

Name _____ Date _____ Per _____

Ch 23 Guided Reading - Roots, Stems, and Leaves

Read Chapter 23 Summary to answer the following questions.

23-1 Specialized Tissues in Plants

1. What are the three main plant organs?
2. What are the three main plant tissues?
3. What does dermal tissue do?
4. What does vascular tissue do?
5. What are the two types of vascular tissues and what does each do?
6. What does ground tissue do?
7. What does meristematic tissue do?
8. Where is meristematic tissue found?

23-2 Roots

9. How does a taproot grow?
10. How does a fibrous root grow?
11. **Read the description of a mature root.** In the space below, draw what a mature root looks like **in cross section**.
12. What are the two functions of roots?

22-3 Stems

13. What are the three jobs of stems?

14. Using the description in the reading and your drawing in #11, draw a monocot stem and a dicot stem in cross section.

15. What do vascular bundles contain?

16. What is primary stem growth?

17. What is secondary stem growth?

23-4 Leaves

18. What three things are made in the leaves by photosynthesis?

19. Describe the structure of a leaf.

20. What type of cells make up leaves and why are they special?

21. What are the small openings in leaves that allow leaves to exchange gases with the air?

22-5 Transport in Plants

22. What two forces pull water up the xylem tissue from the bottom of the plant toward the top?

23. What is transpiration pull?

24. What does phloem do?