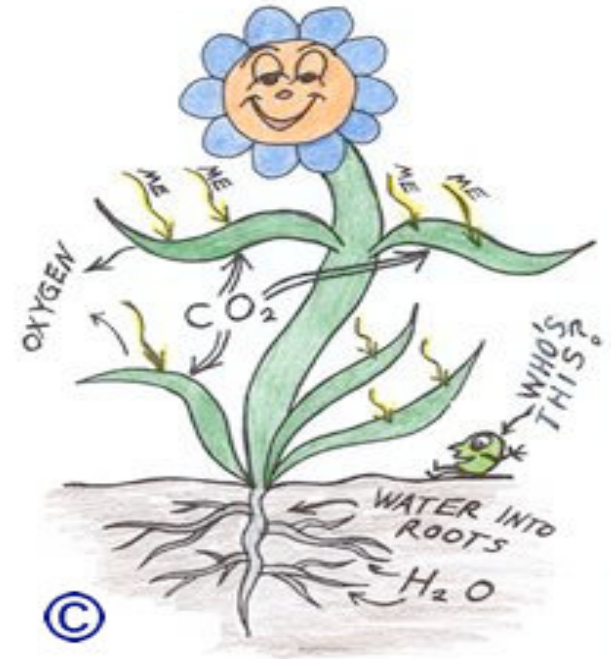
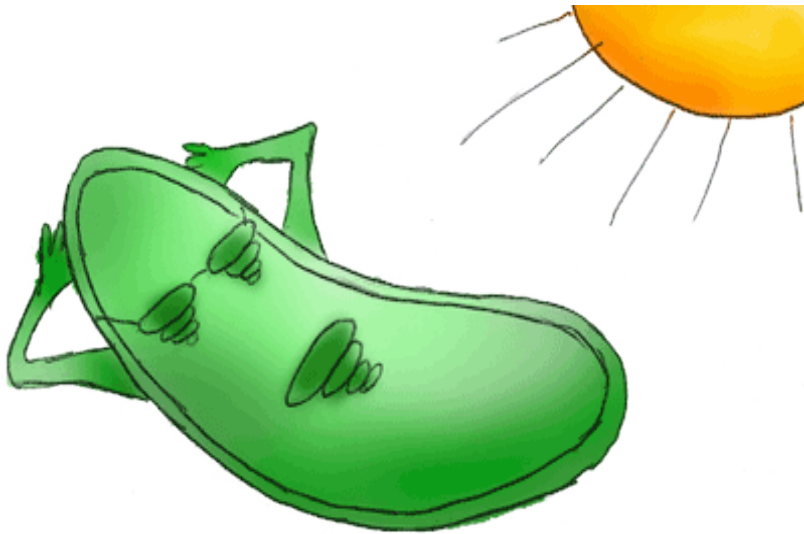


What Is Photosynthesis?

Photosynthesis is a process carried out by **plants, algae**, and few species of **bacteria**. It is a way that these organisms **make their own food** using **light energy, water**, and **carbon dioxide**. It occurs within specialized organelles called **chloroplasts**. These chloroplasts have **pigments** called **chlorophylls** within them that are able to capture the incoming light and convert it into **chemical bond energy (food)**. Lucky for us these organisms produce **oxygen** as a by-product while carrying out photosynthesis. The food that is made by "PS" can be used for: **energy, growth** and **repair**, or **storage**.



Light Energy + Carbon Dioxide + Water —————> Food + Oxygen

Where Does It Happen?

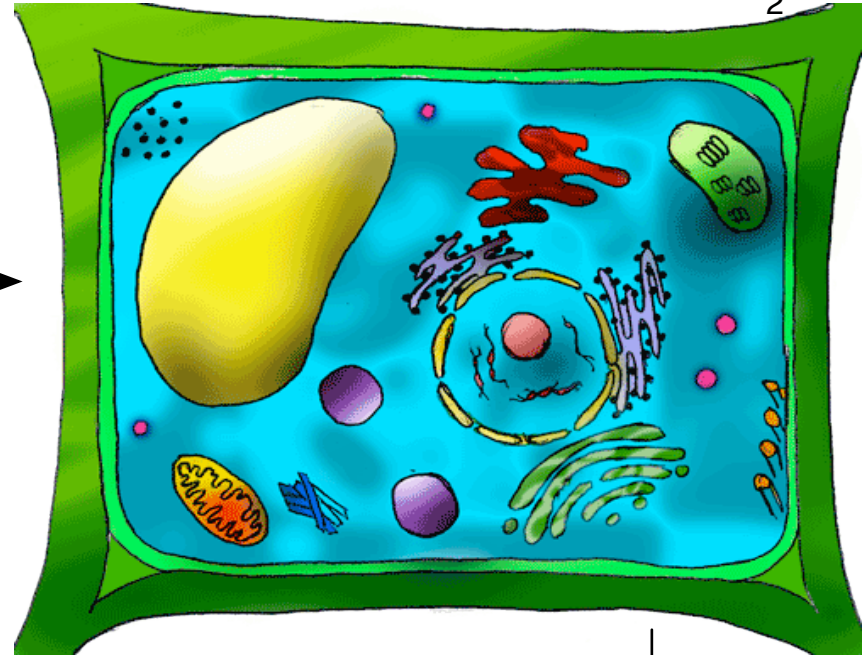
Leaf

1



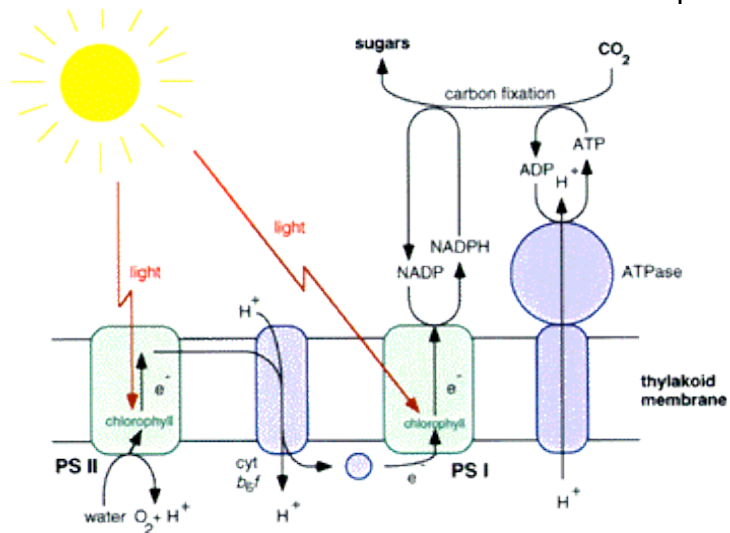
Plant Cell

2



Inside the Chloroplast

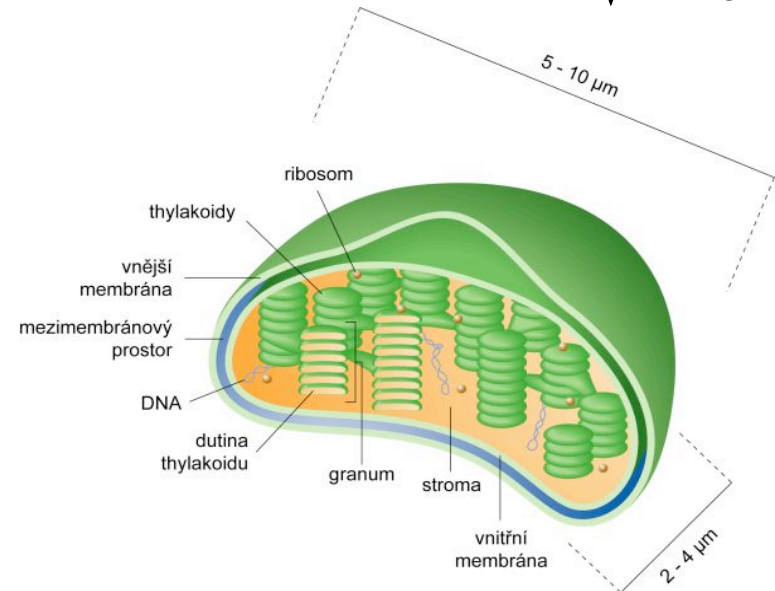
4



Don't need to know this - it is some insight into what happens at the chemical level.

Chloroplast

3



What Do We Need To Know About Photosynthesis?

1. What is the purpose of photosynthesis in living things and where does it take place?
2. What raw materials, energy source, and pigment are needed to allow this process to take place?
3. What are the possible products of photosynthesis and what is the waste product?
4. What can the products of photosynthesis be used for?
5. The formulas for photosynthesis and respiration.
6. How are photosynthesis and respiration related?