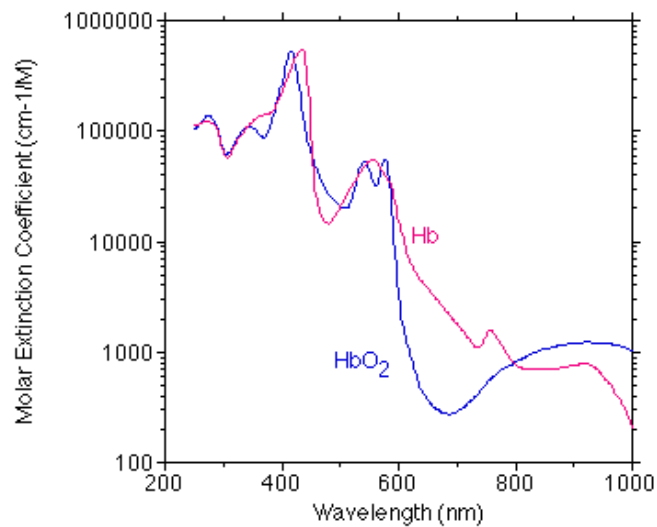


SI #8 LIFE 1010-01

- 1) Draw the reaction for photosynthesis below and determine what is oxidized and what is reduced.
- 2) How might we be able to track the rate of photosynthesis? (think about the byproducts of photosynthesis)
- 3) What are the two sets of reactions included within photosynthesis? What are the goals of each set?
- 4) What does the stoma do and when is it most active and why?
- 5) Where does photosynthesis occur?
- 6) Observe the light absorption graph below and determine what color HbO₂ might be.



Wavelengths
Blue=450-495nm

Green=495-570nm

Violet=390-455nm

Red=620-750nm

- 7) What are the possible fates of an excited electron in photosynthesis?
- 8) Use the space below to draw the z-scheme. Include all reactants and products.
- 9) Use the space below to draw the Calvin cycle. Label all 3 steps and how many carbons are at each step.

Medical Matters

The brain makes up for about 2% of the total bodyweight but uses roughly 20% of the body's energy. Using this information, why is keeping the brain adequately oxygenated essential for survival?

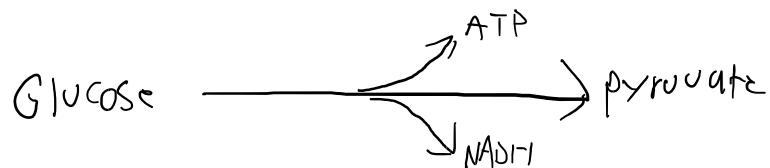
Review of Cellular Respiration

1) Complete the table below. Try to complete without referencing your notes.

	Start with	End with	Produce
Glycolysis			
Pyruvate Processing			
TCA Cycle			
ETC and OX Phos			

2) What is the difference between substrate level phosphorylation and Oxidative phosphorylation?

3) Complete the diagram below to show the pathway of fermentation.



- 4) Use what you know to draw a diagram of the entire cellular respiration process. At each step, include reactants and products.

What question do you have for me?