

Chapter 11, continued

22. Seeds don't have legs, but they sure get around! Give two examples of how seeds are transported to new areas.

Take a look at the text and Figure 20 on page 263. Each of the following phrases describes or is an example of either a monocot or a dicot. In the space provided, write *M* for a monocot and *D* for a dicot.

- 23. _____ has one seed leaf
- 24. _____ an onion
- 25. _____ has leaves with branching veins
- 26. _____ flower parts are in threes
- 27. _____ vascular tissue is in a ring
- 28. _____ flower parts are in fours or fives
- 29. Which of the following come from flowering plants?
(Circle all that apply.)
 - a. food crops
 - b. perfume oils
 - c. rubber
 - d. clothing fibers

Review (p. 263)

Now that you've finished Section 3, review what you learned by answering the Review questions in your ScienceLog.

Section 4: The Structures of Seed Plants (p. 264)

1. What do you have in common with plants?

Chapter 11, continued

Plant Systems (p. 264)

Mark each of the following statements *True* or *False*.

- 2. _____ The shoot system is made up of stems.
- 3. _____ The root system and shoot system work independently of each other.
- 4. _____ Xylem is a vascular tissue that transports water and minerals through a plant.
- 5. _____ Sugar is transported by the phloem.

The Root of the Matter (p. 264)

- 6. Which of the following is NOT one of the main functions of roots?
 - a. supplying plants with water and minerals from the soil
 - b. making food through photosynthesis
 - c. supporting and anchoring the plant
 - d. storing food as sugar or starch
- 7. Roots have root hairs. What do root hairs do?

- 8. The slimy substance produced by the root cap
 - a. protects the tip of the root.
 - b. attracts minerals in the soil.
 - c. helps water diffuse through the root's epidermis.
 - d. helps the root grow through soil.
- 9. _____ obtain water from deep underground, while _____ roots obtain water close to the surface of the soil.

What's the Holdup? (p. 266)

Mark each of the following statements *True* or *False*.

- 10. _____ Stems are always located above the ground.
- 11. _____ Stems connect the roots to the leaves and flowers.
- 12. _____ Stems display flowers to pollinators.
- 13. _____ Stems can store water.

Chapter 11, continued

Stem Structures (p. 267)

- 14.** Poppies and clovers have herbaceous stems that are soft, thin, and flexible. True or False? (Circle one.)
- 15.** What do a tree's growth rings have to do with xylem?

Review (p. 267)

Now that you've finished the first part of Section 4, review what you learned by answering the Review questions in your ScienceLog.

A Plant's Food Factories (p. 268)

- 16.** What are a plant's food factories? Explain.

Choose the term in Column B that best matches the definition in Column A, and write the corresponding letter in the space provided.

Column A	Column B
___ 17. cells that open and close the stomata	a. stoma
___ 18. layer of cells that contains many chloroplasts	b. guard cells
___ 19. a single layer of cells that covers the top and bottom surfaces of a leaf	c. spongy layer
___ 20. a tiny pore that allows carbon dioxide to enter the leaf	d. epidermis
___ 21. contains air spaces between the cells that allow carbon dioxide to diffuse freely	e. palisade layer
___ 22. contain xylem and phloem surrounded by supporting tissue	f. veins

Chapter 11, continued

23. Cactus spines are leaves. True or False? (Circle one.)
24. Figure 28 in the right-hand column of page 269 shows an insect caught on the special leaves of a sundew. How does catching insects enable the sundew to live in its environment?

Flowers (p. 270)

Mark each of the following statements *True* or *False*.

25. _____ Flowers are adaptations for sexual reproduction.
26. _____ Sepals protect the mature flower.
27. _____ Petals may attract animals to the flower.
28. The _____ in a flower produce pollen.
29. The pistil of a flower includes the _____, style, and _____.
30. The eggs of a flower are found in the _____.
31. If the egg is fertilized, what part of the flower develops into a fruit?

32. All flowers have brightly colored petals to attract insects. True or False? (Circle one.)

Review (p. 271)

Now that you've finished Section 4, review what you learned by answering the Review questions in your ScienceLog.