

BRIEF CONTENTS

part *one*

THE BUILDING BLOCKS OF LIFE

- 1 THEMES AND PROCESSES IN HUMAN BIOLOGY 5
- 2 THE CHEMISTRY OF LIFE 19
- 3 HOW CELLS ARE PUT TOGETHER 37
- 4 HOW YOUR CELLS FUNCTION 53
- 5 HOW YOUR CELLS GET AND USE ENERGY 69

part *two*

HOW YOUR BODY IS ORGANIZED

- 6 THE HUMAN BODY 87
- 7 HOW OUR BODIES MOVE 103
- 8 THE CIRCULATORY SYSTEM 121
- 9 THE RESPIRATORY SYSTEM 137
- 10 THE DIGESTIVE SYSTEM 151
- 11 HOW THE BODY ELIMINATES WASTES 171

part *three*

REGULATING YOUR BODY'S ACTIVITIES

- 12 THE NERVOUS SYSTEM 185
- 13 SENSES 205
- 14 HORMONES 221
- 15 HOW YOUR BODY DEFENDS ITSELF 239

part *four*

GENES AND HUMAN HEREDITY

- 16 HUMAN REPRODUCTION 259
- 17 DEVELOPMENT 277
- 18 THE FOUNDATIONS OF GENETICS 289
- 19 HOW GENES WORK 309
- 20 GENE TECHNOLOGY 327

part *five*

THE WORLD WE LIVE IN

- 21 EVOLUTION AND NATURAL SELECTION 341
- 22 HOW HUMANS EVOLVED 357
- 23 ECOSYSTEMS 373
- 24 PLANET UNDER STRESS 391