**CHAPTER 8: CELLULAR ENERGY RFC #3a**

\* Read the following questions, **THEN** read from Chapter 8 p. 228-231 **STOP** @ Anaerobic Respiration, **THEN** answer the following questions on your own paper in complete sentences. ***ANSWERS ARE NOT IN ORDER, YOU MUST READ FIRST!***

1. Compare and contrast anaerobic and aerobic respiration. ***Include which steps of cellular respiration are aerobic and anaerobic.***
2. During electron transport of aerobic respiration most of the ATP is formed from ADP with the help of what from the Krebs Cycle?
3. What is the final acceptor during electron transport of cellular respiration AND what does it help produce?
4. How many molecules of ATP are produced during glycolysis? What is the NET Gain during glycolysis?
5. During glycolysis, what is glucose broken down into? (be sure to give name of compound and the # of carbons they have)
6. Give the overall equation of Cellular Respiration.
7. How does prokaryotic cellular respiration differ from that of eukaryotes? (give a minimum of two ways they are different)
8. How many ATP are generated during electron transport? How many are created from NADH? FADH?
9. In which organelle does cellular respiration occur?
10. **Type II:** Describe the steps of the Kreb’s cycle beginning with Acetyl CoA. . **BE SURE TO USE THE FOLLOWING WORDS AND UNDERLINE THEM WHEN USED: citric acid, carbon dioxide, NAD+, NADH, FAD, FADH2, ATP, ADP**
11. What is the MAIN Idea for section 3?
12. What is the yield number of ATP created from one glucose molecule in eukaryotes?
13. Where is pyruvate transported after glycolysis?
14. Type II: Explain the steps that occur before the Kreb’s cycle that converts pyruvate to Acetyl CoA. **BE SURE TO USE THE FOLLOWING WORDS AND UNDERLINE THEM WHEN USED: pyruvate, carbon dioxide, CoA, Acetyl CoA, NAD+, NADH, two.**
15. What happens to pyruvate in the Kreb’s Cycle?
16. What is the function of cellular respiration?
17. How many “turns” of the krebs cycle occurs per glucose molecule?
    1. Therefore what is the net yield of each of the following from the Krebs Cycle:
       1. Carbon Dioxide
       2. ATP
       3. NADH
       4. FADH2