

## Chapter 1 The Science of Biology

### Vocabulary Review

**Completion** *Fill in the blanks with terms from Chapter 1.*

- The process of gathering information about events or processes in a careful, orderly way is called \_\_\_\_\_.
- A(n) \_\_\_\_\_ is a logical interpretation based on prior knowledge or experience.
- A(n) \_\_\_\_\_ is a proposed scientific explanation for a set of observations.
- In a(n) \_\_\_\_\_ experiment, only one variable is changed at a time, while all other variables are kept unchanged.
- A(n) \_\_\_\_\_ is a well-tested explanation that unifies a broad range of observations.
- In \_\_\_\_\_ reproduction, the new organism has a single parent.
- A(n) \_\_\_\_\_ is a signal to which an organism responds.
- The \_\_\_\_\_ system is a decimal system of measurement whose units are based on certain physical standards and are scaled on multiples of 10.

**Matching** *In the space provided, write the letter of the definition that best matches each term.*

- |                              |                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------|
| _____ 9. biology             | a. a collection of living matter enclosed by a barrier that separates it from its environment           |
| _____ 10. microscope         | b. combination of chemical reactions through which an organism builds up or breaks down materials       |
| _____ 11. cell               | c. a laboratory technique in which a group of cells develops from a single cell                         |
| _____ 12. cell fractionation | d. process of keeping an organism's internal conditions constant                                        |
| _____ 13. homeostasis        | e. a device that produces magnified images of structures that are too small to see with the unaided eye |
| _____ 14. metabolism         | f. a laboratory technique in which cells are separated into cell parts                                  |
| _____ 15. cell culture       | g. the science that seeks to understand the living world                                                |