

Contents

Section 1

Chapter 4: Characteristics of Plants

1. Roots, Stems, and Leaves	1
2. Flowers and Pollination	4
3. Fruits and Seeds	7
4. Plants in Different Habitats	10
5. Quiz 1 and Extra Activity	13

Section 2

Chapter 5: Benefits From Plants

6. Investigation: Watch a Seed Sprout	14
7. The Gift of Grains	18
8. Edible Plant Parts	22
9. Fabrics and Medicines From Plants	25
10. Quiz 2 and Extra Activity	28

Section 3

Chapter 6: Trees and Tropical Plants

11. The Life of Trees	29
12. Evergreen and Deciduous Trees	32
13. Large Plants of the Tropics	35
14. Foods From Tropical Plants	38
15. Self Check	41
16. LightUnit Test	45



Roots, Stems, and Leaves

Textbook pages 68-72 | Lesson

1

 Read 4.1 “Roots, Stems, and Leaves” on pages 68-72 of the textbook.



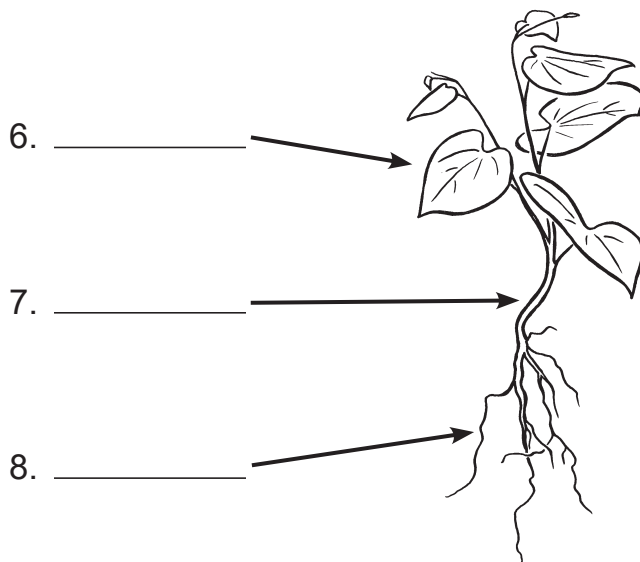
Exploring the Lesson

A Write the letter of each vocabulary word beside its definition.

1. ____ the process of a plant using sunlight to make food
2. ____ a gas that animals and humans breathe out and plants use to make food
3. ____ a young plant grown from seed
4. ____ a sugar that plants make
5. ____ a gas that animals and humans breathe in and plants give off

- a. carbon dioxide
- b. glucose
- c. oxygen
- d. photosynthesis
- e. seedling

B Write *leaves*, *roots*, or *stem* to label the parts of the plant.





Lesson 1



C Write the name of each plant part beside what it does. Use some words twice.

roots stem leaves

9. _____ make food for the plant
10. _____ absorb water and nutrients from the soil
11. _____ has little tubes to carry water and nutrients
12. _____ anchor the plant in the ground
13. _____ supports the leaves, flowers, and fruit

D Number the steps in order.

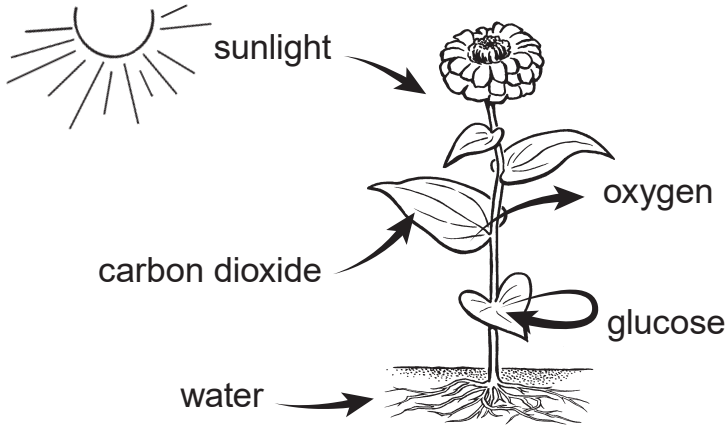
14. How does water reach the leaves of a plant?
 - a. ____ Rainwater soaks into the soil.
 - b. ____ Tubes in the stem carry water to the leaves.
 - c. ____ Roots carry water to the stem.
 - d. ____ Roots soak up water from the soil.

E Circle the letters of the answers to each question.

15. What are two ways plants are different from animals and people?
 - a. Plants produce their own food.
 - b. Plants need food, water, and air to live.
 - c. Plants need carbon dioxide to live.
 - d. Plants need energy to grow.
16. What three things do plants need to produce glucose during photosynthesis?
 - a. sunlight
 - b. water
 - c. carbon dioxide
 - d. oxygen

F Write words from the box to complete each sentence about photosynthesis.

carbon dioxide glucose oxygen sunlight water



17. The plant receives energy from _____ to perform photosynthesis.
18. The plant takes in _____ from the soil.
19. The plant takes in _____ from the air.
20. The plant produces _____ for its food.
21. The plant puts _____ back into the air.

G Circle *T* if the statement is *true* or *F* if it is *false*.

22. **T** **F** Plants make glucose in their roots.
23. **T** **F** Plants store extra glucose in their roots and stems.
24. **T** **F** People can get energy from the glucose in plants.

H Write the answer to each question.

25. How do plants get carbon dioxide for photosynthesis? _____

△ 26. Why does photosynthesis stop at night? _____

Flowers and Pollination

Textbook pages 73-78 | Lesson 2



Read 4.2 “Flowers and Pollination” on pages 73-78 of the textbook.



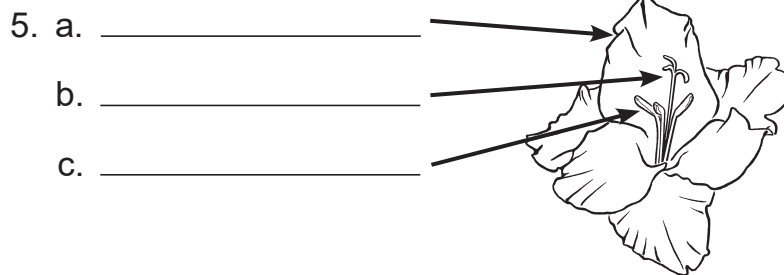
Exploring the Lesson

A Write the letter of each vocabulary word beside its description.

1. ____ the yellow powder from a flower
2. ____ to move pollen from the stamen to the pistil
3. ____ the part of a flower that makes pollen
4. ____ the part in the center of a flower that makes seeds

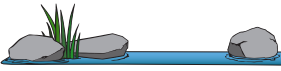
- a. pistil
- b. pollen
- c. pollinate
- d. stamen

B Write *pistil*, *petal*, or *stamen* to label the parts of the flower.



C Underline the bold word that completes each sentence about pollination.

6. The **pistils, stamens** produce and hold pollen.
7. A bird or insect brushes against the **pollen, petals** on the stamens as it drinks nectar.
8. The bird or insect carries the pollen to the **pistil, stamen** of another flower.
9. The pollen moves to the base of the **petal, pistil** to pollinate the flower.
10. The process of pollination allows the flower to produce fruits and **seeds, stems**.



D Circle the letter(s) of the answer(s) to each question.

- 11. Why do you think God made the top of the pistil flat and sticky?
 - a. to catch insects
 - b. for nectar to stick to
 - c. for pollen to stick to easily
 - d. to attract bats with its sweet smell

- 12. What are four types of pollinators?
 - a. insects
 - b. birds
 - c. deer
 - d. bats
 - e. sunshine
 - f. wind

- 13. What are three ways flowers are designed to attract pollinators?
 - a. bad odors
 - b. large leaves
 - c. bright petals
 - d. special marks

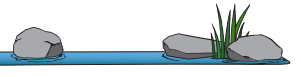
E Write the answer to the question.

- 14. Why do trees, grasses, and grainfields need the wind for pollination?

F Write the letter of each pollinator beside what it often pollinates. Use one letter twice.

- 15. ____ grass and trees
- 16. ____ smelly rafflesia flower
- 17. ____ bananas and mangoes
- 18. ____ fruit and vegetable crops
- 19. ____ long tube-shaped flowers
- 20. ____ pale-colored flowers that bloom at night

- a. bat
- b. honeybee
- c. hummingbird
- d. fly
- e. wind



We Remember

G Write the vocabulary word that fits the definition.

21. _____ a young plant grown from seed

H Write *leaves*, *roots*, or *stem* beside each description.

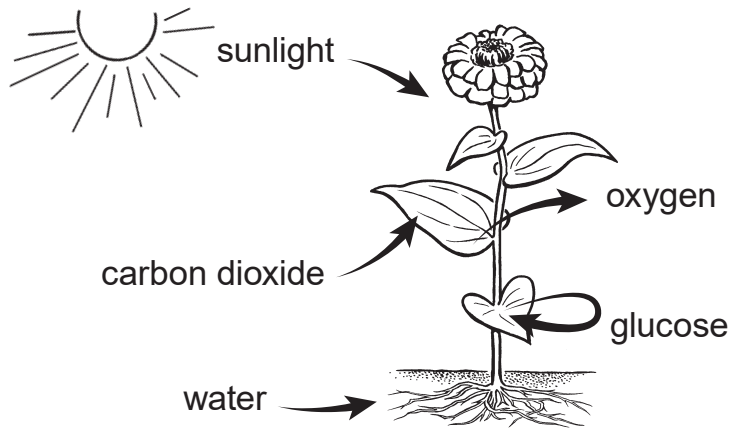
22. _____ make food for the plant

23. _____ has little tubes to carry water and nutrients; supports the leaves, flowers, and fruit

24. _____ absorb water and nutrients from the soil and anchor the plant in the ground



I Underline the bold word(s) that complete(s) each sentence.



25. The plant receives energy from **oxygen, sunlight**.

26. The roots take in **glucose, water** from the soil.

27. The plant takes **carbon dioxide, oxygen** out of the air and puts **carbon dioxide, oxygen** back into the air.

28. The plant makes a sugar called **glucose, carbon dioxide** that helps it grow.

29. This diagram shows the process of **photosynthesis, metamorphosis**.

Fruits and Seeds

Textbook pages 79-84 | Lesson 3



Read 4.3 “Fruits and Seeds” on pages 79-84 of the textbook.



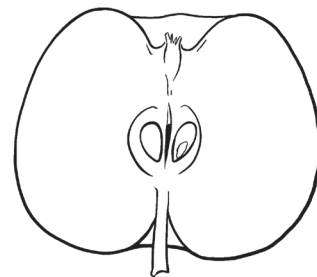
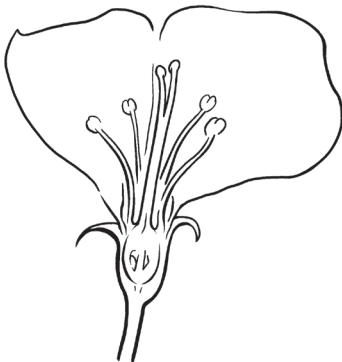
Exploring the Lesson

A Write each vocabulary word beside its definition.

- _____ the part of a plant that contains seeds
- _____ not actively growing
- _____ to begin to grow by sending out a sprout
- _____ the soft juicy part inside a fruit

B Complete the exercise.

5. Write *fruit*, *pistil*, *stamens*, or *seeds* to show the steps of how fruits and seeds form.



- a. Pollen from _____ is brushed onto the pistil.
- b. The lower part of the _____ begins to swell.
- c. Inside the _____ new seeds begin to form.
- d. The fruit protects _____ until they are ripe.



C Write the answer to each question.

- △ 6. What are three fruits? _____
7. What three things do all seeds need to germinate?

8. What nourishes a new plant just after it germinates and before it begins photosynthesis? _____
9. Why is it good for plants and trees to have their seeds spread? _____

D Underline the bold word that completes each sentence.

10. A seed will germinate best in **dry, moist** soil.
11. The soil needs to be **cool, warm** so a seed can germinate.
12. A seed can get **energy, oxygen** from the air in the soil.
13. Maple, elm, and pine seeds have wings and are spread by **water, wind**.
14. The seeds of pussy willows and coconuts can be spread by **water, wind**.
15. Burdock and cocklebur seeds have **barbs, wings** that stick to animal fur or people's clothing.



We Remember

E List four different types of pollinators.

16. _____



F Write a word from the box to complete each sentence. Use one word twice.

nectar pistil petals pollen pollinate stamens

17. The colorful _____ of a flower may attract birds or insects.
18. A bird or insect may also come to a flower to drink _____ .
19. As the bird or insect drinks, it brushes against the pollen on the thin _____ near the center of the flower.
20. The powdery yellow _____ sticks to the body of the bird or insect.
21. When the bird or insect visits the next flower, the pollen may stick to the _____ in the center of the other flower.
22. The _____ moves to the base of the pistil.
23. The pollen travels down into the flower to _____ it so the flower can produce fruits and seeds.

G Complete the exercise.

24. Write *petal*, *pistil*, or *stamen* to label the parts of the flower.

