

Contents

CHAPTER 1

Earth's Ecosystems iv

Lesson 1 Introduction to Earth's Ecosystems 2

Lesson 2 Photosynthesis: The Basic Process of Life 10

Lesson 3 Microscopic Organisms on Earth 18

Lesson 4 Earth's Food Chains, Webs, and Pyramids 24

Lesson 5 Earth's Cycles for Life 32

Vocabulary Review 38

CHAPTER 2

Earth's Land and Water 40

Lesson 1 Earth's Land Biomes 42

Lesson 2 Earth's Water Ecosystems 54

Lesson 3 Ecosystems in California 60

Vocabulary Review 70

CHAPTER 3

Heat Energy 72

Lesson 1 Heat Flow 74

Lesson 2 Waves 80

Lesson 3 Fuels: Our Major Energy Source 86

Lesson 4 Heat Transfer in Solids and Fluids 92

Vocabulary Review 96

CHAPTER 4

Energy in the Earth System 98

Lesson 1 Electromagnetic Spectrum 100

Lesson 2 Solar Radiation 106

Lesson 3 The Power of Convection Currents 112

Vocabulary Review 120

| | |
|----------------------------------------------------------------------------|------------|
| CHAPTER 5 | |
| Plate Tectonics and Earth's Structure | 122 |
| Lesson 1 Earth's Moving Plates | 124 |
| Lesson 2 Plate Tectonics: A Unifying Theory. | 130 |
| Lesson 3 Earthquakes | 138 |
| Lesson 4 Volcanoes | 146 |
| Lesson 5 How Plate Tectonics Affects California | 154 |
| Vocabulary Review. | 158 |
| CHAPTER 6 | |
| Shaping Earth's Surface | 160 |
| Lesson 1 Atmospheric Pressure, Temperature, and Weather. | 162 |
| Lesson 2 Weathering, Erosion, and Deposition. | 170 |
| Lesson 3 Rivers and Streams | 176 |
| Lesson 4 Beaches and Wave Erosion | 182 |
| Lesson 5 Changing Habitats. | 186 |
| Vocabulary Review. | 194 |
| CHAPTER 7 | |
| Earth's Resources. | 196 |
| Lesson 1 Sources of Energy | 198 |
| Lesson 2 Renewable and Nonrenewable Resources | 206 |
| Lesson 3 Uses of Resources | 216 |
| Vocabulary Review. | 222 |