BIOLOGY

3 WEEK STUDY PLAN

Week 1: Molecular & Cellular Biology

Day 1: Chemical Composition of Organisms

- Read: Chapter 2 (Atoms, Water, Carbon)
- Review: Macromolecules (Carbohydrates, Lipids, Proteins, Nucleic Acids)
- Practice: Draw chemical structures & memorize key functions

Day 2: Cell Structure & Function

- Read: Chapter 4 (Prokaryotic vs. Eukaryotic Cells, Organelles)
- Review: Plasma Membrane (Chapter 5)
- Activity: Compare cell types, label diagrams

Day 3: Enzymes & Metabolism

- Read: Chapter 6 (Enzymes & Energy)
- Review: Cellular Respiration (Glycolysis, Citric Acid Cycle, Oxidative Phosphorylation)
- Practice: Make a flowchart of energy transformations

Day 4: Photosynthesis

- Read: Chapter 8 (Light Reactions & Calvin Cycle)
- Review: Energy flow in plants vs. animals
- Practice: Compare photosynthesis vs. cellular respiration

Day 5: Cell Division & Genetics Intro

- Read: Chapter 10 (Cell Cycle & Mitosis)
- Review: Chapter 11 (Meiosis & Sexual Reproduction)
- Activity: Compare mitosis & meiosis, label stages

Day 6: Review & Practice

- Practice: Flashcards for key terms

- **Review: Rework practice questions from previous days**
- **Test: Take a short self-quiz**

Day 7: Rest or Light Review

- **Optional: Watch videos or review weak areas**

Week 2: Organismal Biology

Day 8: Plant Biology

- **Read: Chapter 30 (Plant Body, Stems, Roots, Leaves)**
- **Review: Chapter 31 (Soil & Nutrition)**
- **Activity: Draw and label plant structures**

Day 9: Plant Reproduction & Transport

- **Read: Chapter 32 (Pollination, Asexual Reproduction)**
- **Review: Water/Solute Transport**
- **Activity: Explain plant reproduction in simple terms**

Day 10: Animal Diversity & Body Systems

- **Read: Chapter 27 (Animal Classification)**
- **Review: Chapter 33 (Basic Animal Form & Function)**
- **Activity: Compare plant vs. animal body structures**

Day 11: Nervous, Endocrine, & Circulatory Systems

- **Read: Chapters 34–42 (Key Systems)**
- **Review: Nervous System, Endocrine System, Circulatory System**
- **Practice: Summarize how these systems interact**

Day 12: Animal Reproduction & Development

- **Read: Chapter 43 (Gametogenesis, Fertilization, Development)**
- **Activity: Compare reproduction in plants vs. animals**

Day 13: Review & Testing

- **Practice: Self-test with recall questions**
- **Review: Revisit notes & difficult topics**

Day 14: Light Review or Rest

- **Optional: Teach someone else or create a study guide**

Week 3: Population Biology & Evolution

Day 15: Ecology & Environment

- Read: Chapters 44–47 (Ecology, Conservation)
- Review: Biogeochemical cycles, Population Growth
- Activity: Draw & explain ecological cycles

Day 16: Evolution & Speciation

- Read: Chapters 18–20 (Evolution, Natural Selection, Phylogeny)
- Review: Hardy-Weinberg & Genetic Drift
- Activity: Explain evolution with examples

Day 17: Behavioral & Social Biology

- Read: Topics in Evolution & Ecology Chapters
- Review: Social structures in animals & humans
- Activity: Compare innate vs. learned behavior

Day 18: Applied Genetics & Human Impact

- Read: Chapters on Genetics (Chapters 14–16)
- Review: Genetic Engineering, Human Evolution
- Practice: Explain gene expression in simple terms

Day 19: Review & Self-Testing

- Test: Practice multiple-choice & short-answer questions
- Review: Revisit weak areas, summarize key concepts

Day 20: Final Review & Mock Exam

- Activity: Take a timed full-length practice test
- Review: Errors & areas for improvement

Day 21: Rest & Confidence Boost

- Light review, relaxation, or explanation to a friend.