Name _____ Class _____ Date _____

Reviewing Key Concepts

Identifying Processes *On the lines provided, explain how each of the following contributes to movement of water within a plant.*

1. root pressure _____
2. capillary action _____
3. transpiration _____

Multiple Choice *On the line provided, write the letter of the answer that best completes the sentence or answers the question.*

_____ **4.** The tendency of water to rise in a thin tube is known as
a. gravity. c. root pressure.
b. capillary action. d. transpiration.

_____ **5.** The evaporation of water molecules from leaves helps to move fluid through
a. sieve tube elements. c. the xylem system.
b. companion cells. d. the phloem system.

_____ **6.** One idea used to explain how the movement of materials through phloem is regulated is the
a. transpiration hypothesis. c. regulation hypothesis.
b. osmosis hypothesis. d. pressure-flow hypothesis.

_____ **7.** What causes water to follow nutrients as they are pumped into or out of the phloem system?
a. pressure c. transpiration
b. osmosis d. capillary action

Reviewing Key Skills

8. Comparing and Contrasting Compare the amount of transpiration on a warm day to the amount of transpiration on a cold day. Explain your answer.

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9. Applying Concepts What two forces are responsible for capillary action in plants, enabling the transport of water against the force of gravity?

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10. Comparing and Contrasting With regard to water molecules, how are cohesion and adhesion different?

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