**AP Biology Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Guided Reading Chapter 24**

1. Define speciation.
2. What is the biological species concept?
3. What are the differences between prezygotic and postzygotic barriers to reproduction?
4. Identify each of the following as prezygotic or postzygotic barriers and write a brief definition of each:
   1. Habitat isolation
   2. Temporal isolation
   3. Behavioral isolation
   4. Mechanical isolation
   5. Gametic isolation
   6. Reduced hybrid viability
   7. Reduced hybrid fertility
   8. Hybrid breakdown
5. Detail these other definitions of species:
   1. Morphological species concept
   2. Paleontological species concept
   3. Ecological species concept
   4. Phylogenetic species concept
6. What is the basis for allopatric speciation?
7. What does sympatric speciation mean?
8. What is the difference between autopolyploidy and allopolyploidy?
9. In what types of organisms is polyploidy speciation more common and why do you think this occurs?
10. Discuss the three possible outcomes for hybrids in a hybrid zone?
11. Compare and contrast the models of punctuated equilibrium to gradualism as models for the rate of evolution. Does one have to exclude the other?