

Chapter 7
CAPTURING SOLAR ENERGY:
PHOTOSYNTHESIS

**Chloroplasts are the site of photosynthesis
in plants**

Photosynthesis vs. Cellular Respiration

- Photosynthesis is the opposite of cellular respiration.
- During photosynthesis, glucose and other energy-rich molecules are **made** through a process that requires energy from the sun.
- During cellular respiration, energy is **obtained** from glucose and other energy-rich molecules.

---Photosynthesis transforms light energy trapped by chloroplasts into chemical bond energy and stores that energy in sugar and other organic molecules

- **Synthesis of energy-rich organic molecules (glucose) from energy-poor molecules (CO_2 and H_2O)**
- **Uses CO_2 as a carbon source and sunlight-energy as the energy source.**
- **Directly or indirectly supplies energy to most living organisms.**