

# Structure and Function in Living Systems

Name:

## Stems

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.

flowers growth ring phloem root stem support water xylem xylem

### Stems (p.376)

- \_\_\_\_\_ 1. Where are most stems found?  
a. in roots      b. underground      c. in water      d. above ground

### Stem Functions (p.376)

2. Look at Figure 3. The trunk of a tree is a \_\_\_\_\_ .
3. One job of a stem is to \_\_\_\_\_ the plant body.
4. Stems hold up reproductive structures like \_\_\_\_\_ .
5. Stems connect a plant's \_\_\_\_\_ system to its leaves and flowers.
6. In stems, water and dissolved minerals are carried from the roots to the leaves by a tissue called \_\_\_\_\_ .
7. The food made during photosynthesis is carried by a tissue called \_\_\_\_\_ to roots and other parts of the plant.
8. Cactus stems can store \_\_\_\_\_ .



### Herbaceous Stems (p.376)

- \_\_\_\_\_ 9. What are stems that are soft, thin, and flexible called?  
a. xylem      b. phloem      c. herbaceous stems      d. woody stems
- \_\_\_\_\_ 10. Which of the following has a herbaceous stem?  
a. bean plant      b. shrub      c. oak tree      d. pine tree

### Woody Stems (p.377)

- \_\_\_\_\_ 11. What are rigid stems made of wood and bark called?  
a. xylem      b. phloem      c. herbaceous stems      d. woody stems
12. A \_\_\_\_\_ in woody stems is caused by different sized xylem cells being made in the summer and winter.
13. Look at the diagram in Figure 5. What kind of tissue is most common in a woody stem? \_\_\_\_\_

