## Roots, Stems, and Leaves Chapter 23

## Vocabulary Review

**Multiple Choice** In the space provided, write the letter of the answer that best completes each sentence or answers the question.

- \_ **1.** The main phloem cells are
  - a. epidermal cells.

- **c.** vessel elements.
- **b.** sieve tube elements.
- d. meristems.
- 2. Which of the following cells are found in ground tissue and have thin cell walls and large vacuoles?
  - **a.** parenchyma
  - **b.** sclerenchyma
- c. collenchyma
- **d.** companion cells
- 3. The spongy layer of ground tissue just inside the epidermis of a root is called the
  - **a.** root cap.
  - **b.** endodermis.

- **c.** cortex. **d.** vascular cylinder.
- 4. The meristematic tissue that produces the outer covering of stems is called **c.** vascular cambium.

- d. bark.
- **b.** cork cambium.
- 5. Which of the following is made up of tall, columnar cells that absorb light?
  - **a.** petioles

- c. palisade mesophyll
- **b.** spongy mesophyll
- **d.** stomata

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

- **6.** apical meristem
  - 7. differentiation
  - **8.** root hairs
  - 9. Casparian strip
- **10.** bud
  - 11. heartwood
- \_\_\_ **12.** mesophyll
- \_\_ **13.** transpiration
- 14. adhesion **15.** capillary action

- **a.** structure that makes cells of the endodermis waterproof
- **b.** force of attraction between unlike molecules
- c. cells that divide to increase root and stem length
- **d.** older xylem that no longer conducts water
- e. tendency of water to rise in a thin tube
- f. tiny projections on the root epidermis that absorb water
- **g.** specialized ground tissue in leaves where photosynthesis
- **h.** process in which cells develop special structures and functions
- i. loss of water through leaves
- j. part of a stem that contains undeveloped tissue