

Brief Contents

- 1 Chemistry in Our Lives 33
- 2 Chemistry and Measurements 55
- 3 Matter and Energy 89
- 4 Atoms and Elements 127
- 5 Nuclear Chemistry 166
- 6 Ionic and Molecular Compounds 197
- 7 Chemical Quantities and Reactions 243
- 8 Gases 286
- 9 Solutions 313
- 10 Acids and Bases and Equilibrium 354
- 11 Introduction to Organic Chemistry: Hydrocarbons 392
- 12 Alcohols, Thiols, Ethers, Aldehydes, and Ketones 430
- 13 Carbohydrates 465
- 14 Carboxylic Acids, Esters, Amines, and Amides 504
- 15 Lipids 543
- 16 Amino Acids, Proteins, and Enzymes 583
- 17 Nucleic Acids and Protein Synthesis 622
- 18 Metabolic Pathways and Energy Production 654