





and engaging narrative, superior pedagogy, and innovative use of art and photos to promote student learning. It continues to engage students with its dynamic coverage of the essential elements of this critical discipline. This Tenth Edition, with an increased focus on evolution, ensures students receive the most up-to-date, accurate and relevant information.

AP Biology - Quick Review Study Notes & Facts60 minute review of everything you need to know for the AP Biology testExamville Study Guides

The Chemical Biology of Nitrogen book provides a chemocentric approach to both the inorganic and organic chemical biology of nitrogen. Following an introduction to nitrogen trivalency the book progresses through the logic of inorganic nitrogen metabolism and organic nitrogen metabolites to nitrogen proteomics.

CD-ROM contains: investigations, videos, word study & glossary, cumulative tests and chapter guides.

Barron's AP Biology is one of the most popular test preparation guides around and a "must-have" manual for success on the Biology AP Test. In this updated book, test takers will find: Two full-length exams that follow the content and style of the new AP exam All test questions answered and explained An extensive review covering all AP test topics Hundreds of additional multiple-choice and free-response practice questions with answer explanations This manual can be purchased alone, or with an optional CD-ROM that includes two additional practice tests with answers and automatic scoring. **BONUS ONLINE PRACTICE TEST:** Students who purchase this book or package will also get FREE access to one additional full-length online AP Biology test with all questions answered and explained. Want to boost your studies with even more practice and in-depth review? Try Barron's Ultimate AP Biology for even more prep.

New edition of a standard introductory textbook.

Provides a thorough overview of current research with the green alga *Chlamydomonas* on chloroplast and mitochondrial biogenesis and function, with an emphasis on the assembly and structure-function relationships of the constituents of the photosynthetic apparatus. Contributions emphasize the multidisciplinary nature of current research in photosynthesis, combining molecular genetics, biochemical, biophysical, and physiological approaches. The 36 articles address topics including nuclear genome organization; RNA stability and processing; splicing; translation; protein targeting in the chloroplast; photosystems; pigments; glycerolipids; the ATP synthase; and ferredoxin and thioredoxin. Further contributions address new measurements methods for photosynthetic activity in vivo; starch biosynthesis; the responses of *Chlamydomonas* to various stress conditions; nitrogen assimilation; and mitochondrial genetics. Annotation copyrighted by Book News, Inc., Portland, OR

This volume highlights recent progress on the fundamental chemistry and mechanistic understanding of metallocofactors, with an emphasis on the major development in these areas from the perspective of bioinorganic chemistry.

Metallocofactors are essential for all forms of life and include a variety of metals, such as iron, molybdenum, vanadium,

and nickel. Structurally fascinating metallocofactors featuring these metals are present in many bacteria and mediate remarkable metabolic redox chemistry with small molecule substrates, including N<sub>2</sub>, CO, H<sub>2</sub>, and CO<sub>2</sub>. Current interest in understanding how these metallocofactors function at the atomic level is enormous, especially in the context of sustainably feeding and fueling our planet; if we can understand how these cofactors work, then there is the possibility to design synthetic catalysts that function similarly.

Based on formerly untapped archival sources as well as on interviews of participants, and building upon prior historical literature, *Shaping Biology* covers new ground and raises significant issues for further research on postwar biology and on federal funding of science in general.

**Key Benefit:** For non-majors and mixed-majors introductory botany (plant biology) courses. *Plant Biology* focuses readers on the function of plants and the role they play in our world. With evolved content and a new organization, the authors emphasize the scientific method to help readers develop the critical thinking skills they need to make sound decisions throughout life. Together, the emphasis on how plants work and the development of critical-thinking skills support the authors' goal of fostering scientific literacy. **Key Topics:** Introduction to Plant Biology, Plants and People, Molecules and Plants, Cells, Photosynthesis and Respiration, DNA, RNA, and Protein Synthesis, Cell Division: Mitosis and Cytokinesis, Plant Structure, Growth, and Development, Stems, Roots, Leaves, Plant Behavior, Reproduction, Meiosis, and Life Cycles, Genetics and the Laws of Inheritance, Genetic Engineering, Biological Evolution, Naming and Organizing Microbes, Viruses, and Plants, Prokaryotes and the Origin of Life, Protists and the Origin of Eukaryotic Cells, Fungi and Lichens, Seedless Plants: Bryophytes, Lycophytes, and Pteridophytes, Gymnosperms and the Origin of Seeds, Angiosperm Reproduction: Flowers, Fruits, and Seeds, Flowering Plant and Animal Coevolution: Pollination and Seed Dispersal, Principles of Ecology and the Biosphere, Arid Terrestrial Ecosystems, Moist Terrestrial Ecosystems, Aquatic Ecosystems, Human Impacts and Sustainability **Market Description:** For those interested in learning the basics of plant biology

Based on documents and publications relating to the life and research of Gregor Mendel, the discoverer of the fundamental laws of heredity and the father of modern genetics, this study examines the life of Mendel as scientist, as abbot, and as a man. A new picture of Mendel is presented, incorporating not only the circumstances under which his discoveries were made, but also the attitudes towards these new ideas, both among his contemporaries and in the years following his great achievement.

Provides a study plan to build knowledge and confidence, discusses study skills and strategies, provides two practice exams, and includes a review of the core concepts covered by the material.

