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Photosynthesis and Cellular Respiration Crossword Puzzle

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| **Across**  **3.** The 1st step of Photosynthesis; Light Energy is captured and stored as NADPH and Oxygen gas is released; requires light  **5.** Flattened discs where Light-Dependent Reactions occur  **6.** The process by which cells obtain energy from Carbohydrates; Atmospheric Oxygen combines with Glucose to form Water and Carbon Dioxide  **9.** The Organelle found in plants and algae cells where Photosynthesis takes place  **11.** Cannot occur without Oxygen; requires Oxygen  **12.** The process by which plants, algae, and some bacteria use sunlight, carbon dioxide, and water to produce Carbohydrates and Oxygen  **13.** A series of biochemical reactions that convert Pyruvic Acid into Carbon Dioxide and Water; it is the major pathway of oxidation for many organisms and it releases energy; 2nd Step of Cellular Respiration  **15.** Able to make energy from Light Energy (Plants)  **16.** Able to make energy from Chemicals (Bacteria)  **17.** The 2nd step of Photosynthesis; Calvin Cycle forms Organic compounds using the stored energy(Glucose) | **Down**  **1.** Obtains energy from food; Cannot make energy (Animals & Humans)  **2.** Known as ETC, it converts the most energy into ATP for cells; domino effect; Final Step in Cellular Respiration  **4.** Ca occur with or without Oxygen present; Does NOT require Oxygen  **7.** The anaerobic breakdown of glucose to Pyruvic Acid, which makes a small amount of energy available to cells in the form of ATP; 1st Step of Cellular Respiration  **8.** A green pigment found in most plant cells; gives plants there green color, reacts with sunlight, carbon dioxide, and water to form Carbohydrates; located in Chloroplast  **10.** Stacks of Thylakoids  **14.** The Solution/Space inside the Thylakoid where Light-Independent Reactions occur |

   Autotrophs       Chemotrophs       Heterotrophs       Chloroplast       Grana       Thylakoid       Stroma       Aerobic Respiration       Anaerobic Respiration       Chlorophyll       Photosynthesis       Cellular Respiration       Light-Dependent Reactions       Light-Independent Reactions       Glycolysis       Krebs Cycle       Electron Transport Chain