

Plant Transport Systems: Xylem and Phloem

Biology · Answer Key · 11 Questions

1. What is the process called when water moves upward through narrow tubes in plants?

- A) Transpiration
- B) Capillary action**
- C) Photosynthesis
- D) Diffusion

2. What do water molecules do when they stick to each other?

- A) Adhesion
- B) Cohesion**
- C) Evaporation
- D) Absorption

3. What is the term for water molecules sticking to xylem walls?

- A) Adhesion**
- B) Cohesion
- C) Condensation
- D) Gravity

4. What does the xylem primarily transport?

- A) Sugar and food
- B) Water and dissolved minerals**
- C) Oxygen
- D) Carbon dioxide

5. In which direction does xylem transport substances?

- A) Downward only
- B) Upward only**
- C) Upward and downward
- D) Sideways only

6. Which tissue is mostly made of dead, thick-walled cells?

- A) Phloem
- B) Xylem**
- C) Epidermis
- D) Root hair

7. What does the phloem transport?

- A) Water
- B) Minerals
- C) Food produced by photosynthesis**
- D) Soil nutrients

8. Which tissue is made of living cells and has thin walls?

- A) Xylem
- B) Phloem**
- C) Bark
- D) Heartwood

9. In which directions can phloem transport materials?

- A) Upward only
- B) Downward only
- C) Upward and downward**
- D) None of the above

10. What is the loss of water vapor from plant leaves called?

- A) Transpiration**
- B) Respiration
- C) Photosynthesis
- D) Absorption

11. Besides transporting water and minerals, what else does xylem provide?

- A) Energy
- B) Structural support**
- C) Food storage
- D) Oxygen production