Vocabulary: Biology Unit: 4: photosynthesis and cellular respiration Date:

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| **Picture** | **Word** | **Definition** |
|  | Autotroph | \*An organism that can make its own food  \*Ex: plants, algae, photosynthetic organism |
|  | Heterotroph | \*An organism that cannot make its own food, it must consume other organisms.  \*Ex: animals, fungi, some protists |
|  | ATP | \*Adenosine triphosphate  \*Cellular energy  \*Made by adding a phosphate onto ADP.  ATP=fully charged battery |
|  | Photosynthesis | \*The process of converting solar energy into chemical energy. Using sunlight to make sugar.  \*Plants, algae, photosynthetic bacteria  6CO2 + 6H2O + sunlight 🡺 C6H12O6 + 6 O2 |
|  | Chloroplast | \*The organelle where photosynthesis takes place.  \*Found in plant and other photosynthetic eukaryotes (protists) |
|  | Chlorophyll | \*The pigment found inside a chloroplast that gives plants their green color  \*Absorbs the solar energy and converts it into chemical energy. |
|  | Cellular respiration | \*The process by which food is broken down to release the energy held within the bonds for cellular processes.  \*Converts chemical energy into chemical energy.  \*Can occur with or without oxygen |
|  | Mitochondria | \*The organelle where aerobic respiration occurs.  \*Found in all eukaryotic cells (plants, animals, fungi and protists). |
|  | Aerobic respiration | \*Cellular respiration in the presence of oxygen.  \*Occurs within the mitochondria. |
|  | Fermentation | \*Anaerobic respiration  \*Cellular respiration when oxygen isn’t available.  \*Lactic acid fermentation produces sore muscles, yogurt, cheese  \*alcoholic fermentation produces alcohol and bread. |
| **A + B** | Reactants | \*What goes into a chemical reaction  \*The ingredients |
| **AB** | Products | \*What comes out of a chemical reaction  \*What is produced  \*The final product |