science is a way of knowing that is used by many people not just scientists.

Chapter 1, Lesson 3, Critical Thinking, SE page 19 Chapter 2, Lesson 2, Critical Thinking, SE page 35

Chapter 3, Lesson 1, Critical Thinking, SE page51; Lesson 3, Critical Thinking, SE page 65

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

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

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

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

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

6. Understand the Nature of Science

b. Understand that science investigations use a variety of methods and do not always use the same set of procedures; understand that there is not just one "scientific method."

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

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

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

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

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

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

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

Chapter 9, Lesson 2, Process Skill, SE page 191

6. Understand the Nature of Science

c. Science findings are based upon evidence.
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 I: Students will understand that chemical and physical changes occur in matter.

 Objective 1: Describe that matter is neither created nor destroyed even though it may undergo change.

 a. Compare the total weight of an object to the weight of its individual parts after being disassembled.

 Chapter 7, Lesson 2, Video B, SE page 145

Standard I: Students will understand that chemical and physical changes occur in matter.Objective 1: Describe that matter is neither created nor destroyed even though it may undergo change.b. Compare the weight of a specified quantity of matter before and after it undergoes melting or freezing.This concept is not covered at this level.

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 1: Describe that matter is neither created nor destroyed even though it may undergo change.

c. Investigate the results of the combined weights of a liquid and a solid after the solid has been dissolved and then recovered from the liquid (e.g., salt dissolved in water then water evaporated).

This concept is not covered at this level.

Standard I: Students will understand that chemical and physical changes occur in matter. Objective 1: Describe that matter is neither created nor destroyed even though it may undergo change. d. Investigate chemical reactions in which the total weight of the materials before and after reaction is the same (e.g., cream and vinegar before and after mixing, borax and glue mixed to make a new substance). This concept is not covered at this level.

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 2: Evaluate evidence that indicates a physical change has occurred.

a. Identify the physical properties of matter (e.g., hard, soft, solid, liquid, gas).

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

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 2: Evaluate evidence that indicates a physical change has occurred.

b. Compare changes in substances that indicate a physical change has occurred.

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143; Video C, SE page 145, Critical Thinking, SE page 147

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 2: Evaluate evidence that indicates a physical change has occurred.

c. Describe the appearance of a substance before and after a physical change.

Chapter 7, Lesson 1, Video B, SE page 136; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 2, Video A, SE page 143; Video C, SE page 145

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.

a. Identify observable evidence of a chemical reaction (e.g., color change, heat or light given off, heat absorbed, gas given off). Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 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 I: Students will understand that chemical and physical changes occur in matter.

Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.

b. Explain why the measured weight of a remaining product is less than its reactants when a gas is produced. Chapter 7, Lesson 2, Video A, SE page 143; Lesson 3, Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.

c. Cite examples of chemical reactions in daily life.

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

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 I: Students will understand that chemical and physical changes occur in matter.

Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.

d. Compare a physical change to a chemical change.

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

Standard I: Students will understand that chemical and physical changes occur in matter.

Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.

e. Hypothesize how changing one of the materials in a chemical reaction will change the results.

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface.

a. Identify the objects, processes, or forces that weather and erode Earth's surface (e.g., ice, plants, animals, abrasion, gravity, water, wind).

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

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 1: Describe how weathering and erosion change Earth's surface.

b. Describe how geological features (e.g., valleys, canyons, buttes, arches) are changed through erosion (e.g., waves, wind, glaciers, gravity, running water).

Chapter 4, Lesson 2, Video B, SE page 78; Critical Thinking, SE page 81; Lesson 2, Process Skill, SE page 87

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 1: Describe how weathering and erosion change Earth's surface.

c. Explain the relationship between time and specific geological changes.

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 2: Explain how volcanoes, earthquakes, and uplift affect Earth's surface.

a. Identify specific geological features created by volcanoes, earthquakes, and uplift.

Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 2: Explain how volcanoes, earthquakes, and uplift affect Earth's surface.

b. Give examples of different landforms that are formed by volcanoes, earthquakes, and uplift (e.g., mountains, valleys, new lakes, canyons).

Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, SE page 73; KnowZone, SE pages 74-75

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 2: Explain how volcanoes, earthquakes, and uplift affect Earth's surface.

c. Describe how volcanoes, earthquakes, and uplift change landforms.

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 II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 2: Explain how volcanoes, earthquakes, and uplift affect Earth's surface. d. Cite examples of how technology is used to predict volcanoes and earthquakes.

Chapter 4, Lesson 1, Critical Thinking, SE page 73

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 3: Relate the building up and breaking down of Earth's surface over time to the various physical land features. a. Explain how layers of exposed rock, such as those observed in the Grand Canyon, are the result of natural processes acting over long periods of time.

Chapter 4, Lesson 2, Video B, SE page 78; Critical Thinking, SE page 81

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 3: Relate the building up and breaking down of Earth's surface over time to the various physical land features. b. Describe the role of deposition in the processes that change Earth's surface. Chapter 4, Lesson 2, Video C, SE page 798; Critical Thinking, SE page 81

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 3: Relate the building up and breaking down of Earth's surface over time to the various physical land features. c. Use a time line to identify the sequences and time required for building and breaking down of geologic features on Earth. **This concept is not covered at this level.** Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface. Objective 3: Relate the building up and breaking down of Earth's surface over time to the various physical land features.

d. Describe and justify how the surface of Earth would appear if there were no mountain uplift, weathering, or erosion. Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical Thinking, SE page 73l KnowZone, SE page 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 1: Investigate and compare the behavior of magnetism using magnets.

a. Compare various types of magnets (e.g., permanent, temporary, and natural magnets) and their abilities to push or pull iron objects that are not touching.

See Level B:

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

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 1: Investigate and compare the behavior of magnetism using magnets.

b. Investigate how magnets will both attract and repel other magnets.

See Level B:

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

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 1: Investigate and compare the behavior of magnetism using magnets.

c. Compare permanent magnets and electromagnets.

See Level B:

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

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 1: Investigate and compare the behavior of magnetism using magnets.

d. Research and report the use of magnets that is supported by sound scientific principles.

Level C:

Chapter 8, Lesson 3, Video B, SE page 172

See also Level B:

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

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 2: Describe how the magnetic field of Earth and a magnet are similar.

a. Compare the magnetic fields of various types of magnets (e.g., bar magnet, disk magnet, horseshoe magnet).

See Level B:

Chapter 9, Lesson 2, Video A, SE page 185; Video B, SE page 186

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 2: Describe how the magnetic field of Earth and a magnet are similar.

b. Compare Earth's magnetic field to the magnetic field of a magnet.

This concept is not covered at this level.

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 2: Describe how the magnetic field of Earth and a magnet are similar.

c. Construct a compass and explain how it works.

See Level A:

Chapter 7, Lesson 2, Activities for All, TG page 132

Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.

Objective 2: Describe how the magnetic field of Earth and a magnet are similar.

d. Investigate the effects of magnets on the needle of a compass and compare this to the effects of Earth's magnetic field on the needle of a compass (e.g., magnets effect the needle only at close distances, Earth's magnetic field affects the needle at great distances, magnets close to a compass override the Earth's effect on the needle).

See Level B:

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

Standard IV: Students will understand features of static and current electricity.

Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.

a. List several occurrences of static electricity that happen in everyday life.

See Level B:

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Process Skill, SE page 183

Standard IV: Students will understand features of static and current electricity.

Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.

b. Describe the relationship between static electricity and lightning.

See Level B:

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

Standard IV: Students will understand features of static and current electricity.

Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.

c. Describe the behavior of objects charged with static electricity in attracting or repelling without touching. See Level B:

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Process Skill, SE page 183

Standard IV: Students will understand features of static and current electricity.

Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.

d. Compare the amount of static charge produced by rubbing various materials together (e.g., rubbing fur on a glass rod produces a greater charge than rubbing the fur with a metal rod, the static charge produced when a balloon is rubbed on hair is greater than when a plastic bag is rubbed on hair).

See Level B:

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180

Standard IV: Students will understand features of static and current electricity.

Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.

e. Investigate how various materials react differently to statically charged objects.

See Level B:

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180

Standard IV: Students will understand features of static and current electricity.

Objective 2: Analyze the behavior of current electricity.

a. Draw and label the components of a complete electrical circuit that includes switches and loads (e.g., light bulb, bell, speaker, motor).

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 IV: Students will understand features of static and current electricity.

Objective 2: Analyze the behavior of current electricity.

b. Predict the effect of changing one or more of the components (e.g., battery, load, wires) in an electric circuit.

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 IV: Students will understand features of static and current electricity.

Objective 2: Analyze the behavior of current electricity.

c. Generalize the properties of materials that carry the flow of electricity using data by testing different materials.

See Level B:

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

Standard IV: Students will understand features of static and current electricity.

Objective 2: Analyze the behavior of current electricity.

d. Investigate materials that prevent the flow of electricity.

See Level B:

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

Standard IV: Students will understand features of static and current electricity.

Objective 2: Analyze the behavior of current electricity.

e. Make a working model of a complete circuit using a power source, switch, bell or light, and a conductor for a pathway. **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 V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring. a. Make a chart and collect data identifying various traits among a given population (e.g., the hand span of students in the

classroom, the color and texture of different apples, the number of petals of a given flower).

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

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring.

b. Identify similar physical traits of a parent organisms and its offspring (e.g., trees and saplings, leopards and cubs, chickens and chicks).

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

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring.

c. Compare various examples of offspring that do not initially resemble the parent organism, but mature to become similar to the parent organism (e.g., mealworms and darkling beetles, tadpoles and frogs, seedlings and vegetables, caterpillars and butterflies).

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

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring.

d. Contrast inherited traits with traits and behaviors that are not inherited but may be learned or induced by environmental factors (e.g., cat purring to cat meowing to be let out of the house; the round shape of a willow is inherited, while leaning away from the prevailing wind is induced).

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

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring.

e. Investigate variations and similarities in plants grown from seeds of a parent plant (e.g., how seeds from the same plant species can produce different colored flowers or identical flowers).

This concept is not covered at this level.

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 2: Describe how some characteristics could give a species a survival advantage in a particular environment. a. Compare the traits of similar species for physical abilities, instinctual behaviors, and specialized body structures that increase the survival of one species in a specific environment over another species (e.g., difference between the feet of snowshoe hare and cottontail rabbit, differences in leaves of plants growing at different altitudes, differences between the feathers of an owl and a hummingbird, differences in parental behavior among various fish).

Chapter 2, KnowZone, SE pages 36-37

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 2: Describe how some characteristics could give a species a survival advantage in a particular environment.

b. Identify that some environments give one species a survival advantage over another (e.g., warm water favors fish such as carp, cold water favors fish such as trout, environments that burn regularly favor grasses, environments that do not burn often favor trees).

Chapter 2, Lesson 2, Video B, SE page 32 Chapter 3, Lesson 2, Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 2: Describe how some characteristics could give a species a survival advantage in a particular environment.

c. Describe how a particular physical attribute may provide an advantage for survival in one environment but not in another (e.g., heavy fur in arctic climates keep animals warm whereas in hot desert climates it would cause overheating; flippers on such animals as sea lions and seals provide excellent swimming structures in the water but become clumsy and awkward on land; cacti retain the right amount of water in arid regions but would develop root rot in a more temperate region; fish gills have the ability to absorb oxygen in water but not on land).

Chapter 2, Lesson 2, Video B, SE page 32; Critical Thinking, SE page 35; KnowZone, SE pages 36-37 Chapter 3, Lesson 2, Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Standard V: Students will understand that traits are passed from the parent organisms to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.

Objective 2: Describe how some characteristics could give a species a survival advantage in a particular environment.

d. Research a specific plant or animal and report how specific physical attributes provide an advantage for survival in a specific environment.

Chapter 2, Lesson 2, Video B, SE page 32; Critical Thinking, SE page 35; KnowZone, SE pages 36-37 Chapter 3, Lesson 2, Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; KnowZone, SE pages 58-59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66