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Cellular Respiration

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| **Across**  **3.** What is a set of metabolic reactions and processes that take place in the cells of organisms to convert biochemical energy from nutrients into adenosine triphosphate (ATP), and then release waste products.  **6.** What is the breakdown of glucose by enzymes, releasing energy and pyruvic acid.  **7.** What is the conversion of pyruvate into acetyl-CoA by the enzyme pyruvate dehydrogenase.  **9.** What is an molecule that carries energy within cells  **10.** What a series of complexes that transfer electrons from electron donors to electron acceptors via redox reactions, and couples this electron transfer with the transfer of protons across a membrane | **Down**  **1.** What is is a form of respiration which does not use oxygen.  **2.** What is the process of producing cellular energy involving oxygen.  **4.** What a simple sugar that is an important energy source in living organisms and is a component of many carbohydrates.  **5.** What the sequence of reactions by which most living cells generate energy during the process of aerobic respiration. It takes place in the mitochondria, consuming oxygen, producing carbon dioxide and water as waste products, and converting ADP to energy-rich ATP.  **8.** The \_\_\_\_\_\_\_\_\_ released is trapped in the form of ATP for use by all the \_\_\_\_\_\_\_\_\_\_-consuming activities of the cell. |