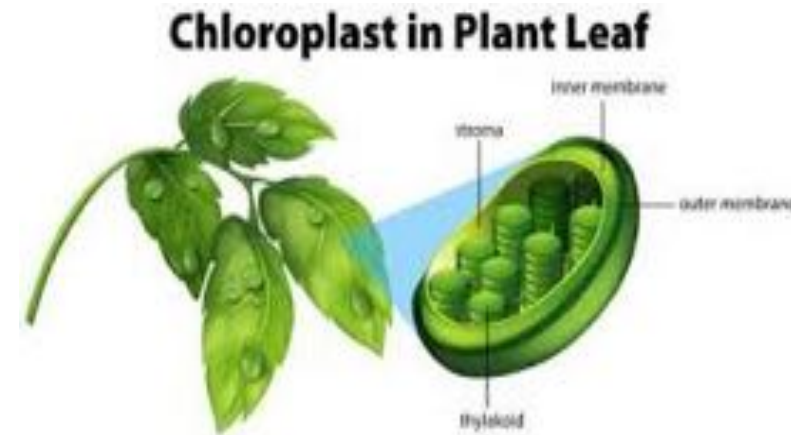
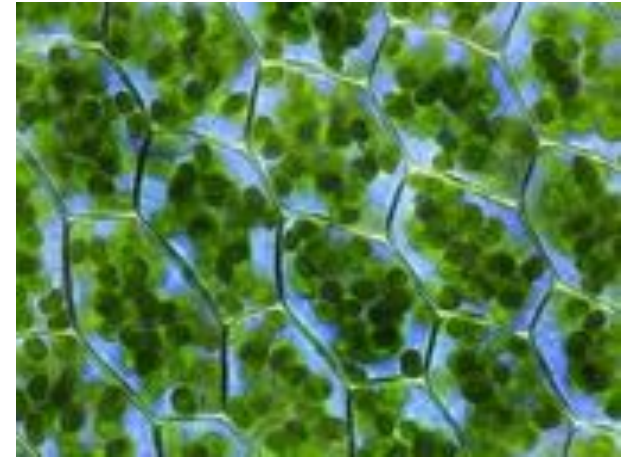


Energy for Cells

Photosynthesis

- Process where plants manufacture their own food
- Occurs in the **chloroplast**, which contains the pigment chlorophyll
- **chlorophyll** absorbs **light** and converts it into **chemical** energy.



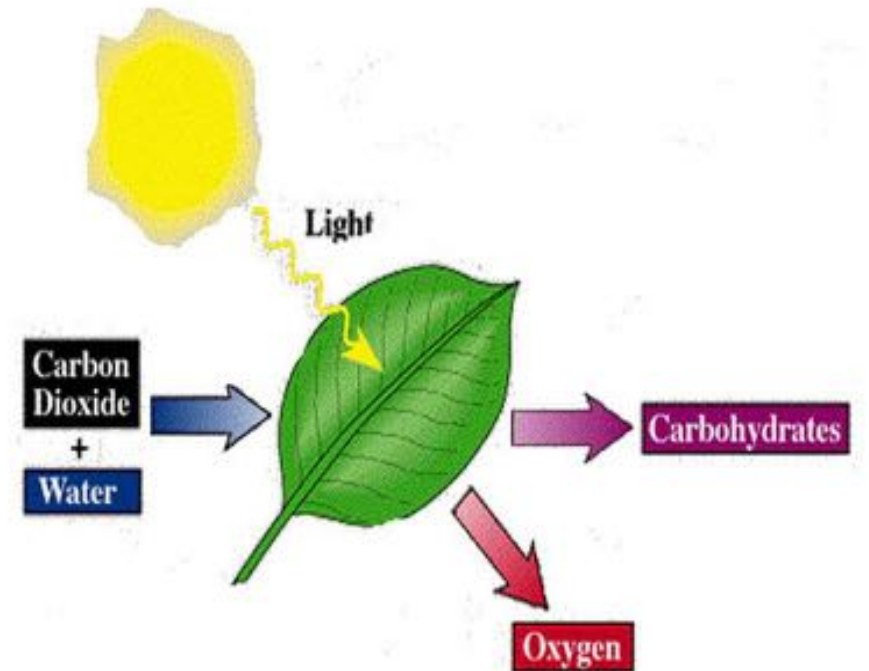
Photosynthesis

light energy

carbon dioxide + water $\xrightarrow{\quad}$ sugar + oxygen

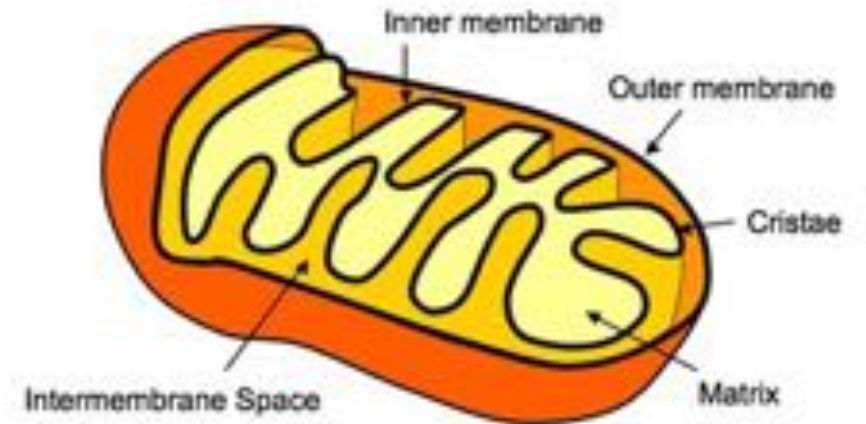
chlorophyll

- The **sugar** is then stored for use later



Cellular Respiration

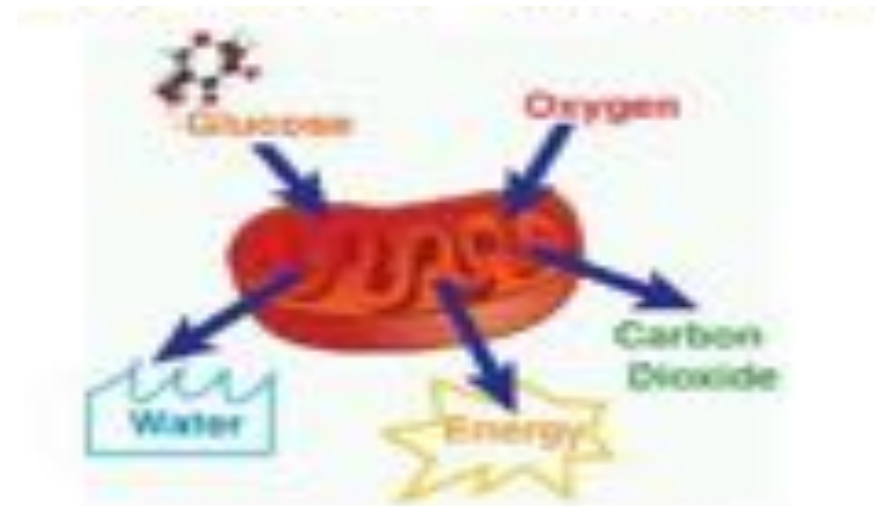
- Process that converts stored energy (sugar) into useable energy for the cell.
- Takes place in the **mitochondrion**.
- occurs in both **plants** and **animals**



Cellular Respiration

sugar + oxygen ---> carbon dioxide + water + energy

- the **energy** released can then be used by the cell



Photosynthesis and Cellular Respiration are complementary processes...

