

Chemistry of Life Unit Vocabulary List

Atom - the basic unit of matter

Nucleus - contains the neutrons and protons

Electron - has a negative charge and nearly no mass

Element - a pure substance consisting of only one type of atom

Compound - a chemical combination of two or more elements

Ionic Bond - these are formed when one or more electrons are transferred from one atom to another

Covalent Bond - when electrons are shared between atoms

Molecule - the smallest unit of most compounds

Hydrogen Bond - the attraction between a hydrogen atom on one water molecule and the oxygen atom on another

Cohesion - water molecules sticking to one another

Adhesion - the attraction between different molecules or substances

Mixture - two elements or compounds physically mixed together, not chemically

Solution - even mixing of substances - like salt mixed in water

Solute - the substance that is dissolved by a solvent

Solvent - the substance doing the dissolving

Suspension - a substance that doesn't dissolve

pH scale - indicates the amount of hydrogen ions in a solution

Acid - any compound that forms hydrogen (H⁺) ions in a solution

Base - a compound that produces hydroxide (OH⁻) ions in a solution

Buffer - these prevent sudden or drastic changes in pH

Monomer - this means "single part"

Polymer - this is made up of many monomers

Carbohydrate - these are macromolecules that are made up of C, H, and O in a ratio of 1:2:1

Monosaccharide - this is a single sugar molecule. Glucose is an example.

Lipid - fat, wax, and oils are examples of this type of molecule

Nucleic Acid - these molecules contain the elements N, H, O, P, C. DNA and RNA are examples

Nucleotide - this is a monomer of nucleic acids

Protein - this is a polymer of amino acids

Amino Acid - this monomer with others to form proteins

Chemical Reaction - this is a process that changes one set of chemicals into another

Reactant - the elements or compounds at the beginning of a chemical reaction

Product - the elements or compounds after a chemical reaction has taken place

Activation Energy - the amount of energy needed to get a chemical reaction started

Catalyst - a substance that speeds up chemical reactions

Enzyme - a protein that acts as a catalyst in our cells

Substrate - these are the reactants of enzyme catalyzed reactions