

Name _____

Period _____

AP Biology

Date _____

RAVEN CHAPTER 37 GUIDED NOTES: PLANT TRANSPORT

1. Explain the forces that drive transpiration in the xylem.

2. What cellular structures are responsible for the rapid water exchange in plant cells?

3. Explain the meaning of the terms "turgor pressure" and "turgid".

4. What is the adaptive value of root hairs?

5. How are mineral ions transported into the roots of plants?

6. List the two main adaptations that reduce water loss in plants.

a. _____

b. _____

7. Explain how the need to regulate water loss and the need for a constant supply of CO₂ can be conflicting requirements.

8. Describe the structural adaptations of guard cells.

9. Describe the cellular mechanism that enables guard cells to open and close stomates.

10. Movement of sugars through the phloem is called _____ ?

11. In what direction do sugars move in the phloem? _____

12. Describe the bulk flow mechanism of sugar transport in the phloem.

13. Summarize transport in plants by explaining this diagram.

