

Name _____ Date _____ Class period _____

Review: 1.4 (ch. 6) Cellular respiration

Complete this review on a separate sheet of paper in order to help you review the concepts we learned in class

1. Explain the difference between “fast twitch” muscle fiber and “slow twitch” muscle fiber.
2. Describe or draw a diagram of the relationship between Photosynthesis and Cellular Respiration (the big picture).
3. What is the chemical equation for Cellular Respiration?
 - a) Which are the reactant and which are the products?
4. How is breathing related to cellular respiration?
5. Draw an ATP molecule.
6. Draw a diagram of Cellular Respiration. (*Use it to describe the process of harvesting energy*)
 - a) Label all the parts of the mitochondria
 - b) The 3 main stages of Cellular respiration (*What does oxidative phosphorylation look like up close?*)
 - c) Electron carries
 - d) ATP output for each part
 - e) CO₂ outputs
 - f) Movement of all molecules & electron carries
 - g) Fermentation
7. What is the difference between aerobic and anaerobic respiration?
8. Describe the process of fermentation or draw a diagram depicting the process. What are the byproducts for both plants and animal?
9. Explain how many ATP are produced in the absence of O₂. Explain how glycolysis and fermentation work together in the absence of O₂?
10. Describe how it is possible that poisons can interrupt the process of cellular respiration.
11. Define a calorie. How are Calories linked to what you eat?
12. Calculate your BMR (basal metabolic rate). Explain what this number tells you?
13. Calculate your BMI (body mass index) Explain what this number tells you?
14. Describe how the rate of respiration for an organism could be calculated using a respirometer.