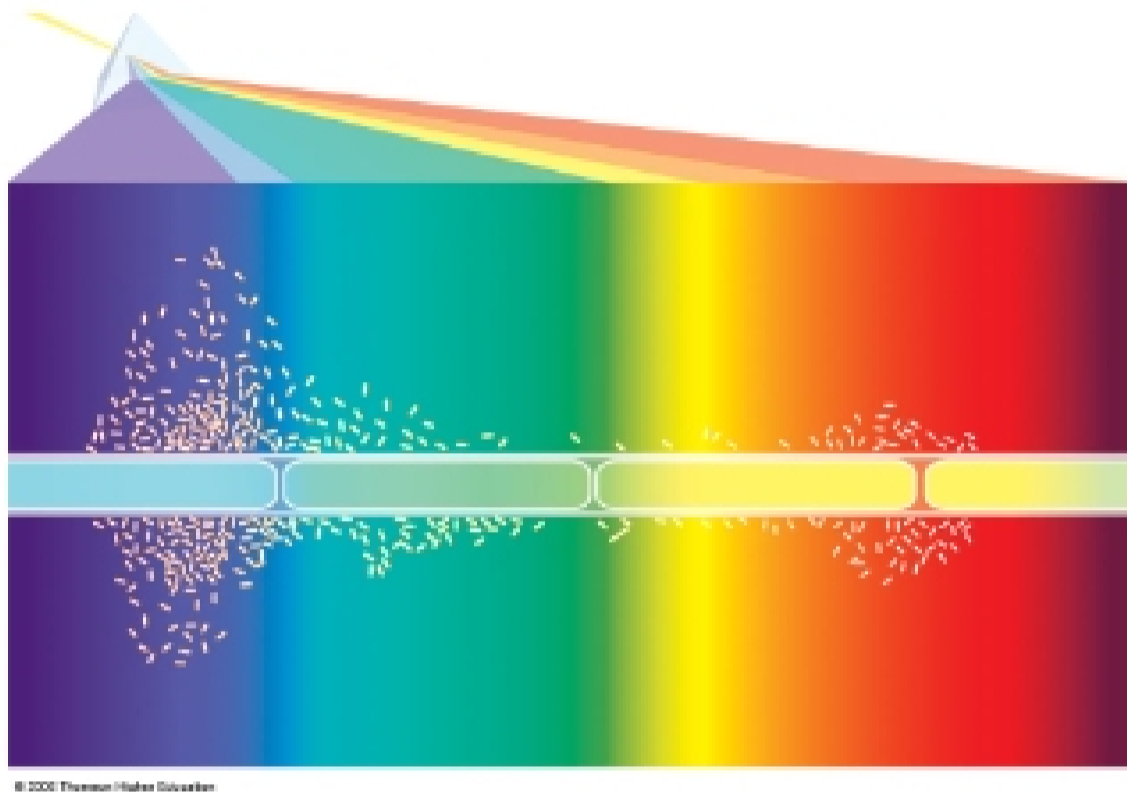


Name _____ Student ID _____

Photosynthesis Worksheet – Lab Exercise 7
Chapter 7 Biology 1

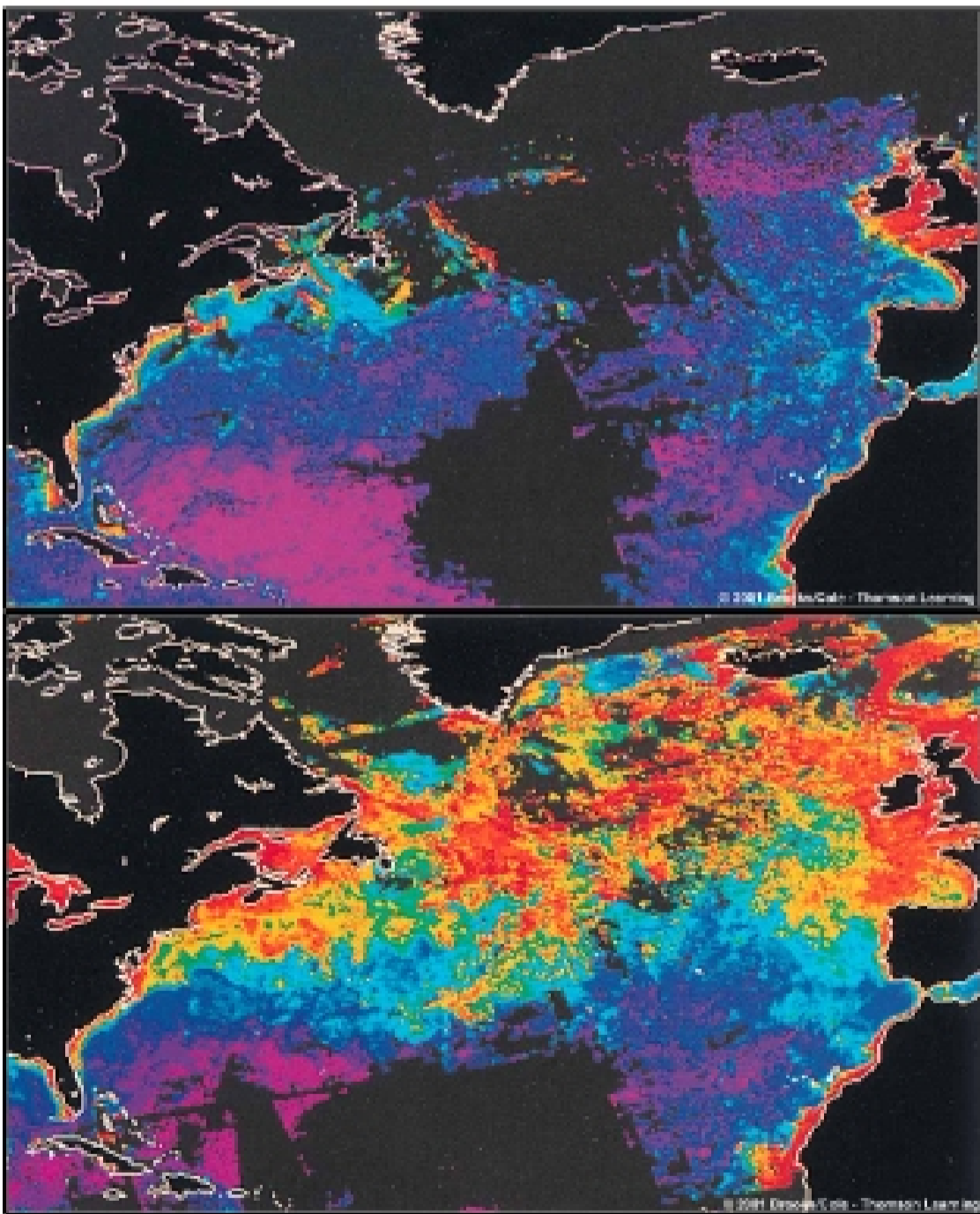
1. Explain what the significance of W.T. Engelmann's experiment and how does this relate to the absorption spectra of chlorophyll



2. Label the following: thylakoid membrane, stroma, light independent reactions, light dependent reactions. Draw arrows where water and carbon dioxide enter and where oxygen and sugars exit.



6. Is oxygen a competitor for Rubisco _____ Yes/No
7. Did light independent reactions evolve when O₂ concentration on earth was low?
_____ Yes/No
8. What are several ways plants deal with photorespiration? (Hint: C₄ and CAM plants)
9. What are the pastures of the seas? Discuss in a group the aquatic food web. How does industrial wastes, raw sewage, and fertilizer from crop land effect the ocean environment. Be specific and scientific in your answer. Will this affect the pastures of the seas?



10. How do the pastures of the seas affect global warming? How do they affect the CO₂ level in the atmosphere?