

## Skills Worksheet

**Critical Thinking****Work-Alikes**

In the space provided, write the letter of the phrase that best describes how each numbered item functions

- |                                 |   |
|---------------------------------|---|
| _____ 1. natural selection      | a. running short sprints with long rest periods in between                  |
| _____ 2. punctuated equilibrium | b. short trees might not be as likely to be hit by lightning in a rainstorm |
| _____ 3. fossil                 | c. a naturalist's field expedition  |
| _____ 4. <i>Beagle</i> voyage   | d. a clue in a detective story  |

**Cause and Effect**

In the space provided, write the letter of the term or phrase that best matches each cause or effect given below.

- | Cause   | Effect                                     |  |
|---|--|--|
| 5. individuals best suited to survive have the most offspring | _____                                      | a. Lamarck   |
| 6. _____  | common ancestry indicated                  | b. their traits will be passed on to future generations                                |
| 7. _____  | antibiotic-resistant bacteria selected for | c. unable to breed with one another  |
| 8. two populations of same species become different species   | _____                                      | d. accumulate many changes in amino acid sequence in a protein found in both organisms |
| 9. _____  | idea of use and disuse of traits           | e. population not limited by environment   |
| 10. _____   | exponential growth                         | f. ideas about gradual change in geological processes                                  |
| 11. Hutton and Lyell  | _____                                      | g. homologous structures   |
| 12. two distantly related organisms                           | _____                                      | h. mutant bacteria survive antibiotic treatment  |

**Critical Thinking** *continued***Linkages**

In the spaces provided, write the letters of the two phrases that are linked together by the phrase in the middle. The choices can be placed in any order.

13. \_\_\_\_\_ South American species must have migrated to the Galápagos Islands \_\_\_\_\_
14. \_\_\_\_\_ series of intermediate fossils are seen \_\_\_\_\_
15. \_\_\_\_\_ few differences in sequences \_\_\_\_\_
16. \_\_\_\_\_ different structures develop \_\_\_\_\_
- a. analyze sequence of fossils
  - b. amino acid sequences analyzed
  - c. plants and animals of South America and Galápagos Islands resemble one another
  - d. vertebrate embryos develop a tail bud
  - e. the tail disappears in late human embryos
  - f. South American species changed
  - g. more recent common ancestor
  - h. dating of fossils

**Analogies**

An analogy is a relationship between two pairs of terms or phrases written as  $a : b :: c : d$ . The symbol  $:$  is read as “is to,” and the symbol  $::$  is read as “as.” In the space provided, write the letter of the pair of terms or phrases that best completes the analogy shown.

- \_\_\_\_\_ 17. amino acid differences : evidence of hereditary relationships ::
- a. atoms : years
  - b. potassium : uranium
  - c. rocks : half-life
  - d. fossil record : sequence of evolutionary events
- \_\_\_\_\_ 18. gradualism : punctuated equilibrium ::
- a. running : walking
  - b. reading : writing
  - c. crawling : flying
  - d. understanding : confusing