

Honors Biology

Unit 5 – Evolution

Unit Objectives

I Can Statements:

- I can define biological evolution
- I can explain Charles Darwin's role in the study of evolution
- I can discuss the differences between Lamarck and Darwin's ideas about evolution
- I can describe the process of natural selection & give examples
- I can describe the difference between natural selection and artificial selection
- I can explain the difference between micro & macroevolution & give an example of each
- I can list and describe types of evidence (fossils, molecular evidence, embryology, homologous structures, vestigial structures, analogous structures, geographical distribution) and explain how they support the Theory of Evolution
- I can define speciation and describe events that may lead to speciation
- I can give an example of temporal, behavioral, and geographical isolation
- I can list the domains & the levels of taxonomy
- I can write out the scientific name of a species using the correct format
- I can correctly draw a cladogram and explain where the common ancestors are
- I can explain how taxonomy shows evolutionary relatedness among two organisms

Textbook: Sections 16.1-16.4, 17.2-17.3, 18.1-18.3

Vocabulary:

Species	Fossil	Evolution
Extinct	Jean-Baptiste Lamarck	Law of Superposition
Charles Lyell	Inheritance of Acquired Traits	Uniformitarianism
Charles Darwin	Alfred Russell Wallace	Natural Selection
Survival of the Fittest	Fitness	Adaptation
Variation	Overproduction	Artificial Selection
Selective Breeding	Macroevolution	Microevolution
Common Descent	Descent with Modification	Adaptive Radiation
Genetic Drift	Gene Flow	Speciation
Allopatric Speciation	Sympatric Speciation	Geographic Isolation
Reproductive Isolation	Behavioral Isolation	Temporal Isolation
Biogeography	Embryology	Homologous Structures
Analogous Structures	Vestigial Structures	Atavism
Contrivance	Taxonomy	Carolus Linnaeus
Binomial Nomenclature	Cladogram	Common Ancestors
Scientific Name		

****Study Tip: Create an outline of your notes. For each section/topic come up with a main idea heading and then only 2-3 important details about the main idea. This forces you to make connections and decide what is most important.**