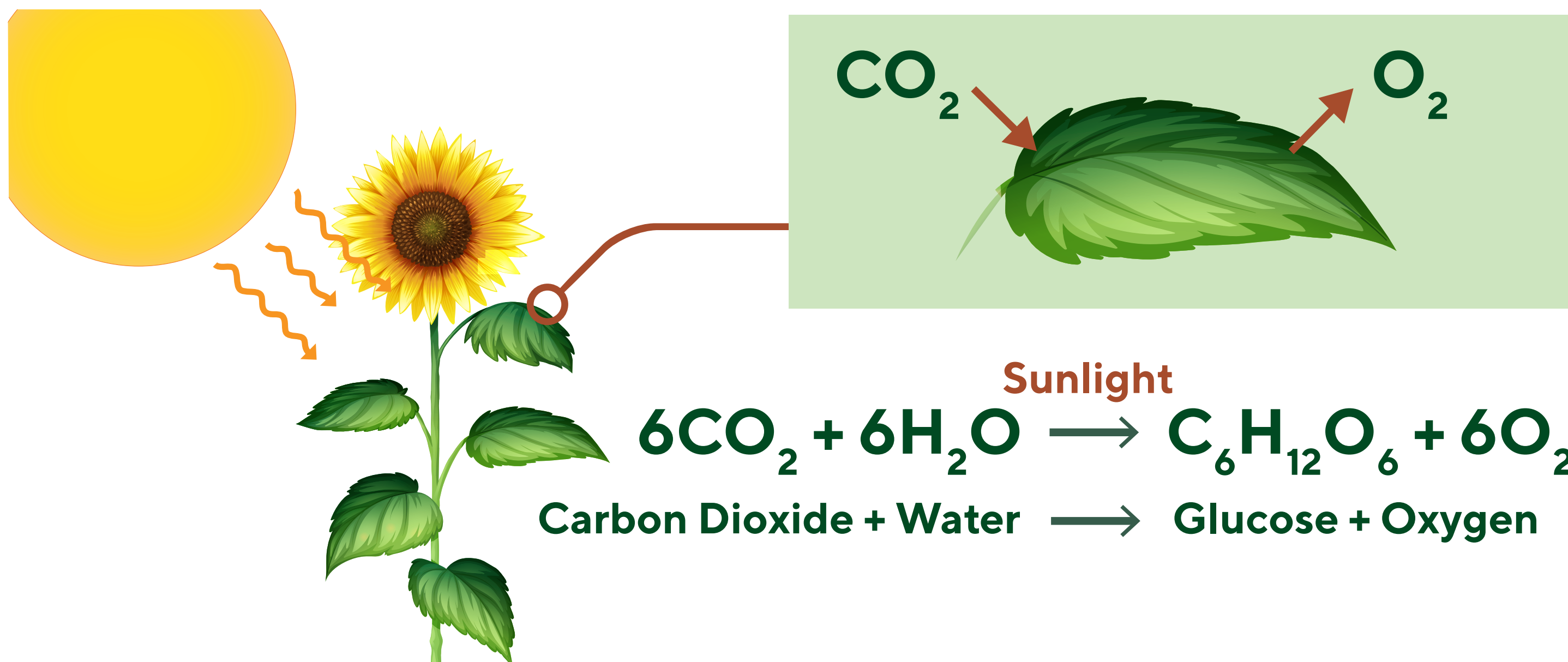


THE SCIENCE BEHIND photosynthesis

WHAT IS PHOTOSYNTHESIS?

Photosynthesis is the process by which plants make food with energy from sunlight, carbon dioxide, and water. Plants take the light energy from the Sun and convert it into chemical energy in the form of carbohydrates, like sugar. Almost all living organisms directly or indirectly rely on photosynthesis to provide the basic building blocks for cells and tissues.



4 INTERESTING FACTS ABOUT PHOTOSYNTHESIS

- 1** Lichens are organisms with a photosynthetic component, usually green algae, living in a symbiotic relationship with fungal filaments.
- 2** Plants not only take in carbon dioxide and give off oxygen during photosynthesis, they also take in oxygen and give off carbon dioxide during cellular respiration.
- 3** Single-celled organisms in the genus *Euglena* have unique anatomy—flagella for mobility, internal chloroplasts for photosynthesis and a gullet for taking in food particles.
- 4** Plants undergo photosynthesis best in the blue wavelengths of visible light (425–450 nm) and the red ranges (600–700 nm). The green wavelengths are reflected, not absorbed.

