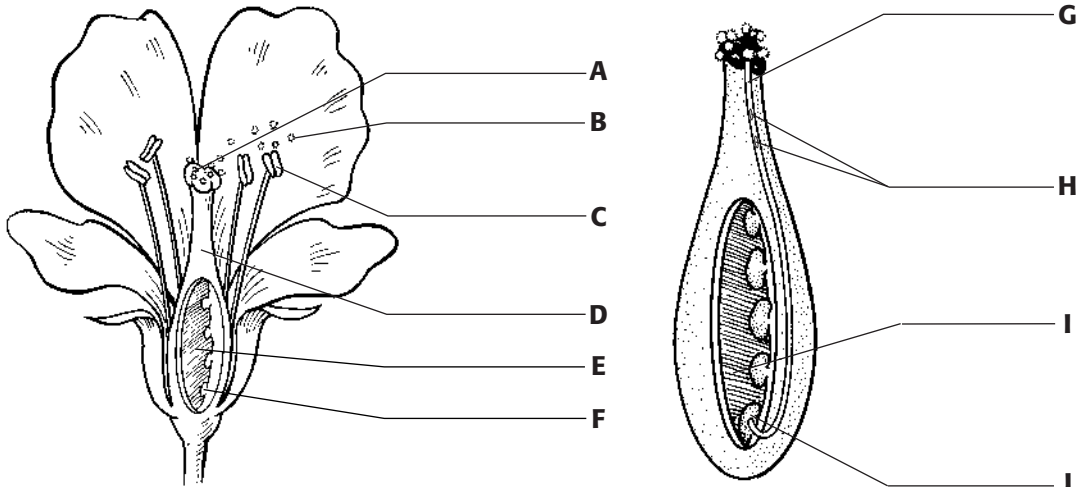Skills Worksheet

Section 2   Plant Processes ch 5

Section: Reproduction of Flowering Plants

_____ **1.** The largest and most diverse group of plants is
   a. prairie grasses.
   b. trees.
   c. flowering plants.
   d. shrubs.

FERTILIZATION

Match the labels to the parts of the drawing. Write the letters in the spaces provided. Some labels may be used more than once.

_____ **2.** anther   _____ **7.** pollen tube

_____ **3.** ovary   _____ **8.** sperm

_____ **4.** ovule   _____ **9.** stigma

_____ **5.** ovule containing egg   _____ **10.** style

_____ **6.** pollen

11. When pollen is moved from anthers to stigmas, _____ takes place.

12. When sperm fuses with the egg inside an ovule, _____ takes place.

FROM FLOWER TO FRUIT

13. After fertilization takes place, the _____ develops into a
seed.

14. After fertilization takes place, the _____ becomes a fruit.

FROM SEED TO PLANT

15. What is a dormant seed?

_____

16. Define the word *germination*.

_____

_____

17. What three things do seeds need in order to sprout?

_____

3pts

_____

_____

OTHER METHODS OF REPRODUCTION

**Match the correct definition with the correct term. Write the letter in the space
provided.**

_____**18.** above-ground stems from which new plants
can grow

_____**19.** tiny plants that grow along the edges of a
plant's leaves and fall off and grow on
their own

_____**20.** underground stems from which new plants
can grow

a. plantlets

b. tubers

c. runners

Skills Worksheet

Section 3 Plant Processes ch 5

Section: Plant Responses to the Environment

1. Name three stimuli to which plants respond.

3pts

_____

_____

_____

PLANT TROPISMS

2. What is a tropism?

_____

_____

3. What is a positive tropism?

_____

_____

4. What is a negative tropism?

_____

_____

For each description listed, write whether it is an example of a positive tropism or negative tropism.

_____ **5.** plant growth in response to light

_____ **6.** shoot growth in response to gravity

_____ **7.** root growth in response to gravity

8. A change in the direction a plant grows that is caused by light is

called _____.

9. Plant growth that changes in response to the direction of gravity is called

_____.

SEASONAL RESPONSES

10. What would happen if a plant bloomed during a cold winter?

_____

_____

11. How do plants living in areas with cold winters detect the change in seasons?

_____

_____

_____

12. Plants that flower when nights are long are called _____.

13. Plants that flower when nights are short are called _____.

14. What are the characteristics of evergreen trees?

2pts

_____

_____

15. What are the characteristics of deciduous trees?
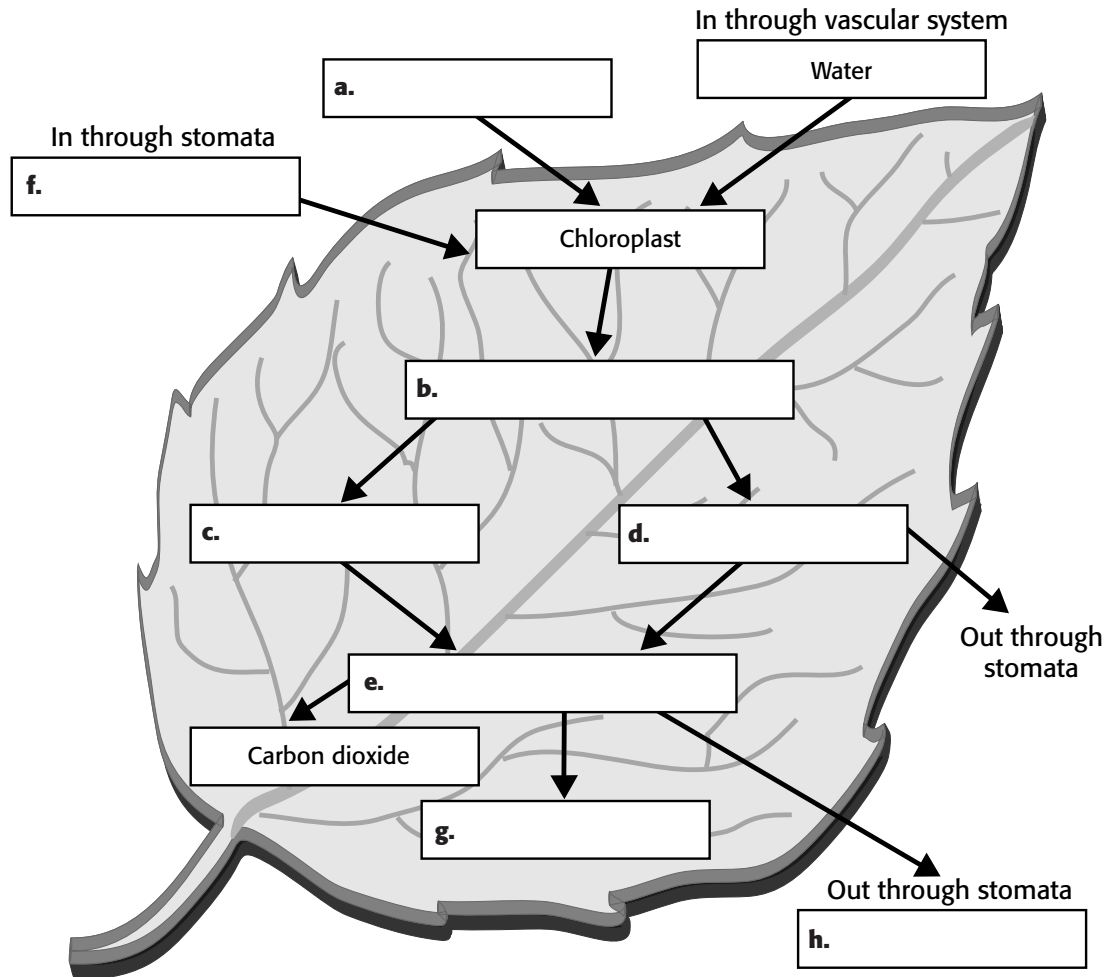
2pts

_____

_____

_____

Name _____ Class _____ Date _____

Reinforcement

A Leaf's Work Is Never Done

Complete this worksheet after you finish reading the section "Photosynthesis."

A plant makes food in its leaves. Complete the outline below by filling in the blanks in the diagram with the words at the bottom of the page.

In through vascular system

Water

a.

In through stomata

f.

Chloroplast

b.

c.

d.

Out through stomata

e.

Carbon dioxide

g.

Out through stomata

h.

Words

- photosynthesis
- cellular respiration
- sugar
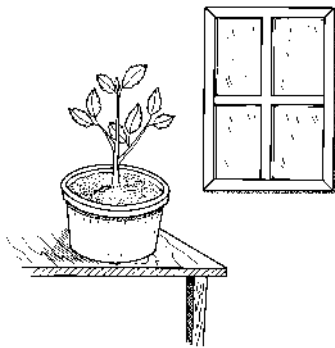- carbon dioxide
- water
- oxygen
- sunlight
- energy

Skills Worksheet

Reinforcement

How Plants Respond to Change

Complete this worksheet after you finish reading the section "Plant Responses to the Environment."

Although plants don't walk and talk, they do respond to stimuli in their environment. Plants respond to stimuli by growing in a particular direction. Plant growth away from a stimulus is a negative tropism. Plant growth toward a stimulus is a positive tropism.
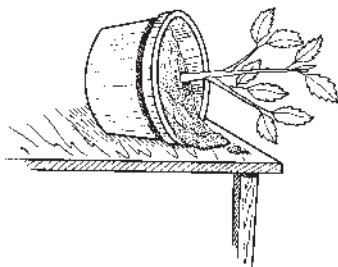
1. The plant shown below has just been moved next to a window from a room with no direct light. Sketch what the plant will look like in a few days.

In a few days

2. Phototropism is a change in the growth of a plant in response to light. Is phototropism positive or negative?

_____

3. The plant shown below has just been tipped over on its side. Sketch what the plant will look like in a few days. (Hint: The plant will respond to gravity.)

In a few days

4. Gravitropism is a change in the direction of the growth of a plant in response to gravity. Is gravitropism of most shoot tips positive or negative?

_____