

TABLE OF CONTENTS

Preface	9
Chapter 1 Biological Levels	15
Chapter 2 Biomolecules	23
Chapter 3 Enzymes	33
Chapter 4 Cell Basics and Organelles	41
Chapter 5 Cell Membranes	55
Chapter 6 Cell Transport	63
Chapter 7 Cellular Respiration	77
Chapter 8 Photosynthesis	93
Chapter 9 DNA	105
Chapter 10 DNA Replication	115
Chapter 11 The Cell Cycle	129
Chapter 12 Cell Division	139
Chapter 13 Genetics	159
Chapter 14 RNA and Protein Synthesis	185
Chapter 15 Mutations	199
Chapter 16 Biotechnology	211
Chapter 17 Evolution: Mechanisms and Evidence	229

Chapter 18 Viruses	243
Chapter 19 Domain Bacteria and Domain Archaea	255
Chapter 20 Domain Eukarya: Fungi, "Protists," Plants, and Animals	265
Chapter 21 Plants: Diversity, Structure, and Reproduction	281
Chapter 22 Ecology	297
Chapter 23 Body Systems Overview	315
Chapter 24 Homeostasis	331
One Last Thing (or several)	341
Glossary	344
About the Authors	369