Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour:\_\_\_\_\_\_\_

**Photosynthesis and Cellular Respiration Review Sheet**

If order to use a note sheet on the test for this unit you MUST have this review sheet done and signed at the start of class on Wednesday! No exceptions!

**Photosynthesis**

1. What is the equation for photosynthesis?
2. What is the big idea of photosynthesis?
3. Who does photosynthesis?
4. The first step of photosynthesis is the light reactions. Answer the following questions about the light reactions:
   1. Where do they take place?
   2. What happens during it?
   3. What gets made?
5. The second step of photosynthesis is the “dark reactions”. Answer the following questions about the dark reactions:
   1. Why is calling it the dark reactions wrong?
   2. What is the other name it does by and who discovered it?
   3. Where does it take place?
   4. What gets made?

**Cellular Respiration**

1. What is the equation for cellular respiration?
2. What is the big idea of cellular respiration?
3. Who does cellular respiration?
4. Create a chart below that shows the different options cellular respiration can take (think oxygen vs no oxygen and include all the names of the steps, also be sure to include the works aerobic and anaerobic respiration)
5. Answer the following questions about Glycolysis:
   1. Where does it happen?
   2. What does it not require?
   3. What happens during it?
   4. What gets made?
6. Answer the following questions about the Breakdown of Pyruvate:
   1. Where does it happen?
   2. What happens during it?
   3. What gets made?
7. Answer the following question about the Krebs Cycle:
   1. Where does it happen?
   2. What happens during it?
   3. What gets made?
8. Answer the following questions about the Electron Transport Chain:
   1. Where does it happen?
   2. What happens during it?
   3. What gets made?
9. If there is no oxygen present cells undergo anaerobic respiration (fermentation) fill in the chart below about this:

|  |  |  |
| --- | --- | --- |
|  | Lactic Acid Fermentation | Alcoholic Fermentation |
| Who does this? |  |  |
| Where does this happen? |  |  |
| What gets made during this process? |  |  |
| Example of this process: |  |  |

1. Does aerobic or anaerobic respiration make more ATP per glucose molecule? What step specifically makes the most?

**Chemical Reactions (throw back to last unit! But you will see this stuff on the test)/Left Overs**

1. What are the different types of pigment molecules we discussed in class?
2. Which of the above pigment molecules do plants use?
3. Why do plants appear green?
4. In a chemical equation, what if the difference between reactants and products?
5. What is the difference between ADP and ATP? How can you convert one to the other?
6. Define the following:
7. Autotroph:
8. Heterotroph:
9. Metabolism:   
   * Give examples –
10. Enzyme:
11. Catalyst:  
    * What do they do to reactions?