

1. All plants are
 - a. eukaryotes
 - b. unicellular
 - c. heterotrophs
 - d. prokaryotes
2. Gymnosperms are
 - a. the oldest type of seed plant
 - b. known to have seeds surrounded by a protective coat
 - c. flowering plants
 - d. the newest type of seed plant
3. The *raw materials (what is needed)* of photosynthesis are
 - a. sugar and water.
 - b. sugar and oxygen.
 - c. carbon dioxide and oxygen
 - d. carbon dioxide and water
4. Vascular plants differ from nonvascular plants in
 - a. how they make food.
 - b. differences in their cells.
 - c. how they transport materials.
 - d. their two stages of the plant cycle.
5. The process of breaking down food to release its energy is called
 - a. photosynthesis.
 - b. 'cellular' respiration.
 - c. chemosynthesis.
 - d. tropism.
6. Photosynthesis in plants produces
 - a. oxygen and carbon dioxide.
 - b. carbon dioxide and water.
 - c. sugar and oxygen.
 - d. water and sugar.
7. Seed plants share two important characteristics. They have
 - a. vascular tissue and they use pollen and seeds to reproduce.
 - b. prokaryotic cells and are unicellular.
 - c. the ability to pass nutrients from cell to cell and use spores to reproduce.
 - d. the absence of vascular tissue and use spores to reproduce.

8. The energy that powers photosynthesis comes from the
- water.
 - chemicals.
 - oxygen.
 - sun.
9. Groups of similar cells that perform a specific function are called
- gametes.
 - chloroplasts.
 - tissues.
 - vacuoles.
10. Which is NOT a characteristic of a plant's vascular tissue (stem)?
- It transports water and food inside the plant.
 - It transports egg and sperm cells for reproduction.
 - It exposes the plant's leaves to the sun.
 - It supports the plant's stems and leaves.
11. In a vascular plant, the vascular tissue through which food moves is
- phloem.
 - xylem.
 - chlorophyll.
 - pollen.
12. Which is NOT a way seeds are dispersed?
- Wind
 - Water
 - Other organisms
 - Temperature
13. What is the most important abiotic factor needed for a seed to germinate?
- Oxygen
 - Water
 - Soil
 - Sunlight

14. Write down the full chemical equation for photosynthesis.

15. Write down the full chemical equation for cellular respiration.

16. Explain photosynthesis and respiration by relating the two processes.
