## Chapter 25 Plant Responses and Adaptations

## **Section Review 25-1**

a. plant hormones

b. ethylene

c. gibberellins

d. gravitropism

g. phototropism

e. cytokinins

f. auxins

## **Reviewing Key Concepts**

**Matching** On the line provided, write the letter of the term that best matches each description. A term may be used more than once.

- 1. chemical substances that control a plant's patterns of development and responses to the environment
- 2. stimulate cell elongation 3. produced in the apical meristem
  - 4. produced in growing roots
    - 5. stimulate the growth of lateral buds 6. cause dormant seeds to sprout
    - 7. produce dramatic increases in size
  - 8. stimulates fruits to ripen
- 9. growth toward a light source
  - **10.** growth in response to the force of gravity

**Short Answer** *On the lines provided, answer the following questions.* 

- 11. In a plant's stem, what is the relationship between the amount of light received and auxin concentration?
- **12.** How are auxins able to cause a stem to grow upright?
- 13. How do auxins produce the phenomenon called apical dominance?

## **Reviewing Key Skills**

- **14. Forming Operational Definitions** Identify the functions of a plant hormone.
- 15. Comparing and Contrasting Describe the advantages and disadvantages of using ethylene to ripen fruit.