

# Sample SCIENCE Study Material

## Photosynthesis: How Plants Make Food

Photosynthesis is the process by which green plants use sunlight to make their own food.

Requirements for Photosynthesis:

1. Sunlight - provides energy
2. Water - absorbed through roots
3. Carbon dioxide - taken from air through stomata
4. Chlorophyll - green pigment in leaves

The Process:

Plants capture sunlight using chlorophyll in their leaves. This energy is used to convert water and carbon

Chemical Equation:



Importance:

- Provides food for plants
- Produces oxygen for animals and humans
- Removes carbon dioxide from atmosphere
- Foundation of food chains

Key Terms:

- Chloroplast: Organelle where photosynthesis occurs
- Stomata: Tiny pores on leaves for gas exchange
- Glucose: Sugar produced during photosynthesis