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Suggested Reading; 3. Heterocycles and Hereditary Information; 3.1 Nucleic Acids; 3.2 The Double Helix; 3.3 How One DNA Doubles Itself; 3.4 Protein Synthesis, Genetic Code and the Genome; 3.5 What are Mutations?; 3.6 Mysterious Telomeres; 3.7 Gene Expression; 3.8 Problems; 3.9 Suggested Reading; 4. Enzymes, Coenzymes and Vitamins; 4.1 Molecular Robots; 4.2 Coenzymes and Enzymes as 'Joint Molecular Ventures'; 4.2.1 Oxidative-Reductive Coenzymes
4.2.2 Coenzymes as Carriers of Molecular Species4.3 Vitamins, the 'Molecules of Health'; 4.4 Ribozymes: Vestiges of an Ancient World; 4.5 Problems; 4.6 Suggested Reading; 5. Heterocycles and Bioenergetics; 5.1 ATP as the Universal Currency of Energy; 5.2 Breathing; 5.2.1 Glycolysis; 5.2.2 The Krebs Cycle, or the 'Molecular Merry-Go-Round'; 5.2.3 The Respiratory Chain; 5.3 Problems; 5.4 Suggested Reading; 6. Heterocycles and Photosynthesis; 6.1 Chlorophyll: Sunlight-Receiving Antenna and Energy Carrier; 6.2 What Daylight can Achieve; 6.3 Photosynthesis Without Light; 6.4 Problems
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Sommario/riassunto

Heterocycles in Life and Society is an introduction to the chemistry of heterocyclic compounds, focusing on their origin and occurrence in nature, biochemical significance and wide range of applications. Written in a readable and accessible style, the book takes a multidisciplinary approach to this extremely important area of organic chemistry. Topics covered include an introduction to the structure and properties of heterocycles; the key role of heterocycles in important life processes such as the transfer of hereditary information, how enzymes function, the storage and transport of b