Honors Biology
Unit 13 Objectives

1. Vocabulary: Darwin, natural selection, decent with modification, hypothesis, theory, law, microevolution, macroevolution, species, local population, population genetics, gene pool, allele frequency, polymorphic, Hardy-Weinberg model, gene flow, genetic drift, founder effect, population bottleneck, inbreeding, inbreeding depression, artificial selection.

3. Explain the concept of natural selection in terms of resources, variation, mutation, allele frequencies, and adaptation to the environment.

4. Given information concerning a change in allele frequencies within a population, use the concept of equilibrium to explain the frequency change in light of local environmental conditions.

6. Given phenotypic frequencies in a population, use the Hardy-Weinberg principle to calculate allele and genotypic frequencies of sample populations. Tie the use of this principle into the measurement of microevolution.

7. Describe the consequences of natural selection, genetic drift, gene flow, and mutation on small and large populations.