

Skills Worksheet

# Directed Reading

## Section: Mendel's Theory

In the space provided, write the letter of the description that best matches the term or phrase.

- |                       |   |
|-----------------------|---|
| _____ 1. alleles      | a. when two different alleles are present, the allele that is completely expressed                    |
| _____ 2. dominant     | b. when two alleles of a particular gene are the same   |
| _____ 3. recessive    | c. when two alleles of a particular gene are different  |
| _____ 4. homozygous   | d. an organism's physical appearance  |
| _____ 5. heterozygous | e. the set of alleles that an organism has  |
| _____ 6. genotype     | f. different forms of a gene  |
| _____ 7. phenotype    | g. when two different alleles are present, the allele that has no observable effect on the organism's |

Complete each statement by writing the correct term or phrase in the space provided.

8. If the allele for yellow peas is  $Y$ , the allele for the contrasting trait, green peas, is \_\_\_\_\_.
9. If  $Tt$  is the genotype of a plant, where  $T$  stands for tall and the recessive allele stands for short, its phenotype is \_\_\_\_\_.
10. If  $tt$  is the genotype of a plant, where  $T$  stands for tall and the recessive allele stands for short, its phenotype is \_\_\_\_\_.

Read each question, and write your answer in the space provided.

11. What is the *law of segregation*?

---

---

---

12. What is the *law of independent assortment*?

---

---