






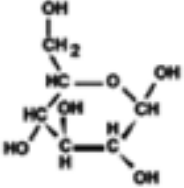
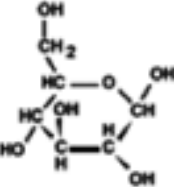

Ch 10.1: Cellular Respiration: An Overview

Essential Questions:

- Where do organisms get energy?
 - What is cellular respiration?
 - What is the relationship between photosynthesis & cellular respiration?
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- Chemical Energy & Food
 - Calorie
- Overview of Cellular Respiration
 - Oxygen + Glucose → Carbon Dioxide + Water
 - $6 \text{ O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 6 \text{ CO}_2 + 6 \text{ H}_2\text{O} + \text{energy}$
 - Stages of CR
 - Oxygen & energy
 - Aerobic
 - Anaerobic

■ Comparing Photosynthesis and CR

	PHOTOSYNTHESIS	RESPIRATION
Where?	Chloroplasts 	Mitochondria 
When?	In the presence of light 	All the time 
Input	Carbon dioxide and water 	Glucose and oxygen 
Output	Glucose and oxygen 	Carbon dioxide and water 
Energy sources	Light	Chemical bonds
Energy result	Energy stored	Energy released