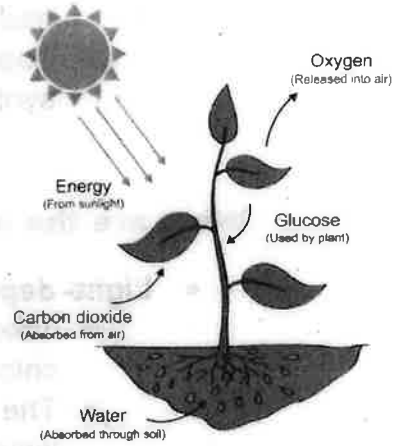
CSUSM
STEM Success Center

Photosynthesis



What is photosynthesis?

- The process by which plants, algae, and some microorganisms convert solar energy, carbon dioxide, and water into chemical energy they can use such as glucose.

Photosynthesis

$$6CO_2 + 6H_2O \longrightarrow C_6H_{12}O_6 + 6O_2$$

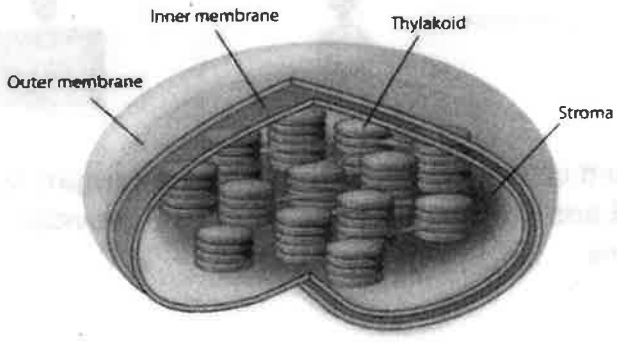
carbon dioxide + water ⟶ glucose + oxygen

Who does photosynthesis?

- **Autotrophs** are organisms that are self-feeders meaning they can convert sunlight and inorganic substances such as carbon dioxide into organic nutritional molecules, so they do not have to eat other organisms.

  ***examples of autotrophs: Algae, Cyanobacteria, Plants*

Where does photosynthesis take place?



➢ **Chloroplasts** are organelles found in green plant cells and eukaryotic algae. **Chlorophyll** resides within the thylakoid membranes of the chloroplast; this pigment absorbs violet-blue and red light and reflect a green pigment in plants.