Honors Biology Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
NDHS Per: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Cellular Respiration Worksheet**

**Directions**: Complete the following chart for the location, reactants, products, and energy yields for each step of cellular respiration.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step** | **Location** | **Reactants** | **Products** | **ATP Yield** |
| **Glycolysis** |  |  |  |  |
| **Krebs Cycle** |  |  |  |  |
| **ETC** |  |  |  |  |

Questions:

1. What is the difference between aerobic and anaerobic respiration? What kind of cells perform these types of metabolism?
2. What are the two main steps of glycolysis and what occurs in each step?
3. What is the main (most) product of the Kreb’s cycle?
4. Why do cells use hydrogen acceptors? What are the full names of the hydrogen acceptors in C.R.?
5. How does the ETC produce ATP?
6. How is the ETC of C.R. different than the ETC of photosynthesis? Give three reasons.
7. What are the two types of fermentation? What kind of cells carry these out?
8. What is the main purpose of fermentation? (It’s not to produce energy).

 9-10. Write the equation for cellular respiration. Draw and label the mitochondria. Label where the steps of C.R. use the reactant, make the products, and occur in the mitochondria.