

## Photosynthesis Study Guide

1. Define each kind of energy and explain where you would find each one in Photosynthesis.
  - a. Potential Energy
  - b. Light Energy
  - c. Chemical Energy
2. Write the Equation for Photosynthesis
3. Write the Equation for Cellular Respiration
4. Describe the relationship between Cellular Respiration and Photosynthesis.
  - a. How could I use Bromothymol Blue to test this relationship?
5. Define:
  - a. Chloroplast
  - b. Chlorophyll
  - c. Thylakoids
  - d. Grana
6. Which color of light is NOT absorbed in photosynthesis? How do you know?
7. What are the products of the Light Dependent Reactions? **Where does it occur in the chloroplast?** (Use the flow chart)

8. What are the products of the Light Independent Reactions (Calvin Cycle)? (Use the flow chart)
  
9. Where does the light Independent Reaction occur in the Chloroplast?
  
10. Define
  - a. Xylem
  - b. Phloem
  - c. Stomata
  - d. Chemosynthesis
  
11. List the Factors impacting Photosynthesis

#### NEW MATERIAL

##### **Define**

- 1. Aerobic**
- 2. Anaerobic**
- 3. ATP- you should be able to draw the cycle.**

**Describe the following Process. How many ATP are Made? Is oxygen Required?**

**Where does it happen in the cell?**

- 1. Glycolysis**
  
- 2. Krebs cycle**
  
- 3. Electron Transport Chain (ETC)**
  
- 4. Alcoholic Fermentation**

## **5. Lactic Acid Fermentation**

### **Questions you should be able to Answer**

- 1. Why do we break down glucose in to steps? What would happen if we did it all at once?**
- 2. Which of the processes listed above can help us make.**
  - a. Bread**
  - b. Yogurt**
  - c. Beer**