Name _____ Class _____ Date _____

Reviewing Key Concepts

Short Answer *On the lines provided, answer the following questions.*

1. How might natural selection on single-gene traits lead to evolution?

_____

2. What is directional selection?

_____

_____

3. In stabilizing selection, how does the fitness of individuals at the center of the curve differ from the individuals at either end?

_____

4. How does disruptive selection result in two distinct phenotypes?

_____

_____

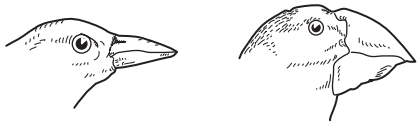
5. What occurs during genetic drift?

_____

Completion *On the lines provided, complete the sentences in the following paragraph.*

There are five conditions required to maintain genetic equilibrium. First, _____ (6.) ensures that every member of a population has an equal chance to pass on its genes. Second, an extremely large population is necessary to minimize genetic drift. Third, the population's gene pool must be kept _____ (7.) from other gene pools. Fourth, genes must not mutate from one form to another. Finally, so that all genes have an equal probability of survival, there can be no _____ (8.).

Reviewing Key Skills



9. **Applying Concepts** You examine these two beaks: One is narrow and needlelike. The other looks like a pair of pliers. Explain whether these beaks could have resulted from a single example of stabilizing selection.

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