

## Assessment

**Quiz****Section: Origins of Hereditary Science**

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- \_\_\_\_\_ 1. The garden pea is a good subject for genetic study because it
- is easy to grow.
  - has characters in two clearly different forms.
  - produces many offspring.
  - All of the above
- \_\_\_\_\_ 2. Mendel first allowed each variety of garden pea to self-pollinate for several generations. This produced the
- F<sub>1</sub> generation.
  - F<sub>2</sub> generation.
  - P generation.
  - filial generation.
- \_\_\_\_\_ 3. What did Mendel find in the F<sub>1</sub> generation?
- a ratio of 3:1
  - a ratio of 3:1:3
  - 30 percent of the plants expressed the dominant trait.
  - 100 percent of the plants expressed the dominant trait.
- \_\_\_\_\_ 4. Which ratio of plants expressing contrasting traits did Mendel find in the F<sub>2</sub> generation?
- 3:1
  - 3:1:3
  - 3:3
  - 1:1
- \_\_\_\_\_ 5. The trait that disappeared in the F<sub>1</sub> generation
- reappeared in some plants in the F<sub>2</sub> generation.
  - reappeared in all plants in the F<sub>2</sub> generation.
  - reappeared in some plants in the P generation.
  - was lost forever.

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

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|---------------------|--|
| _____ 6. Mendel     | a. comparison of two numbers   |
| _____ 7. ratio      | b. branch of biology that focuses on heredity  |
| _____ 8. hybrid     | c. he did breeding experiments with garden pea plants                                  |
| _____ 9. generation | d. all the offspring produced from a group of parents                                  |
| _____ 10. genetics  | e. the offspring of a cross between parents that have differing traits for a character |