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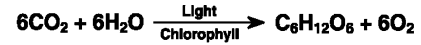
1. The yucca moth of the Arizona desert lays its eggs inside the flower of the yucca plant. When the eggs hatch, the moth larvae eat some of the plant seeds. When the moth flies away from the plant, it takes pollen from the yucca flower with it.

How does the yucca moth help the yucca plant?

- A. lays eggs B. eats seeds
C. hatches larvae D. spreads pollen
2. Which part of the ecosystem is alive and provides oxygen for animals?
- A. soil B. plant
C. water D. mushroom
3. Which would help a plant survive in dry environments?
- A. ripe fruit to attract animals
B. large leaves to collect rainwater
C. waxy leaves to reduce water loss
D. colorful petals to attract insects
4. Which of these possible plant functions *best* explains why plants are important to animals?
- A. Plants use food and release oxygen.
B. Plants make food and release oxygen.
C. Plants use food and release carbon dioxide.
D. Plants make food and release carbon dioxide.
5. Which of the following gases do plants use in photosynthesis?
- A. hydrogen B. oxygen
C. carbon dioxide D. carbon monoxide
6. Which of the following is broken down in the body to release energy?
- A. sugar B. water C. salt D. oxygen
7. Which molecule in plant cells first captures the radiant energy from sunlight?
- A. glucose B. carbon dioxide
C. chlorophyll D. adenosine triphosphate

8. **Photosynthesis**

The following equation represents the process of photosynthesis in green plants.



(Carbon Dioxide + Water, in the Presence of Light and Chlorophyll → Sugar + Oxygen)

What happens to most of the light energy during photosynthesis?

- A. It is transformed into heat energy.
B. It is transformed into chemical energy.
C. It is changed into carbon dioxide.
D. It is changed into oxygen.
9. Use the diagram to answer the question.

Gases and Photosynthesis



The diagram shows the gases that enter and leave a plant during the process of photosynthesis. Which gases do arrows 1 and 2 represent?

- A. Arrow 1 is nitrogen, and arrow 2 is oxygen.
B. Arrow 1 is oxygen, and arrow 2 is nitrogen.
C. Arrow 1 is oxygen, and arrow 2 is carbon dioxide.
D. Arrow 1 is carbon dioxide, and arrow 2 is oxygen.
10. In which part of a plant does photosynthesis take place?
- A. bark B. flowers C. leaves D. roots

21. Chloroplasts are organelles that are found in plant cells. Some plant tissue contains cells with large numbers of chloroplasts, while other tissue contains few chloroplasts.

Which type of plant tissue contains cells with many chloroplasts?

- A. Stem, because chloroplasts are needed for plant growth
- B. Root, because chloroplasts are needed for water uptake
- C. Leaf, because chloroplasts are needed for photosynthesis
- D. Flower, because chloroplasts are needed for reproduction

22. Vascular plants transport water and nutrients to all parts of the plant through—

- A. diffusion.
- B. phagocytosis.
- C. xylem and phloem.
- D. cellular respiration and photosynthesis.

23. Which of these structures is responsible for transporting water from plant roots to the rest of the plant?

- A. Chloroplast
- B. Phloem
- C. Stoma
- D. Xylem

24. Redwood trees can grow much taller than other plants. Which of the following structures supports the height of these trees?

- A. Stomata
- B. Apical buds
- C. Chloroplasts
- D. Vascular tissue

25. Flowers aid in the survival of plant species because they contain structures with what function?

- A. Gravitropism
- B. Photosynthesis
- C. Reproduction
- D. Respiration

26. If the xylem in a young tree is damaged, which process is *first* affected?

- A. performing photosynthesis
- B. transporting sugar to the roots
- C. transporting water to the leaves
- D. absorbing water from the soil

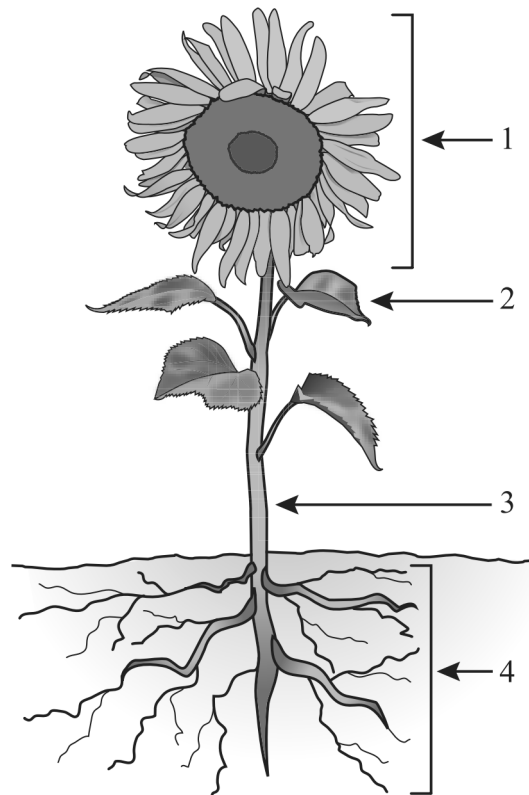
27. Which structure in the leaf controls the opening and closing of the stoma?

- A. cuticle
- B. epidermis
- C. guard cell
- D. spongy mesophyll

28. What is the main function of a plant stem?

- A. to collect pollen from other plants to make seeds
- B. to absorb water and plant nutrients from the soil
- C. to carry food and water to the rest of the plant
- D. to make food for the plant

29. Four parts of a sunflower plant are identified by numbers in the picture below.



Which numbered part of the sunflower plant is *mainly* responsible for reproduction?

- A. part 1
- B. part 2
- C. part 3
- D. part 4