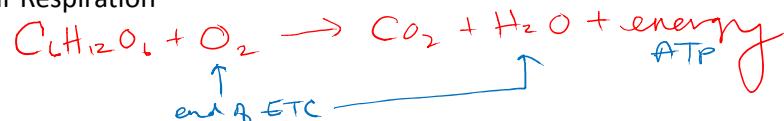


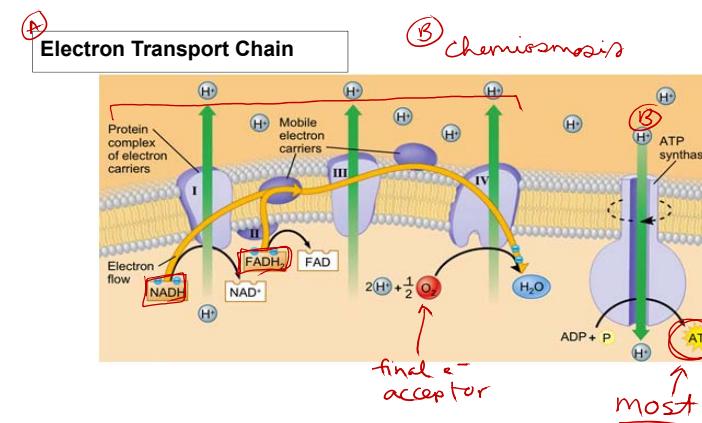
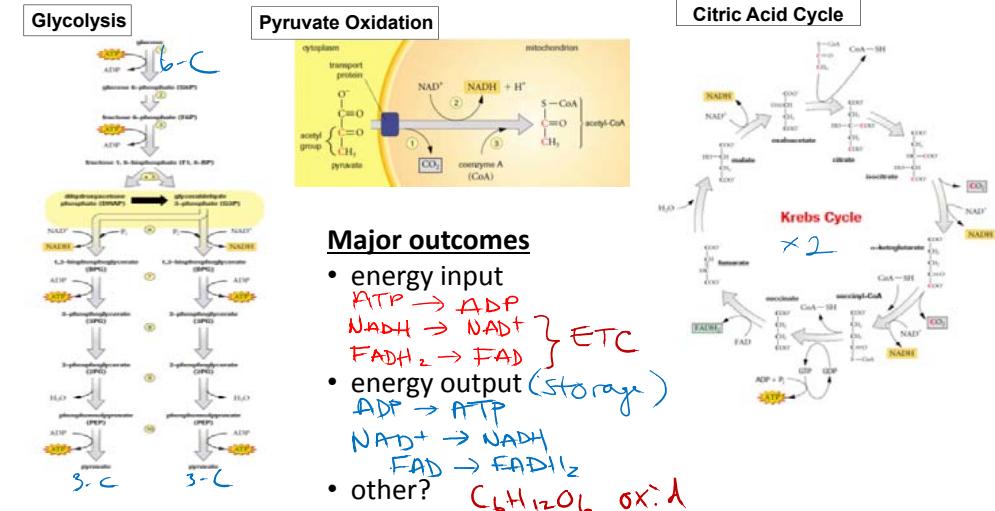
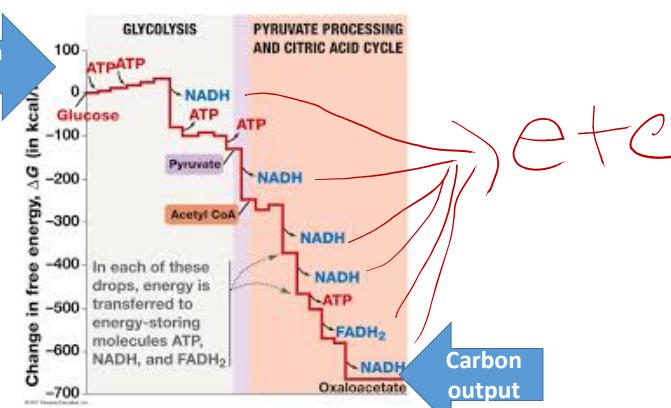
Unit 2 – Metabolic Processes

- Energy Changes in Metabolic Processes

- Cellular Respiration



- Photosynthesis



- Major outcomes
- energy input
 - energy output
 - other?

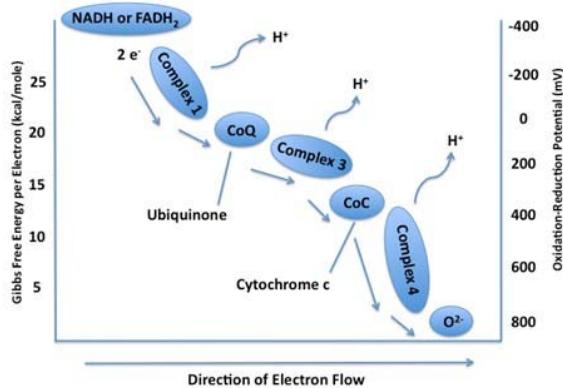
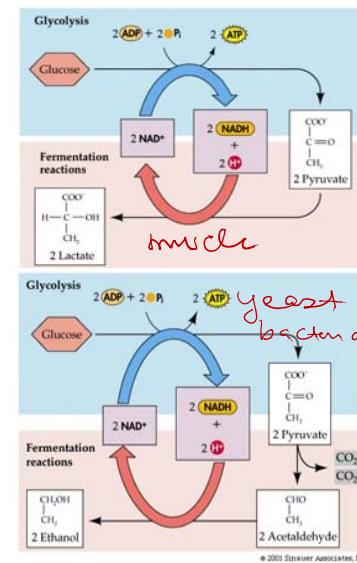
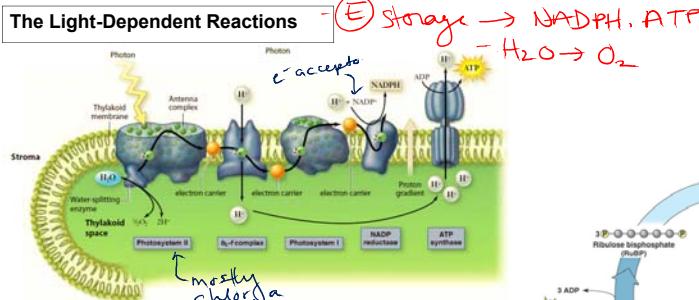


Figure 2



Anaerobic Pathways

- Similarities
 - no O_2 , no ETC
 - glycolysis
- Function
 - produce ATP
- Energy output (vs. aerobic respiration)
 - ↪ way less



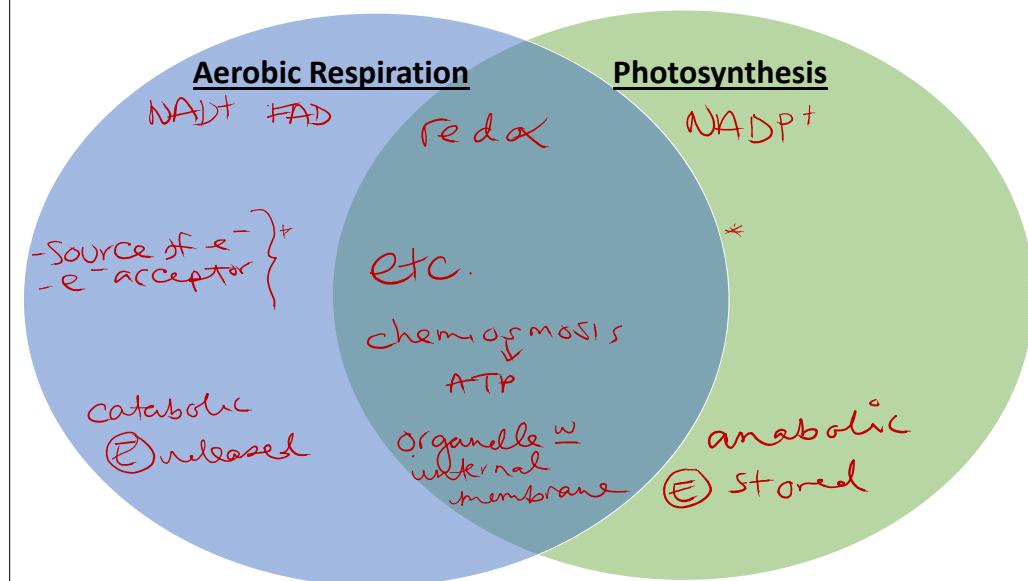
Major outcomes

- energy input
- energy output
- other?

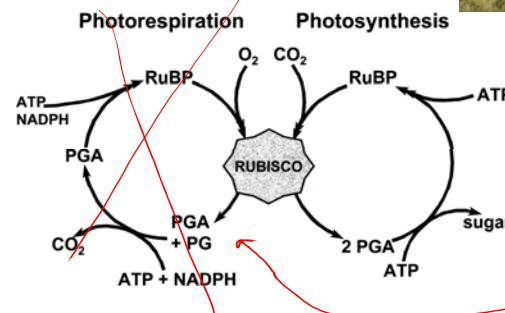
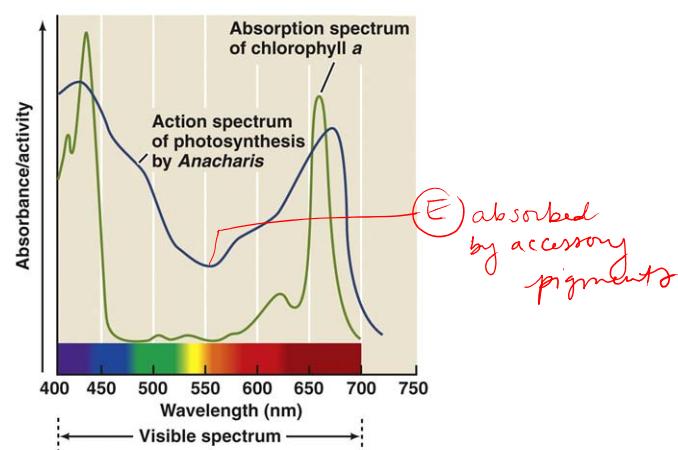
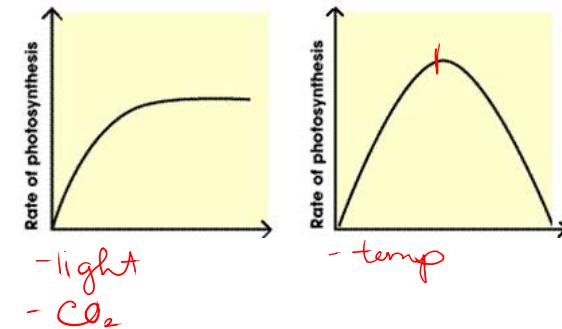
The Light-Independent Reactions

- CO_2 fixation (ribisco)
- ↪ 6 per glucose (car)

	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



Factors affecting photosynthesis



- Competition for rubisco!
- C₄, CAM
(no details)