



The Same Trusted, Accessible Content Plus New Coverage and Features for Today's AP Classroom

Students explore AP Biology through an inquiry-based lens as they discover the unity and interconnected nature of the study of life. Author Sylvia Mader blends her iconic field expertise with a clear, easy-to-understand writing style to provide students with concise and engaging instruction, practice, and support for AP success. The stunning illustrative artwork and photo presentations add visual interest and powerful pedagogical tools to support and enhance key concepts. Mader's *Biology* is fully-aligned to the College Board's AP Curriculum Framework with integrated AP coverage and new features including new unit projects focused on the AP science practices, features focused on AP illustrative examples, and full chapter reviews with AP-style questions.

Your Teaching and Learning Resources for AP Success:

- *Focus Review Guide* workbook to reinforce key AP concepts
- AP Test Banks, featuring AP-style questions to help students prepare for the AP Exam
- AP Teacher Manual with helpful hints to support teachers throughout the course, as well as a pacing guide and classroom activities
- Customizable PowerPoint presentations
- AP Edition eBook and an AP *SmartBook*[®] adaptive reading experience, designed to help students learn faster, study more efficiently, and retain more knowledge
- AP Suggested Activities and more!



The Pathway to Success for Today's AP[®] Students

AP advantage helps students navigate the rigors of Advanced Placement[®] coursework with accessible, engaging and fully aligned resources designed specifically for today's learners.

1 ONboard[™]

AP Course Prep

- Self-paced, diagnostic, interactive AP course prep
- Builds prerequisite skills and knowledge before the first day of class
- Great for summer assignments

2 APc[®]ore[™]

AP Course Resources

- Robust online teaching and learning platform that extends class instruction
- Interactive, engaging pedagogy tied to the text
- Powerful reporting tools and customizable content

3 SCOREboard[™]

AP Test Prep

- Personalized, adaptive AP content review
- Four complete, auto-graded AP practice exams
- Builds mastery and confidence for AP Exam success

AP[®], Advanced Placement[®], and Advanced Placement Program[®] are trademarks registered by the College Board, which was not involved in the production of, and does not endorse, these products.

Table of Contents

Chapter 1 A View of Life

UNIT 1: THE CELL

- Chapter 2 Basic Chemistry
- Chapter 3 The Chemistry of Organic Molecules
- Chapter 4 Cell Structure and Function
- Chapter 5 Membrane Structure and Function
- Chapter 6 Metabolism: Energy and Enzymes
- Chapter 7 Photosynthesis
- Chapter 8 Cellular Respiration

UNIT 2: GENETIC BASIS OF LIFE

- Chapter 9 The Cell Cycle and Cellular Reproduction
- Chapter 10 Meiosis and Sexual Reproduction
- Chapter 11 Mendelian Patterns of Inheritance
- Chapter 12 Molecular Biology of the Gene
- Chapter 13 Regulation of Gene Expression
- Chapter 14 Biotechnology and Genomics

UNIT 3: EVOLUTION

- Chapter 15 Darwin and Evolution
- Chapter 16 How Populations Evolve
- Chapter 17 Speciation and Macroevolution
- Chapter 18 Origin and History of Life
- Chapter 19 Taxonomy, Systematics, and Phylogeny

UNIT 4: MICROBIOLOGY AND EVOLUTION

- Chapter 20 Viruses, Bacteria, and Archaea
- Chapter 21 Protist Evolution and Diversity
- Chapter 22 Fungi Evolution and Diversity

UNIT 5: PLANT EVOLUTION AND BIOLOGY

- Chapter 23 Plant Evolution and Diversity

- Chapter 24 Flowering Plants: Structure and Organization
- Chapter 25 Flowering Plants: Nutrition and Transport
- Chapter 26 Flowering Plants: Control of Growth Responses
- Chapter 27 Flowering Plants: Reproduction

UNIT 6: ANIMAL EVOLUTION AND DIVERSITY

- Chapter 28 Invertebrate Evolution
- Chapter 29 Vertebrate Evolution
- Chapter 30 Human Evolution

UNIT 7: COMPARATIVE ANIMAL BIOLOGY

- Chapter 31 Animal Organization and Homeostasis
- Chapter 32 Circulation and Cardiovascular Systems
- Chapter 33 The Lymphatic and Immune Systems
- Chapter 34 Digestive Systems and Nutrition
- Chapter 35 Respiratory Systems
- Chapter 36 Body Fluid Regulation and Excretory Systems
- Chapter 37 Neurons and Nervous Systems
- Chapter 38 Sense Organs
- Chapter 39 Locomotion and Support Systems
- Chapter 40 Hormones and Endocrine Systems
- Chapter 41 Reproductive Systems
- Chapter 42 Animal Development and Aging

UNIT 8: BEHAVIOR AND ECOLOGY

- Chapter 43 Behavioral Ecology
- Chapter 44 Population Ecology
- Chapter 45 Community and Ecosystem Ecology
- Chapter 46 Major Ecosystems of the Biosphere
- Chapter 47 Conservation of Biodiversity

ISBN List

AP advantage Print and Digital Bundle (Student Edition with ONboard™, Online Student Edition, SCOREboard™)

.....6 year: 978-0-07-903170-9 | 1 year: 978-0-07-903176-1

AP advantage Deluxe Print and Digital Bundle (Student Edition with AP Focus Review Guide, ONboard™, Online Student Edition, SCOREboard™)

.....6 year: 978-0-07-903174-7 | 1 year: 978-0-07-903180-8

AP advantage Digital Student Subscription (ONboard™, Online Student Edition, SCOREboard™)

.....6 year: 978-0-07-903207-2 | 1 year: 978-0-07-903206-5

AP advantage Digital Teacher Subscription (ONboard™, Online Teacher Edition, SCOREboard™)

.....6 year: 978-0-07-903210-2 | 1 year: 978-0-07-903209-6

AP advantage access includes an AP SmartBook, interactive eBook, AP Test Banks, and AP Teacher Manual, and more teaching and learning resources.