

Honors Biology
Class Activity
Population Genetics

With your group, complete the following activities:

1. List the 5 conditions which are necessary to maintain “genetic equilibrium”(i.e. necessary for Natural Selection to NOT occur) according to the Hardy-Weinberg Principle:
 - a)
 - b)
 - c)
 - d)
 - e)
2. Use the Hardy-Weinberg Equation to answer the following:

If a population is in genetic equilibrium and the value of p is 0.3, what proportion of the population has each genotype?

3. On a separate sheet, create 3 separate graphs(simple) which depict each of the following:
 - a) Directional Selection
 - b) Stabilizing Selection
 - c) Disruptive Selection

