

Photosynthesis

A baby eats only milk. Cows eat grass. Birds eat bugs. You eat lots of different foods. Babies, cows, birds, and you need to eat food to get energy. Energy is needed for us to **live** and **grow**. Plants live and grow, too. But what do plants eat?

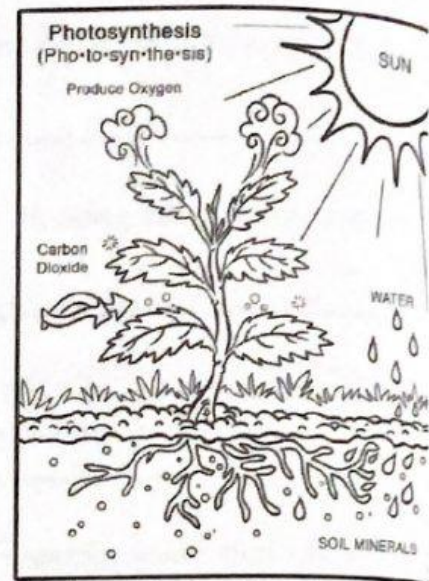
Plants can make their own food. How do they do it? They get energy from the sun's light. They use that energy, along with water and gas from the air, to make their own food. This is called **photosynthesis** (foe toe SIN tuh sis).

Plants have something unique that lets them do photosynthesis. It's called **chlorophyll** (KLOR-uh-fill). Chlorophyll is a chemical. It gives plants their green colour. ^{Chloroplast} ~~Chlorophyll~~ changes sunlight into chemical energy.

Plants need chlorophyll to make food. They need light from the sun. They also need water. Plants get water from the soil through their **roots** to the stems. Plants also need gas from the air. They get carbon dioxide gas through tiny openings in their leaves called **stomata**.

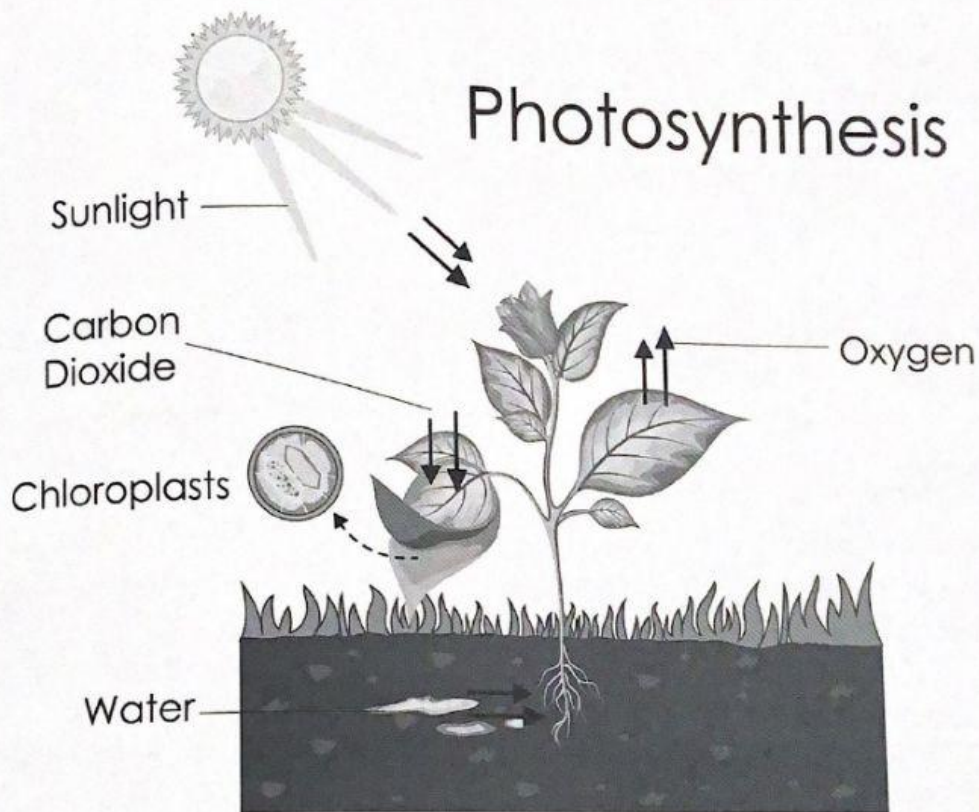
Inside the plant, carbon dioxide and water go through a chemical change. The water is split into oxygen and hydrogen. The hydrogen joins with the carbon dioxide. It makes a kind of sugar. The plant does not need the oxygen. It passes out of the tiny openings in the leaves. It becomes part of the air. That's a good thing for people and animals! We need oxygen to breathe.

The plant uses most of the sugar/glucose it makes to live and grow. Some of the sugar is stored in the plant. Animals and people can eat plants to get this stored sugar. Plants make their **own food**. We eat plants. They make food for us, too!



PLANTS

Observe the diagram showing the process of photosynthesis.



1. Define the term '**photosynthesis**'. [2]

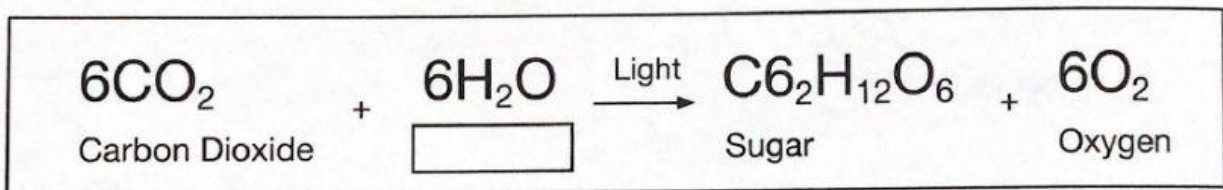
2. There are tiny openings on the leaf that help the plant during photosynthesis. What is the name of these tiny openings or holes? [1]

3. Which gas enters the leaf during the process of photosynthesis? [1]

4. Plants make their own food. What are organisms that make their own food called? [1]

5. Explain the function of the roots of a plant. [1]

6. The diagram shows the equation for the type of photosynthesis that occurs in plants.



What does **H₂O** represent in the equation? _____ [1]

7. "To save plants, we must conserve them. Suggest **ONE** way in which we can conserve plants."

_____ [1]

END.