

Chapter 1	Classification I	1.0 Chapter Preparation	4
		1.1 Taxonomy	6
		1.2 Domain to Species	8
		1.3 Bacteria and Archaea	12
		1.4 Eukarya: Protists and Fungi	14
		1.5 Plant Kingdom	16
		1.6 Dichotomous Key	18
		1.7 Tropisms	20
		1.8 Chapter Review	22
		SN Science Notebook Answer Key	24
Chapter 2	Classification II	2.0 Chapter Preparation	30
		2.1 Animal Kingdom	32
		2.2 Vertebrates I	34
		2.3 Vertebrates II	38
		2.4 Invertebrates I	40
		2.5 Invertebrates II	42
		2.6 Dissection	44
		2.7 Biomes	46
		2.8 Chapter Review	48
		SN Science Notebook Answer Key	50
Chapter 3	Cell Processes	3.0 Chapter Preparation	56
		3.1 The Egg as a Cell	58
		3.2 Cell Structure	60
		3.3 Cellular Respiration	64
		3.4 Transport	66
		3.5 Cell Division	68
		3.6 Exploring Cell Processes	70
		3.7 Reproduction	72
		3.8 Chapter Review	74
		SN Science Notebook Answer Key	76
Chapter 4	Heredity and Genetics	4.0 Chapter Preparation	82
		4.1 Genetic Possibilities	84
		4.2 Gregor Mendel	86
		4.3 Basic Genetics	90
		4.4 Gene Combinations	92
		4.5 Dominance	94
		4.6 Forensics and Phenotypes	96
		4.7 Animal Breeding	98
		4.8 Chapter Review	100
		SN Science Notebook Answer Key	102

PHYSICAL SCIENCE: STRUCTURE

UNIT 2

Chapter 5	Periodic Table of Elements	5.0	Chapter Preparation	110
		5.1	Tables	112
		5.2	Atomic Structure	114
		5.3	Atomic Model	118
		5.4	Chemical Families	120
		5.5	Building Molecules	122
		5.6	Elemental Properties	124
		5.7	Structures and Properties	126
		5.8	Chapter Review	128
		SN	Science Notebook Answer Key	130
Chapter 6	States of Matter	6.0	Chapter Preparation	136
		6.1	Solids, Liquids, and Gases	138
		6.2	State Changes	140
		6.3	Temperature Scales	144
		6.4	Uniqueness of Water	146
		6.5	pH Scale	148
		6.6	Changes and Conversions	150
		6.7	Heat Technology	152
		6.8	Chapter Review	154
		SN	Science Notebook Answer Key	156
Chapter 7	Fluids	7.0	Chapter Preparation	162
		7.1	Contrasting States of Matter	164
		7.2	Shape and Volume	166
		7.3	Properties of Fluids	170
		7.4	Bernoulli's Principle	172
		7.5	Flight	174
		7.6	Investigating Pressure	176
		7.7	Applications of Lift	178
		7.8	Chapter Review	180
		SN	Science Notebook Answer Key	182
Chapter 8	Why Things Move	8.0	Chapter Preparation	188
		8.1	Motion	190
		8.2	Newton's Laws of Motion	192
		8.3	Speed and Velocity	196
		8.4	Acceleration and Momentum	198
		8.5	Friction	200
		8.6	Surfaces	202
		8.7	Perpetual Motion	204
		8.8	Chapter Review	206
		SN	Science Notebook Answer Key	208

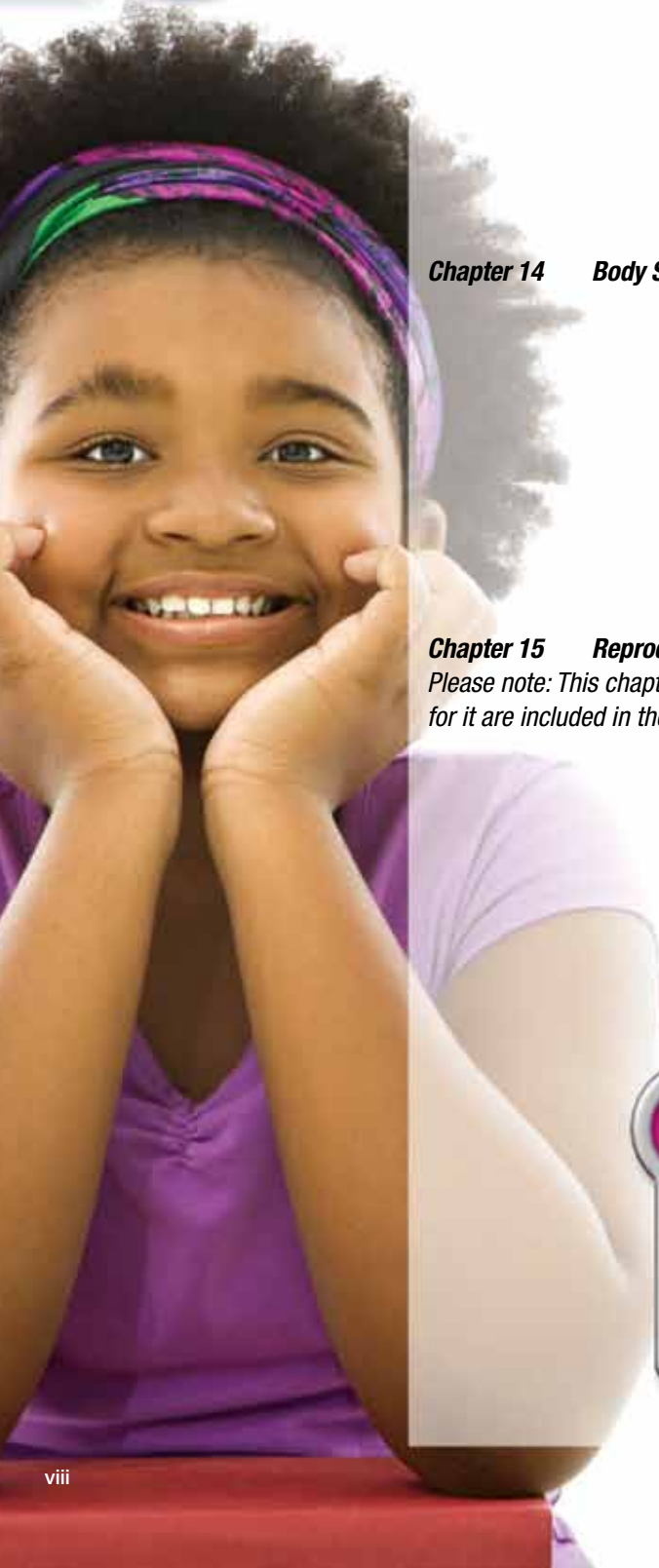
EARTH AND SPACE SCIENCE: PATTERNS

UNIT 3

Chapter 9	Oceans in Motion	9.0 Chapter Preparation	216
		9.1 Notion of Motion	218
		9.2 Water Movement	220
		9.3 Currents	224
		9.4 Ocean Zones	226
		9.5 Marine Life	228
		9.6 Investigating Density	230
		9.7 Brine Pools	232
		9.8 Chapter Review	234
		SN Science Notebook Answer Key	236
Chapter 10	Rock Records	10.0 Chapter Preparation	242
		10.1 Recalling Rocks	244
		10.2 Rock Cycle	246
		10.3 Breakdown	250
		10.4 Deposition	252
		10.5 Fossil Formation	254
		10.6 Creation and Evolution	256
		10.7 Footprints and Contours	260
		10.8 Geologic Layers	262
		10.9 Chapter Review	264
		SN Science Notebook Answer Key	266
Chapter 11	Violent Motions	11.0 Chapter Preparation	272
		11.1 Movement and Balance	274
		11.2 Earthquakes	276
		11.3 Volcanoes	280
		11.4 Thunderstorms and Tornadoes	282
		11.5 Hurricanes	284
		11.6 Epicenters	286
		11.7 Wildfires	288
		11.8 Chapter Review	290
		SN Science Notebook Answer Key	292
Chapter 12	Astronomy	12.0 Chapter Preparation	298
		12.1 Perspective	300
		12.2 Starlight	302
		12.3 Star Populations	306
		12.4 Star Life Cycles	308
		12.5 Celestial Interactions	310
		12.6 Researching and Predicting	312
		12.7 Clusters and Constellations	314
		12.8 Chapter Review	316
		SN Science Notebook Answer Key	318

UNIT
4

HUMAN BODY: DECISIONS



Chapter 13	Interaction of Systems	13.0 Chapter Preparation	326
		13.1 Uniqueness of Humans	328
		13.2 Systems Overview	330
		13.3 Muscular System	334
		13.4 Skeletal System	336
		13.5 Nervous System	338
		13.6 Food Absorption	340
		13.7 The Senses	342
		13.8 Chapter Review	344
		SN Science Notebook Answer Key	346

Chapter 14	Body Stewardship	14.0 Chapter Preparation	352
		14.1 Identifying Nutrients	354
		14.2 Diet and Exercise	356
		14.3 System of Supply	360
		14.4 System of Movement	362
		14.5 System of Control	364
		14.6 Nutrients in Foods	366
		14.7 Healthful Cooking	368
		14.8 Chapter Review	370
		SN Science Notebook Answer Key	372

Chapter 15 **Reproductive System**

Please note: This chapter on the human body reproductive system as well as supplemental materials for it are included in the Teacher Edition only.

15.0 Chapter Preparation	378
15.1 God's Plan for Procreation	380
15.2 Female Pubescent Changes	382
15.3 Male Pubescent Changes	384
15.4 The Female System	386
15.5 The Male System	388
15.6 Human Development	390
15.7 Negative Consequences	392
15.8 Chapter Review	394

RESOURCES

Scientific Inquiry	xx
Glossary	397
Index	403
Science Notebook Index	411