

Skills Worksheet

Directed Reading B

Section: Mendel and His Peas (pp. 174–179)

1. What is heredity?

2. What field of study did Mendel's experiments help establish?

BEFORE MENDEL

- _____ 3. If a brown rabbit mates with a white rabbit, the offspring would be tan according to the idea of
- a. mixing inheritance.
 - b. proportionate inheritance.
 - c. Mendelian inheritance.
 - d. blending inheritance.

GREGOR MENDEL'S WORK

- _____ 4. Gregor Mendel was born in
- a. the United States.
 - b. Austria.
 - c. Germany.
 - d. Italy.

5. Why did Mendel study garden peas?

6. Why is it possible for pea plants to self-pollinate?

Directed Reading B *continued*

MENDEL'S FIRST EXPERIMENTS

- _____ **16.** When plants that are true breeding for different traits of a characteristic are crossed, the offspring are called
- dominant plants.
 - recessive plants.
 - first-generation plants.
 - second-generation plants.
- _____ **17.** When plants that are true breeding for different traits of a characteristic are crossed, the trait observed in the first generation is called the
- dominant trait.
 - recessive trait.
 - first-generation trait.
 - second-generation trait.
- _____ **18.** A trait that reappears in the second generation after disappearing in the first generation is called a
- dominant trait.
 - recessive trait.
 - first-generation trait.
 - second-generation trait.

MENDEL'S SECOND EXPERIMENTS

- _____ **19.** When first-generation plants are allowed to self-pollinate, the offspring are called
- dominant plants.
 - recessive plants.
 - first-generation plants.
 - second-generation plants.
- _____ **20.** When first-generation plants are allowed to self-pollinate, what type of traits appear in the second generation?
- Only the dominant traits appear.
 - Only the recessive traits appear.
 - Dominant and recessive traits appear.
 - New traits appear.
- _____ **21.** In Mendel's experiments, what type of trait appeared most often in the second generation?
- dominant traits
 - recessive traits
 - passive traits
 - new traits