

~PHOTOSYNTHESIS/CELLULAR RESPIRATION HOMEWORK~

Section 1: Match the definitions on the right with the correct term on the left. Write the correct answer in the blank.

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| _____ 1. ATP | A. Process requiring oxygen (O ₂) |
| _____ 2. Anaerobic | B. Principal pigment in plants |
| _____ 3. Aerobic | C. 3rd phase of cellular respiration, produces 32 ATP, turns ADP into ATP |
| _____ 4. Autotroph | D. Organism that make their own food |
| _____ 5. Heterotroph | E. Process that does not require oxygen (O ₂) |
| _____ 6. Glycolysis | F. Anaerobic process that happens after glycolysis has used up all of the electron carriers. |
| _____ 7. Krebs Cycle | G. An Organism that gets energy by consuming organisms. |
| _____ 8. Electron Transport Chain (ETC) | H. 2nd phase of cellular respiration, produces 2 ATP, breaks pyruvic acid into carbon dioxide |
| _____ 9. Fermentation | I. Molecule used by cells to store and release energy |
| _____ 10. Chlorophyll | J. 1st stage of cellular respiration, produces 2 ATP, break glucose into pyruvic acid |

Section 2: Answer the questions and draw any necessary diagrams.

11. Write the formula for photosynthesis in words. Then, sketch a picture/diagram to illustrate the formula. (7pts)

12. 11. Write the formula for cellular respiration in words. Then, sketch a picture/diagram to illustrate the formula. (7pts)

13. Explain how a C4 plant functions differently than regular plants AND give an example. (3 pts)

14. How does CAM plants go through Photosynthesis compared to others and give an example. (3 pts)

Section 3: Complete the following chart. Use the hints for the number of products. (16 points).

Process name	Products	# of ATP produced at end of process	Location in cell (Organelle)
Aerobic Cellular Respiration (all of it)	(3)		
Alcoholic Fermentation (no glycolysis)	(2)		
Lactic Acid Fermentation (by itself)	(1)		
Photosynthesis	(2)		

