

Photosynthesis is the process plants use to convert light energy into chemical energy, or food. Using chlorophyll, plants absorb sunlight and combine water from the soil and carbon dioxide from the air to create glucose (sugar). This process occurs in the leaves, where carbon dioxide enters through small pores called stomata. As a result of this reaction, oxygen is released into the atmosphere as a byproduct.

- **Summary:** Photosynthesis is the process where plants use sunlight, water, and carbon dioxide to create their own food (glucose) and release oxygen.
- **Inputs:** The primary inputs are sunlight, water, and carbon dioxide, with chlorophyll acting as the catalyst to capture light energy.
- **Location:** The process mainly happens in the leaves, specifically within organelles called chloroplasts.
- **Process:** Sunlight, water, and carbon dioxide are combined in the chloroplasts to produce glucose (sugar) for the plant's energy.
- **Outputs:** The products are glucose, which the plant uses for energy and growth, and oxygen, which is released into the atmosphere.