

Skills Worksheet

# Directed Reading

---

## Section: Modeling Mendel's Laws

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

1. In a testcross to determine if an individual with a dominant phenotype is heterozygous or homozygous for the character, you always cross the individual with a homozygous \_\_\_\_\_ individual.
2. If the offspring of a testcross all have the dominant trait, then the genotype of the individual being tested is \_\_\_\_\_.
3. If some of the offspring of a testcross have the recessive trait, then the genotype of the individual being tested is \_\_\_\_\_.
4. The probability that a gamete from a plant with a  $Tt$  genotype will carry a  $t$  allele is \_\_\_\_\_.
5. The probability of homozygous recessive offspring resulting from a cross between two homozygous dominant individuals is \_\_\_\_\_.
6. The probability of heterozygous offspring resulting from a cross between two heterozygous individuals is \_\_\_\_\_.

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

7. When studying a pedigree, how do scientists determine if a trait is sex-linked?

---

---

8. When studying a pedigree, how do scientists determine if an autosomal trait is dominant or recessive?

---

---

---