Unit 2 Vocabulary – Biochemistry

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| 1. Carbohydrates | Organic compounds (biomolecules), made of carbon, hydrogen & oxygen, which provide a source of quick energy. |
| 1. Glucose | Example of a monosaccharide used by the body to provide energy; product of photosynthesis |
| 1. Proteins | Organic compounds essential for growth and repair, structural components of tissues and organs, and includes both hormones & enzymes; made up of chains of amino acids. |
| 1. Denatured | State of an enzyme that has stopped working due to excessive heat or extreme ph changes. |
| 1. Enzyme | A type of protein that speeds up chemical reactions by reducing the amount of activation energy necessary for a reaction to begin (catalyst). |
| 1. Nucleic acids | Organic compounds made up of chains of nucleotides that store genetic information in code; includes RNA & DNA. |
| 1. Lipids | Organic compounds used for long-term energy storage and the molecule that makes up cell membranes; includes fats, oils, waxes & steroids. |
| 1. Glycogen | Example of a polysaccharide that serves as a form of long-term energy storage in animals and fungi. |
| 1. Hemoglobin | Example of protein found in red blood cells responsible for circulating oxygen in the bloodstream. |
| 1. Cellulose | Example of a polysaccharide found in the cell walls of plants that provides structure and support. |
| 1. Active Site | The site on an enzyme where a particular substrate(s) locks in and triggers a chemical reaction. |
| 1. Insulin | Small protein hormone released by the pancreas in order to regulate sugars in the bloodstream |
| 1. Amino Acid | Building blocks (monomers) of protein; 20 different types |
| 1. Substrate | The reactant molecule or molecules to which an enzyme binds at the active site and acts upon. |
| 1. Nucleotide | Building blocks (monomers) of nucleic acids; include a 5-Carbon sugar, a phosphate group and one of five nitrogen-containing bases. |
| 1. Molecule | Smallest unit of a compound, contains atoms of more than one element chemically bonded in a fixed ratio. |
| 1. Polymer | Substance made of many “small parts,” or monomers. |
| 1. Buffer | A substance used to maintain a constant ph when an acid or base is added |
| 1. Inorganic compound | Compound that does not contain carbon, oxygen and hydrogen bonded together |
| 1. Monomer | A single molecule that is used to make up more complex organic molecules. |
| 1. Starch | Polysaccharide that is used for energy storage in organisms |
| 1. Glycerol | The backbone of the fatty acid chain that serves as an attachment point for the fatty acid tails. |
| 1. Fatty acid tails | A group of three fatty acids that join with glycerol to form a lipid. |
| 1. Saturated fatty acid | Lipid that is solid at room temperature |
| 1. Unsaturated fatty acid | Lipid that is liquid at room temperature due to double carbon bond |
| 1. Phospholipid | A singular molecule consisting of a hydrophilic head and a hydrophobic tail. |
| 1. Catalyst | An inorganic molecule that speeds up a chemical reaction |
| 1. Activation energy | Amount of energy required to start a chemical reaction |
| 1. Indicator | A chemical compound that changes color and structure when exposed to certain conditions and is therefore useful for chemical tests |

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