**Cellular Respiration Word Game Review**

**Directions:** On the lines below, write the word or words that best fit the description on the left. When you are finished, the boxed-in letters will spell out a secret message!

1. During glycolysis, glucose is broken down into what 3-carbon compound? ________________

2. During the electron transport chain, what is pumped from the matrix across the cristae membrane into the inner membrane space? ________________

3. This molecule is the primary fuel for cellular respiration. ________________

4. This type of respiration can only occur in the presence of oxygen. ________________

5. The Krebs cycle occurs in this part of the mitochondria. ________________

6. This molecule serves as a source of immediate energy for cellular processes that require energy. ________________

7. ATP are generated when hydrogen protons cause a rotor to spin as they flow across the cristae membrane through this enzyme. ________________

8. At the end of the electron transport chain, low-energy hydrogen electrons and hydrogen protons are combined with oxygen to form this end product. ________________
9. This is the nitrogen base that is found in molecules of ADP and ATP.

10. The energy transformation that converts the energy held in molecules of glucose to molecules of ATP is called?

11. This molecule serves as the final electron acceptor in the electron transport chain.

12. In the absence of oxygen, muscle cells may convert pyruvic acid into what compound?

13. This stage of cellular respiration produces hydrogen atoms, ATP, and carbon dioxide.

14. This type of fermentation produces carbon dioxide which causes bread dough to rise.

15. The addition or removal of this molecule determines whether energy is stored or released.

16. In this stage of respiration, glucose is converted to pyruvic acid.

17. Acetate is joined with oxaloacetic acid to form what 6-carbon compound?

18. A large number of high-energy hydrogen electrons are delivered to the electron transport chain in this form.

19. The energy generated from this process is used to pump hydrogen protons across a membrane, generating a high concentration proton gradient.
20. This folding and looping membrane increases the surface area for cellular respiration. 

21. This is the cellular organelle where aerobic respiration takes place. 

22. During the oxidation, or break down, of pyruvic acid, this compound is given off as a waste product. 

23. This type of respiration occurs in the absence of oxygen. 

24. Anaerobic respiration takes place in this part of the cell. 

25. What is the total number of ATP that can be generated from one molecule of glucose? 

26. Glycolysis does not require oxygen and is said to be? 

27. This is the type of sugar that is found in an ADP or ATP molecule. 

28. During the bridge reactions, molecules of pyruvate are oxidized into molecules of this 2-carbon compound. 

Decode your secret message here:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

23 24 25 26 27 28