Structure and Function in Living Systems Name:

Roots Period:

Use Chapter 12, Section 4 of your textbook to answer the questions below. The word bank can be used to fill out the sentences below.

cells	phloem	phloem	soil	soil	tip	underground	vascular	xylem	xylem

Section 4: Structures of Seed Plants (p.374)

_____ 1. What supplies a seed plant with the things it needs to survive?
a. seeds and spores c. reproductive structures
b. roots and shoots d. rhizomes and rhizoids

2. _____ is a tissue that moves water and minerals through a seed plant.

3. _____ is a tissue that moves food to all seed plant parts.

4. Phloem and xylem are found in all _____ plants.

Roots (p.374)

5. Most roots are found _____ .

Root Functions (p.374)

_____ 6. What do roots supply a plant with?
a. protection b. sunlight c. water and minerals d. xylem and phloem

7. Roots hold plants tightly in place in the _____ .

_____ 8. Which of the following is a function of roots?
a. They store food. c. They capture energy from the sun.
b. They get rid of extra water. d. They release minerals.

Root Structure (p.375)

9. The epidermis is a layer of _____ that cover a root.

_____ 10. What helps roots get more water?
a. root tip b. stem c. root hairs d. root cap

11. The root cap protects the _____ of a root.

12. The slime made by the root cap makes it easier for the root to push through _____ while growing.

13. Look at Figure 2. What kind of tissue is found in the center of the root? _____

14. Look at Figure 2. What kind of tissue is found surrounding the central vascular tissue?

_____

Root Systems (p.375)

_____ 15. What is a root system with one main root called?
a. root stem b. root cap c. taproot d. fibrous root

_____ 16. What is the name of a root system with several roots that are usually the same size?
a. root stem b. root cap c. taproot d. fibrous root