

Chapter 9

Use with Section 2

REINFORCEMENT

● Plant Responses

Write the letter of the term that best completes each sentence.

- _____ 1. A plant's response to gravity is called _____.
 a. phototropism b. gravitropism c. photosynthesis d. photoperiodism
- _____ 2. The flowering of a plant in response to change of light or dark is called _____.
 a. photosynthesis b. phototropism c. gravitropism d. photoperiodism
- _____ 3. Anything in the environment that affects the behavior of an organism is called a _____.
 a. stimulus b. positive tropism c. response d. hormone
- _____ 4. Auxins cause cells to grow _____.
 a. longer on the sunny side of the stem c. shorter on the shaded side of the stem
 b. shorter on the sunny side of the stem d. longer on the shaded side of the stem
- _____ 5. Ethylene gas is NOT _____.
 a. a plant hormone that affects ripening of fruit
 b. used by growers to cause stems to lengthen
 c. a stimulus
 d. a plant hormone that affects seed germination
- _____ 6. Because of the effect of auxins on cell growth, plant stems grow _____.
 a. away from gravity c. toward touch
 b. toward light d. straight
- _____ 7. The response of roots growing downward is an example of _____.
 a. negative phototropism
 b. negative gravitropism
 c. negative thigmotropism
 d. positive gravitropism

Label the responses of the stem and roots in the following diagram. FIGURE 1 shows a plant's response after being tipped on its side for a few days. FIGURE 2 shows a plant's response to sunlight.

FIGURE 1

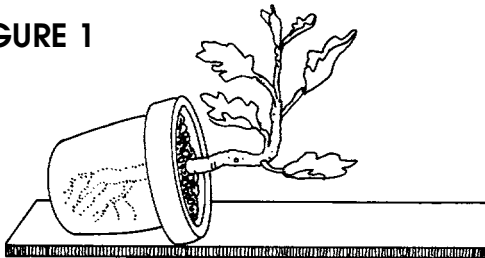
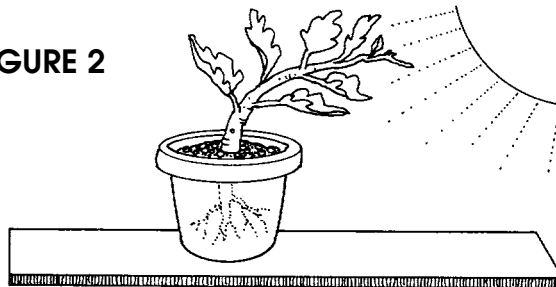


FIGURE 2



- A. stem: _____ A. stem: _____
 B. roots: _____