

Name _____

EVOLUTION READING GUIDE
(CHAPTER 16)

1. Describe what is meant by microevolution and macroevolution.
2. Provide a description of the discipline of study called population genetics.
3. Describe what is meant by gene pool, use an example to illustrate your point.
4. What is meant by polymorphic, use an example to illustrate your point.
5. Provide and explain four sources of genetic variation in populations.
6. List the assumptions of the Hardy-Weinberg model, are these realistic in naturally occurring populations? Explain why or why not.
7. Briefly describe why the allele for sickle-cell anemia persists in populations even with the negative effects for those who are homozygous.
8. Completely explain the four mechanisms by which allelic frequencies change in gene pools.
9. Completely describe genetic drift, use an appropriate example from the Mutagen Valley Lab to illustrate your point.
10. Completely explain what is meant by founder effect and provide an example.
11. Completely explain what is meant by a genetic bottleneck, and how it can lead to extensive inbreeding.
12. Completely explain what is meant by inbreeding depression and provide an example.