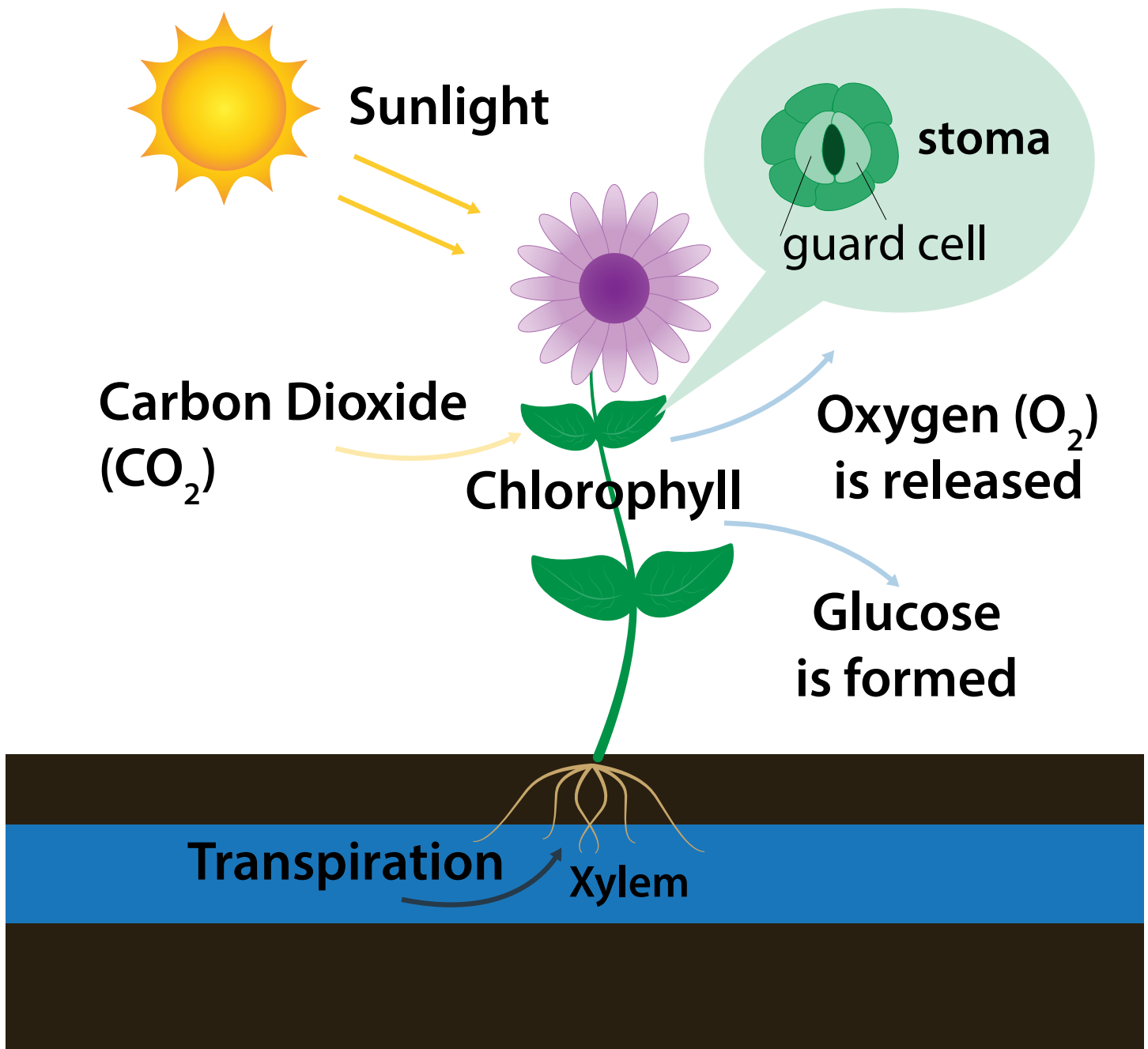


Answers

1. Draw a picture on the back of this paper of photosynthesis and label the parts: plant, sunlight, CO_2 , O_2 , transpiration, xylem, stomata, and guard cell. Use arrows to indicate whether a gas and/or water vapor is entering or leaving the plant leaf.



2. What are the ingredients used to make glucose for plants?

sunlight + carbon dioxide + water

3. What is the name of the pigment that absorbs sunlight in plant cells?

chlorophyll

4. What is the function of xylem?

Xylem transports water from the roots of a plant through the stem and to the leaves.

5. What causes stomata to open?

Stomata open when the air is warm and dry.

6. What causes the rate of transpiration to increase in a plant?

Transpiration increases when the air is warm and dry, like during the day.

7. Fill in the definitions for these vocabulary words.

Vocabulary	
photosynthesis	the process in which plants use CO ₂ , water, and sunlight to make food for themselves
chloroplast	the part of the plant cell that contains chlorophyll
chlorophyll	the green pigment in plants that gives them their green color and absorbs sunlight for photosynthesis
glucose	the food produced by plants through photosynthesis
xylem	a plant tissue that carries water from the roots to the leaves of the plant
stomata	structures in the leaf of a plant that allow gases and water to move in and out of the leaf
guard cells	a pair of cells that surround a stoma and allow for the opening and closing of the stoma
transpiration	the evaporation of water from plant leaves