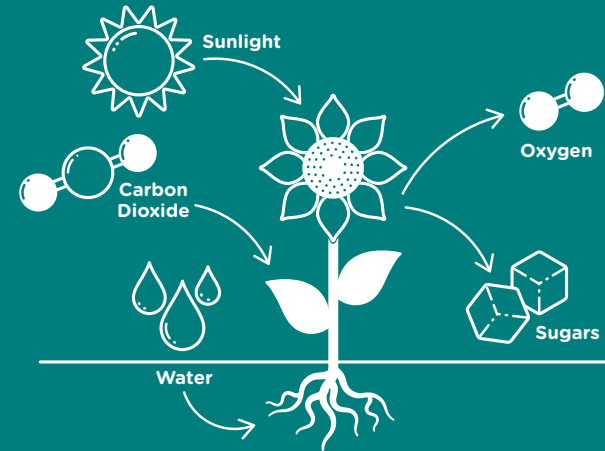


# WHAT IS PHOTOSYNTHESIS?

Photosynthesis is the process plants use to make food.  
To photosynthesize, plants need water, carbon dioxide gas, and sunlight.



As sunlight shines on a plant, the chlorophyll in its cells absorbs the light's energy. This energy gives the cells power to turn water and carbon dioxide into oxygen and sugar. The sugar is then transported throughout the plant so it can grow.

SCIENCE PUZZLE SET

# PLANT ANATOMY

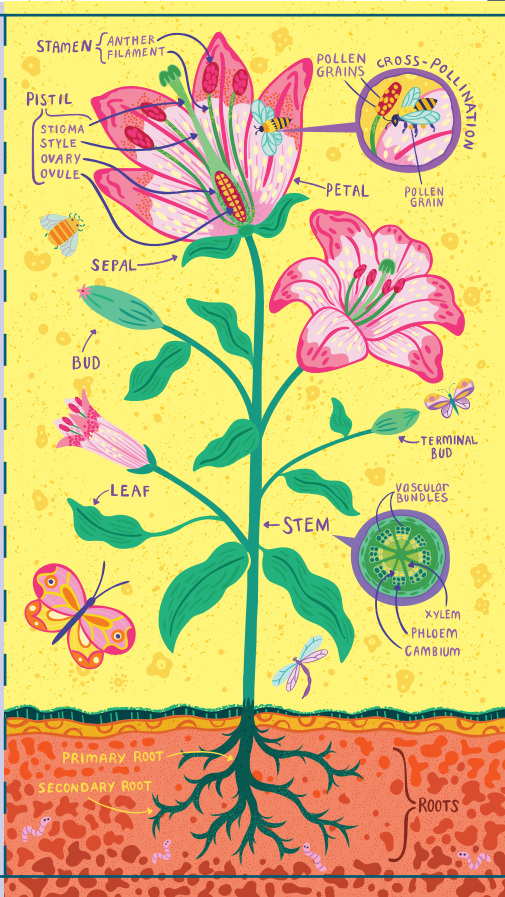
FACT SHEET

PLANT ANATOMY INSERT  
FRONT



SAGUARO CACTUS

- The saguaro cactus is one of the world's tallest cacti, growing up to 52 feet (16 m) tall. It is only found in the dry Sonoran Desert, which receives just 20 inches (51 cm) of rain a year.
- To keep hungry critters away, a saguaro is covered in rows of tough, sharp spines that grow from bumps called areoles. Spines can grow up to 2.8 inches (7 cm) long.
- Pleats are folds in the saguaro's skin that expand so the cactus can soak up extra water. After a rainstorm, a saguaro can weigh over 2 tons!
- To reproduce, saguaros grow arms, where flowers and fruit appear on the tips. A saguaro can have over 25 arms.



LILY FLOWER

- Lilies are perennial plants that are famous for their big blooms. There are over 100 different species of lilies, in every color of the rainbow—including black!
- Stamens are the male parts of a flower that make pollen. The pistil is the female part, which contains the ovary, where seeds form. The stigma is the sticky tip of the pistil that catches pollen grains.
- To make seeds, a lily flower must be cross-pollinated, which is when pollen from a different lily plant is carried to the stigma by animals, like bees, or by wind or water.
- To attract butterflies and other pollen-spreading visitors, lily flowers have special glands that make tasty nectar.



REDWOOD TREE

- Redwood trees are the tallest trees in the world, growing up to 379 feet (116 m) tall and can live to be up to 2,200 years old.
- Due to its sky-high height, a redwood can't pump water up from its roots to its upper branches well. So in its crown, a redwood absorbs water from fog through its bark and needles.
- Damaged redwoods can re-sprout from cut stumps, roots, and woody growths called burls. A burl contains buds and stored food that can grow a new tree.
- Redwoods produce two types of cones: The tiny male cones make pollen, which is carried by wind or animals to the bigger female cones, where the seeds are formed.