NAME DATE CLASS

Chapter 5

STUDY GUIDE

Use with Text Pages 132–136

Genetics Since Mendel

Write the letter of the term or phrase that best completes each sentence.

_____ **1.** When both alleles of a gene are expressed in the offspring, the condition is called _____ .
a. heredity
b. mixing
c. blending
d. incomplete dominance

_____ **2.** An example of incomplete dominance is _____ .
a. a white allele and a red allele in a plant producing pink flowers
b. red flowers crossed with white flowers producing both red and white flowers
c. a red allele covering a white allele in red flowers
d. a dominant pink allele covering recessive red and white alleles

_____ **3.** Because alleles A and B for blood type are inherited by incomplete dominance, a person with genotype AB would have the phenotype _____ .
a. A
b. B
c. AB
d. O

_____ **4.** Because alleles A and B are both dominant and the O allele is recessive, a person with phenotype O would have genotype _____ .
a. AO
b. BO
c. ABO
d. OO

_____ **5.** A person with phenotype O blood could not be the parent of an offspring with phenotype _____ blood.
a. O
b. A
c. AB
d. B

For each item, identify the type of inheritance. Write "multiple allele" or "polygenic" in the blank.

_____ **6.** A group of genes acts together to produce a single trait.

_____ **7.** One trait is controlled by more than two alleles of a gene.

_____ **8.** There are three alleles for human blood type.

_____ **9.** Up to six gene pairs may control the color of human skin.

_____ **10.** The effect of a single allele may be small, but the combination of alleles from many genes produces a wide variety in a trait.

_____ **11.** Human traits such as eye and hair color, height, and weight are controlled by two or more gene pairs.

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