Chapter 8-2: Photosynthesis: An Overview Essential Questions:

- What is the overall equation for photosynthesis?
- What is the role of light & chlorophyll in photosynthesis?
- What happens in the light-dependent reactions?
- What happens in the Calvin cycle?

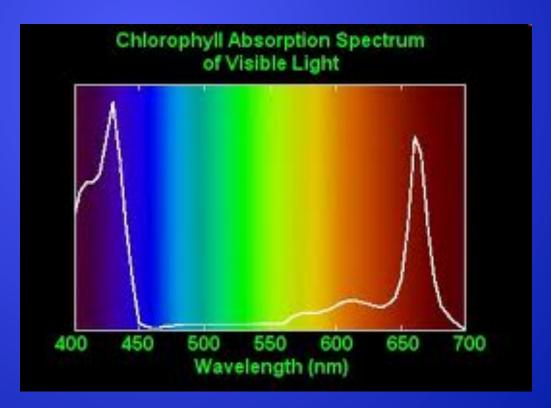
- The Photosynthesis equation
 - Words:

(light)

Carbon dioxide + water → glucose + oxygen

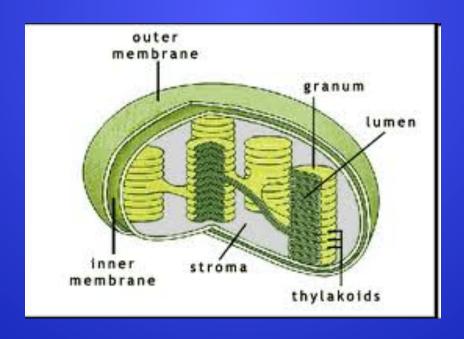
- Chem. Formula

- Light & pigments
 - Chlorophyll



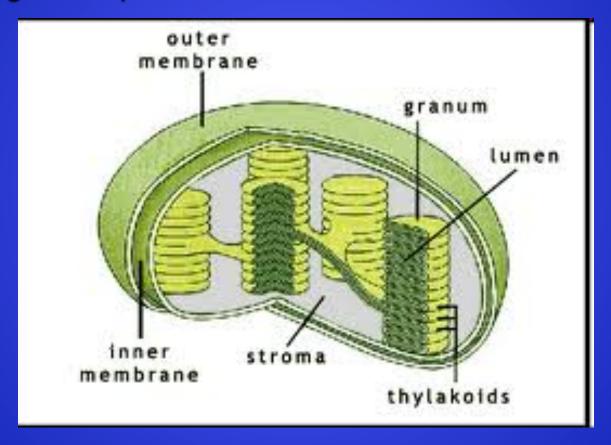
Chapter 8-3: The Reactions of Photosynthesis

- Inside a chloroplast
 - Thylakoids
 - grana (singular: granum)

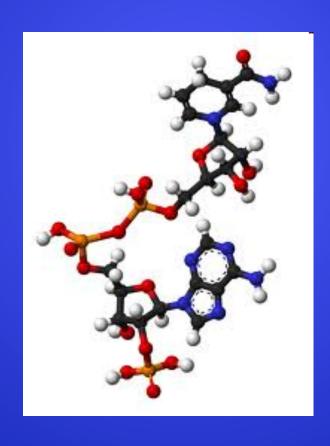


2 stages of photosynthesis

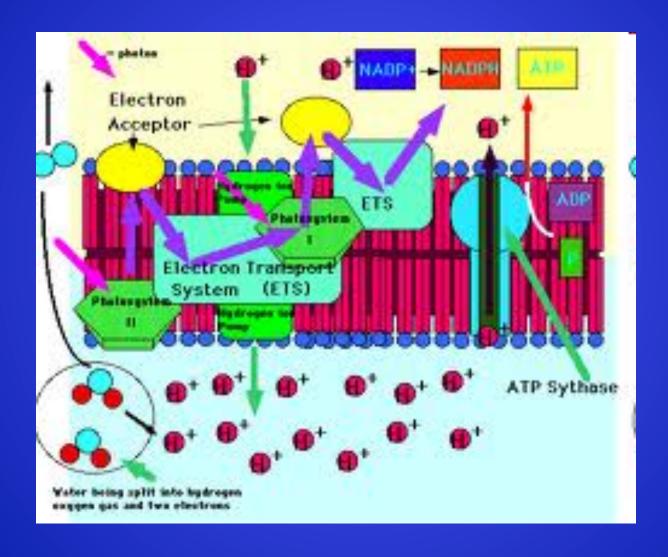
- Light dependent
- Light independent



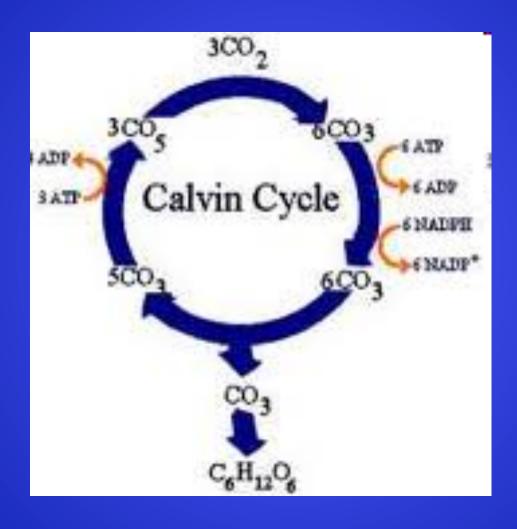
- NADPH
 - NADP⁺
 - Becomes NADPH energized



Light-dependent reactions



The Calvin Cycle



Factors affecting photosynthesis

- Light intensity
- Amount of water
- Temperature

