

# Science 10 Sunrise Edition

**Biology** based on Biology textbook

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
<p><b>Life, Matter, and Energy</b></p> <p><b>An Overview of Life</b> Life and Its Designer Characteristics of Living Things Classification of Living Things</p> <p><b>Biochemistry</b> Matter and Energy Chemical Reactions Water Carbohydrates and Lipids Proteins and Nucleic Acids</p> <p><b>Energy and Matter Flow in an Ecosystem</b> The Web of Life Energy Flow Carbon Cycle Nitrogen and Phosphorus Cycles</p>	<p><b>Ecology</b></p> <p><b>Biomes and Ecosystems</b> Introduction to Biomes and Ecosystems Biomes Change and Succession in Ecosystems</p> <p><b>Communities and Populations</b> Community Interactions Symbiosis Species Diversity Population Requirements, Density, and Distribution Population Change</p> <p><b>Human Interactions With the Biosphere</b> The Importance of Biodiversity Threats to Biodiversity Stewardship of Biodiversity</p>	<p><b>Cells and Cell Processes</b></p> <p><b>Introduction to the Cell</b> Introduction to the Cell Structure of the Cell Organelles Cell Specialization</p> <p><b>Cellular Processes</b> Cell Transport Cell Signaling Cellular Respiration</p> <p><b>The Cell's Role in Genetics</b> DNA Protein Synthesis Mitosis Meiosis</p>	<p><b>Genetics</b></p> <p><b>Mendelian Genetics</b> Mendel – Father of Modern Genetics Mendel's Principles Using Mendel's Principles More Complex Crosses and Independent Assortment</p> <p><b>Advanced Genetics</b> What Mendel Did Not Know Changes in Genes and Chromosomes Factors That Influence Human Genetics</p> <p><b>Limitations of Genetic Diversity</b> Natural Selection Speciation The Development of Evolutionary Theory The Limit of Genetic Change The Unlikelihood of Evolutionary Theory</p>	<p><b>Plants: Form and Function</b></p> <p><b>Plants and Their Purpose</b> Plants and the Environment Photosynthesis: Light-Dependent Phase Photosynthesis: Light-Independent Phase</p> <p><b>Plant Structure</b> Introduction to Plant Structure Leaves Stems Roots</p> <p><b>Plants and Their Environment</b> Plant Design for Fitness Growth Responses to Abiotic Factors Physiological Responses to Abiotic Factors Plant Defense Beneficial Plant Interactions</p>
Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
<p><b>Plants: Reproduction and Cultivation</b></p> <p><b>Plant Diversity</b> Plant Life Cycle and Diversity Bryophytes Seedless Vascular Plants Gymnosperms Angiosperms</p> <p><b>Plant Reproduction</b> Flowers Fruits and Seeds Asexual Reproduction</p> <p><b>Plant–Human Interactions</b> The Green Revolution and Intensive Agriculture Sustainable Agriculture Ecological Principles in Agriculture Soil and Plant Nutrition</p>	<p><b>Fungi, Microorganisms, and Viruses</b></p> <p><b>Fungi</b> Characteristics of Fungi Fungus Reproduction and Classification Fungi in Their Environment Fungi and Humans</p> <p><b>Protists</b> Fungus-Like Protists Algae Protozoa</p> <p><b>Bacteria and Viruses</b> Bacteria: Characteristics and Classification Bacteria Diversity Viruses Bacterial and Viral Disease; Vaccines</p>	<p><b>Invertebrates</b></p> <p><b>Introduction to Animals; Invertebrates</b> Introduction to Animals Sponges Cnidarians</p> <p><b>More Invertebrates</b> Flatworms and Roundworms Segmented Worms Echinoderms Mollusks</p> <p><b>Arthropods</b> Introduction to Arthropods Crustaceans and Myriapods Arachnids Insects: Classification and Life Cycle Insects in Their Environment</p>	<p><b>Vertebrates</b></p> <p><b>Introduction to Vertebrates; Fish</b> Chordate Classification and Characteristics Invertebrate and Vertebrate Chordates Fish: Characteristics and Classification Fish in Their Environment</p> <p><b>Amphibians and Reptiles</b> Amphibians: Characteristics and Classification Amphibians in Their Environment Reptiles: Characteristics and Classification Reptiles in Their Environment</p> <p><b>Birds and Mammals</b> Birds: Characteristics and Classification Birds in Their Environment Mammals: Characteristics and Classification Mammals in Their Environment</p>	<p><b>Animal Processes and Behavior</b></p> <p><b>Homeostasis and Exchange</b> Introduction to Homeostasis Digestion and Absorption Gas Exchange Excretion Circulation</p> <p><b>Control of Homeostasis</b> Chemical Control of Homeostasis Neural Control of Homeostasis Defense and Immunity Muscles and Skeletons</p> <p><b>Animal Behavior</b> Introduction to Animal Behavior Social Behavior Behavioral Adaptations to the Environment</p>