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# Photosynthesis


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# What is photosynthesis and what does it do?

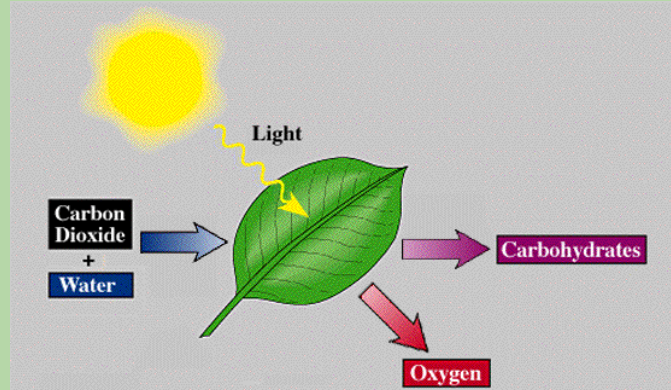
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- Light energy  chemical energy
- Sunlight, Carbon Dioxide, Water
- Glucose, Oxygen

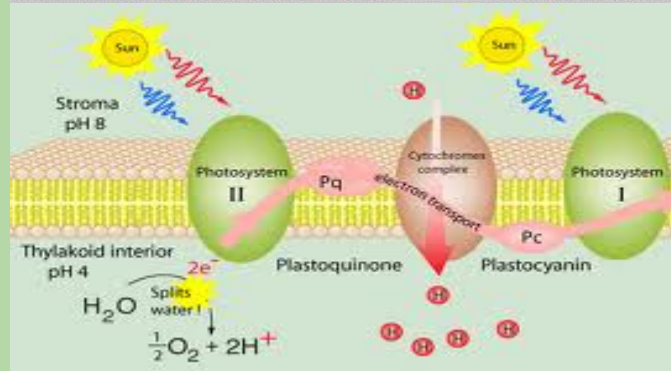


# What does photosynthesis look like.

A simple way of looking at photosynthesis is...

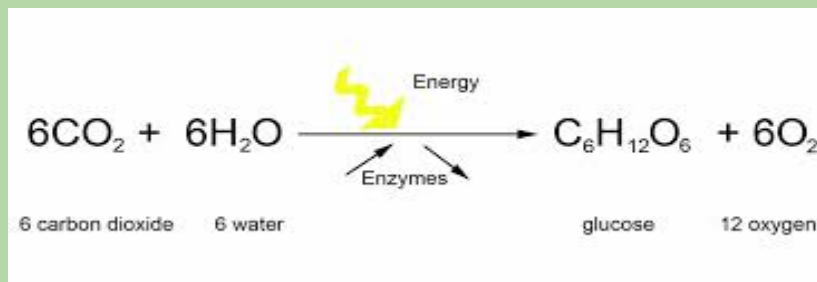
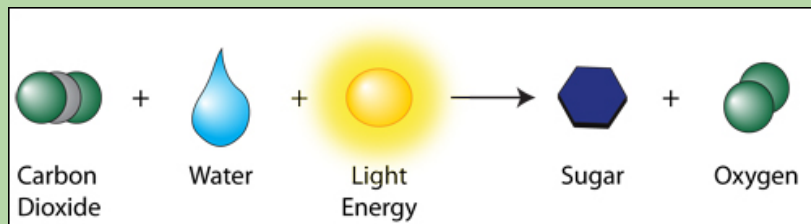


A more complex way of looking at photosynthesis is...



# What is the equation for photosynthesis?

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# Organelle Structure

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Bacteria has three packs:

Cyanobacteria:

- Allows oxygenic photosynthesis to take place
- Electric doner is water

Green bacteria:

- Allows anoxygenic photosynthesis to take place
- Molecules used as electron sources and to produce NADH and NADPH
- Photosynthetic system located in chlorosomes

Purple bacteria

- Aids anoxygenic photosynthesis
  - Molecules used as electron sources and to produce NADH and NADPH
  - Photosynthetic system located in membrane system
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# Why is photosynthesis essential?

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- Process: plants obtain energy
  - Survival of the plants
  - Output: Oxygen, glucose
  - Plants are a necessary part of our world; we work as a cycle.
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# Vocabulary

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**Photosynthesis:** Process in which light energy is converted into chemical energy and stored in the bonds of sugar

**Kingdom Protista:** made up of plants and some algae; these organisms go through photosynthesis

**Chloroplast:** the part of the cell where photosynthesis takes place

**Chlorophyll:** The green pigment involved in the photosynthesis

**Mesophyll:** The layer in between the other layers on a leaf.

**Green Bacteria:** One of the 3 types of bacteria in photosynthesis

**Purple Bacteria:** One of the 3 types of bacteria in photosynthesis

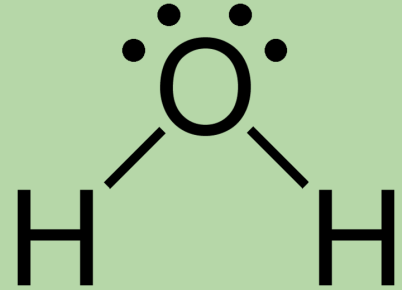
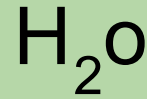
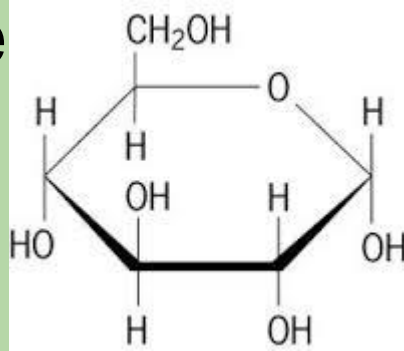
**Cyanobacteria:** One of 3 types of bacteria in photosynthesis

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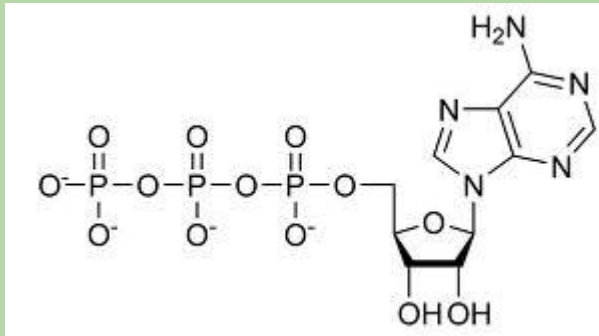
# Basic structures

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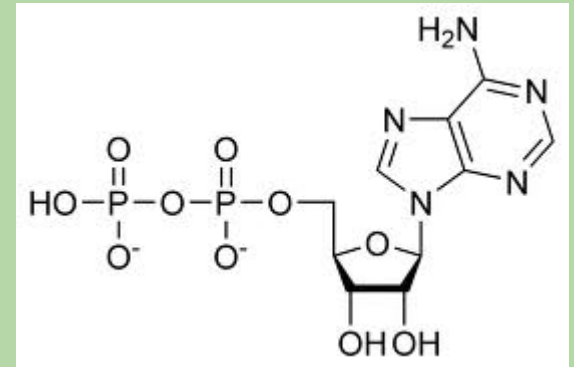
Glucose



ATP



ADP





# Conclusion

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In short, photosynthesis is the process of changing light, water, and carbon dioxide, into glucose and ATP with a by-product of oxygen.

for more information visit [faculty.ccbcmd.edu](http://faculty.ccbcmd.edu).

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