

Contents

Preface iv

To the Instructor iv

To the Student v

Lab	Title	Page	Text Chapter Reference
1	Scientific Method	1	1
2	Measuring with Metric	9	3
3	Microscopy	15	3
4	Chemical Composition of Cells	31	2
5	Cell Structure and Function	45	3
6	Body Tissues	57	4
7	Organization of the Body	75	4
8	Cardiovascular System	91	5, 6
9	Chemical Aspects of Digestion	105	9
10	Energy Requirements and Ideal Weight	115	9
11	Homeostasis	131	9, 10, 11
12	Musculoskeletal System	149	12, 13
13	Nervous System and Senses	167	14, 15
14	Reproduction and Development	183	17, 18
15	Mitosis and Meiosis	199	19
16	Human Genetics	217	21
17	DNA Biology and Technology	231	22
18	Human Evolution	245	23
19	Effects of Pollution on Ecosystems	263	24, 25

Appendix: Metric System A-1

Index I-1

Practical Examination Answer Sheet online at <http://connect.mheducation.com>

Applications for Daily Living

The Stress Test	7	The Liver Is a Vital Organ	147
Microscopic Diagnoses	29	Bone Marrow Transplants	165
Nutrition Labels	42	LASIK Surgery	181
Dehydration and Water Intoxication	55	Cord Around Baby's Neck	198
Tissue Engineering	72	Mitosis and Cancer	214
The Systems Work Together	88	Choosing the Gender of Your Child	229
High Blood Pressure	103	Personal DNA Sequencing	243
Losing Weight	129	Climate Change	270