

Chapter 16 Evolution of Populations

Section Review 16-1

Reviewing Key Concepts

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

Two main sources of genetic variation are _____ **1.**
and _____ **2.**

The number of _____ **3.** produced for a given trait depends on how many _____ **4.** control the trait.

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

5. Describe the source of genetic variation that involves changes in the DNA code.

6. Why is a widow's peak considered a single-gene trait?

Reviewing Key Skills

7. **Calculating** A particular gene pool contains only two alleles, G and H, for an inheritable trait. If allele G has a relative frequency of 42 percent, what is the relative frequency of allele H?

8. **Inferring** Analysis shows that an organism may have a mutation, yet the organism's phenotype has not been affected. From this observation, what can you infer about the mutation?

9. **Comparing and Contrasting** How are mutations and gene shuffling alike? How do they differ?

10. **Comparing and Contrasting** What is one difference between a single-gene trait and a polygenic trait?

