

Name: _____ Date: _____

Chapter 5 Quiz Biology

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| 1. The ability to do work | A. Activation energy (enzymes) |
| 2. Stored energy that can be used for motion | B. Enzymes |
| 3. Energy of motion | C. Catabolism |
| 4. Energy conversion to heat, Heat energy | D. Anabolism |
| 5. The study of energy or heat | E. Potential energy |
| 6. Can never be created nor destroyed, amount of energy, in the universe remains constant | F. 1st law of thermodynamics |
| 7. Amount of energy transforming from potential to heat energy, or entropy in universe is increasing | G. Reducing power |
| 8. The starting molecules of a chemical reactions | H. Reactants and Substrates |
| 9. Molecules at the end of a chemical reaction | I. Oxidation |
| 10. Reactions have products w/ more energy than the reactants (uses & stores energy) spontaneous | J. Products |
| 11. An initial input of energy by destabilizing existing chemical bonds | K. B/w phosphate bonds |
| 12. reactions become more spontaneous if their activation is lowered | L. Thermodynamics |
| 13. Catalysts used by cells to perform particular reactions | M. Endergonic |
| 14. Enzymes lower activation energy by binding specific molecules and stressing the bonds to make the reaction more likely to proceed | N. Coupled reactions |
| 15. includes all the chemical and physical process continuously occurring in living cells | O. Biochemical Pathways |
| 16. Is the process by which food is changed into living tissue | P. Redox Reduction |
| 17. Is the process by which food is converted into energy and wastes of a simpler chemical composition | Q. Catalysis |
| 18. Series of reactions of the product of one reaction is the substrate of the next | R. Release energy |
| 19. What do free "inorganic" phosphates do? | S. Activation energy |
| 20. When an atom or molecule loses an electron | T. Energy |
| 21. When an atom or molecule gain an electron | U. How energy is measured |

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| 22. Have "the power" causes something else to be reduced | V. Kinetic energy |
| 23. Where is energy "Stored" in ATP molecule? | W. Reduction |
| 24. electrons pass from atoms or molecules to one another as part of many energy reactions | X. 2nd law of thermodynamics |
| 25. Provide energy for the initiation of endergonic reactions. | Y. Metabolism |