

Guided Reading Activity

6-4

Heredity and Environment

For use with textbook pages 174-176

Directions: Filling in the Blanks Use your textbook to fill in the blanks using the words in the box.

| | | |
|-----------------|-----------------|--------------------|
| behavior | heredity | monozygotic |
| dizygotic | identical twins | nature |
| environment | instinctive | nurture |
| fraternal twins | John Watson | Sir Francis Galton |
| genes | learned | |

Heredity and Environment

1 Genes establish(es) what you could be, and 2 environment define(s) the final product. People often argue about whether human behavior is 3 instinctive (due to heredity) or 4 learned (due to environment). 5 Heredity is the genetic transmission of characteristics from parents to their offspring. In the "nature vs. nurture question," 6 nurture refers to environmental factors, such as family, culture, education, and individual experiences; 7 nature refers to the characteristics that a person inherits—his or her biological makeup.

8 Sir Francis Galton became one of the first to preach the importance of nature in the modern era. He found that success ran in families and concluded that heredity was the cause. Many psychologists, however, have emphasized the importance of the environment. The tone was set by 9 John Watson, the founder of behaviorism.

Genes build and modify the body's physical structures, which must then interact with their environment to produce 10 behavior. One way to find out whether a trait is inherited is to study twins. 11 Identical twins develop from a single fertilized egg (thus they are called 12 monozygotic) and share the same genes. 13 Fraternal twins develop from two fertilized eggs (thus, 14 dizygotic), and their genes are no more similar than those of brothers or sisters.

