

Table of Contents

Unit 1: Foundations

Chapter 1: Introduction to Science

Preparation: Chapter 1	6
1.1 Science and Scientists	8
1.2 Scientific Investigations	10
1.3 Science Tools	12
1.4 Recording Data	14
1.5 Engineering and Technology	16
1.6 Investigate: Engineering Design Process	18
1.7 Chapter 1 Review	20

Unit 2: Life Science

Chapter 2: Animals

Preparation: Chapter 2	30
2.1 Living and Nonliving	32
2.2 Animals Have Needs	34
2.3 Animals Have External Parts	36
2.4 Animals Can Be Grouped	38
2.5 Animal Babies and Their Parents	40
2.6 Investigate: Body Coverings	42
2.7 Chapter 2 Review	44

Chapter 3: Mammals

Preparation: Chapter 3	48
3.1 What Mammals Are	50
3.2 Mammals Have External Parts	52
3.3 Life Cycle of a Beaver	54
3.4 Mammal Babies and Their Parents	56
3.5 Mammals of the Woodlands	58
3.6 Investigate: Mammals Change Their Environments	60
3.7 Chapter 3 Review	62

Chapter 4: Fish and Birds

Preparation: Chapter 4	66
4.1 What Fish and Birds Are	68
4.2 Fish Have External Parts	70
4.3 Birds Have External Parts	72
4.4 How Fish and Birds Detect	74
4.5 Life Cycles of Fish and Birds	76
4.6 Investigate: Camouflage	78
4.7 Chapter 4 Review	80

Chapter 5: Plants

Preparation: Chapter 5	84
5.1 Plants Have Parts	86
5.2 Life Cycle of a Plant	88
5.3 What Plants Need	90
5.4 Plants Are Useful	92
5.5 Plants Protect Themselves	94
5.6 Investigate: Seed Growth	96
5.7 Chapter 5 Review	98
Unit 2 Connect	100
Unit 2 Design	101

Unit 3: Physical Science

Chapter 6: Movement and Sound

Preparation: Chapter 6	112
6.1 What Makes Things Move	114
6.2 Ways Things Move	116
6.3 Investigate: Changing Motion.....	118
6.4 Making Sound.....	120
6.5 Nature of Sound	122
6.6 Investigate: Testing Sound.....	124
6.7 Chapter 6 Review.....	126

Chapter 7: Light

Preparation: Chapter 7	130
7.1 Seeing Light.....	132
7.2 How Light Travels.....	134
7.3 What Light Passes Through	136
7.4 Reflection	138
7.5 Bending Light	140
7.6 Investigate: Communicating with Light.....	142
7.7 Chapter 7 Review.....	144
Unit 3 Connect.....	146
Unit 3 Design.....	147

Unit 4: Earth Science

Chapter 8: Objects in the Sky

Preparation: Chapter 8	158
8.1 Sun	160
8.2 Day and Night.....	162
8.3 Moon and Stars	164
8.4 Patterns in the Night Sky	166
8.5 Differences in the Day and Night Skies	168
8.6 Investigate: Shadows	170
8.7 Chapter 8 Review.....	172

Chapter 9: Weather and Seasons

Preparation: Chapter 9	176
9.1 Weather	178
9.2 Measuring Weather	180
9.3 Seasons	182
9.4 Seasons and Plants	184
9.5 Seasons and Animals	186
9.6 Investigate: How the Sun Warms Surfaces.....	188
9.7 Chapter 9 Review.....	190
Unit 4 Connect.....	192
Unit 4 Design.....	193

Unit 5: Human Body

Chapter 10: Five Senses

Preparation: Chapter 10	202
10.1 Sight and Hearing	204
10.2 Touch	206
10.3 Smell and Taste	208
10.4 Human and Animal Senses	210
10.5 Senses and Safety	212
10.6 Investigate: Food and Senses	214
10.7 Chapter 10 Review	216

Chapter 11: Bones, Muscles, and Teeth

Preparation: Chapter 11	220
11.1 Bones	222
11.2 Muscles and Joints	224
11.3 Healthy Bones and Muscles	226
11.4 Teeth	228
11.5 Healthy Teeth	230
11.6 Investigate: Tooth Care	232
11.7 Chapter 11 Review	234

Chapter 12: Heart and Lungs

Preparation: Chapter 12	238
12.1 Heart	240
12.2 Heart and Blood	242
12.3 Lungs	244
12.4 Lungs and Breath	246
12.5 Healthy Heart and Lungs	248
12.6 Investigate: Number of Breaths	250
12.7 Chapter 12 Review	252

Chapter 13: Stomach and Food

Preparation: Chapter 13	256
13.1 Stomach and Eating	258
13.2 Food as Fuel	260
13.3 Where Food Comes From	262
13.4 Good Food Choices	264
13.5 Healthy Habits	266
13.6 Investigate: Greasy Potato Chips	268
13.7 Chapter 13 Review	270
Unit 5 Connect	272
Unit 5 Design	273

Glossary	277
Index	279