Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_

Introduction to Biochemistry – Notes Organizer

1. What is **Chemistry**?

Watch lecture video found on blog by Thursday, Jan. 19

1. Define ***Biochemistry***:
2. Physical Reaction vs. Chemical Reaction  
   1. **Physical Reaction**
      * + Examples:
   2. **Chemical Reaction**
      * + Examples:
3. The chemical equation below illustrates the biochemical process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Using the equation, circle and label the ***reactants*** and ***products***.

6C02 + 6H20 🡪 C6H12O6 + 6O2

1. What is **activation energy**?
2. What is an ***enzyme***?
3. Draw and explain the energy diagram for *reactions using enzymes vs. reactions not using enzymes*.
4. Define the following terms:  
   1. **Substrate**:
   2. **Active Site:**
5. List biological processes which utilize enzymes
6. What does the “**lock and key**” model explain?
7. Click on the “Enzymes in Action” link found on the blog. Review the tutorial and then click on “Why Enzymes.” ***What was the difference between the reaction taking place with and then without an enzyme?***