

## Photosynthesis

Photosynthesis is the process by which green plants, algae, and some bacteria convert sunlight into chemical energy. It primarily occurs in chloroplasts, where the pigment chlorophyll captures light.

During photosynthesis, organisms take in carbon dioxide and water, producing glucose as an energy source and releasing oxygen as a byproduct. This process is vital for life on Earth, as it provides both food and the oxygen required by most living things.

Photosynthesis also plays a major role in regulating atmospheric carbon dioxide levels, making it important for global climate stability.