Honors Biology I

Evolution

Honors Biology Curriculum

Power Objectives

P.O. #2: Explain the mechanisms responsible for the evolution of life. (P.O. #2 Proficiency Rubric)

P.O. #5: Design and conduct science investigations. (P.O. #5/6 Proficiency Rubric)

P.O. #6: Appraise emerging scientific issues associated with the biological sciences. (P.O. #5/6 Proficiency Rubric)

Academic Vocabulary

❑ gene flow	❑ clade	❑ Occam's razor
❑ allele frequency	❑ monophyletic	❑ homologous structures
❑ Hardy-Weinberg	❑ paraphyletic	❑ convergent evolution
❑ natural selection	❑ synapomorphy	❑ divergent evolution
❑ homology	❑ derived character	❑ vestigial structures
❑ cladistics	❑ sexual dimorphism	

Enduring Understanding

Students understand that...

- The theory of evolution is the unifying principle in biology and explains the vast diversity and relatedness of all life.

Essential Questions

- How can the environment influence which organisms survive in population?
- What role does mate selection play in evolution?
- How can scientists determine if evolution is taking place?
- What types of factors influence what phenotypes persist in a population?