**Chapter 7 Photosynthesis Study Guide and Questions**

1. Photosynthesis (Reactants, Products, Location of Occurrence)
2. Redox Reactions (Oxidized, Reduced)
3. Cellular Respiration (Reactants, Products, Location of Occurrence)
4. Parts of a Leaf and Chloroplast - Types of Pigments (Chlorophyll a, Chlorophyll b, and Carotenoids)
5. Electromagnetic Spectrum (specifically visible spectrum)
6. Stages of Photosynthesis(Order, Process -Reactants, Products, Intermediates -Location they Occur)
7. Diagrams of the Stages of Photosynthesis (Be able to Explain a Diagram)
8. C3, C4, and CAM Plants

\*Be able to answer questions at end of notes

 Additional Questions

1. What is the overall process of Photosynthesis?
2. What is a chloroplast?
3. Describe the structure of a chloroplast? (main parts)
4. What is the electromagnetic spectrum? What are the wavelengths for visible light?
5. Why, in our virtual lab, did the plants grow best under blue light? (Think wavelengths and pigment molecules)
6. Differentiate between chlorophyll a, chlorophyll b, and carotenoids.
7. What is a Redox reaction? In photosynthesis what is getting oxidized? Reduced?
8. Describe the 2 main stages of photosynthesis.
9. What is photophosphorylation?
10. Where do the light dependent reactions take place?
11. In the light dependent reaction what happens to the component of the reactant water?
12. What is the process, reactants, and products in the light dependent reactions?
13. Why are the reactions of the Calvin Cycle called light independent reactions?
14. What is RuBP? What is Rubisco?
15. What is the process, reactant, and products in the Calvin Cycle? How does it make sugar?
16. How are photosynthesis and Cellular Respiration Related ?(Diagram in Cell Resp. Notes\*\*\*)
17. Describe and differentiate between C3, C4, and CAM plants. Give an example of each.