

Term	Definition
Absolute Zero	the lowest possible temperature; the temperature at which all particle movement stops; -273°C or 0 K .
Alloy	a homogenous mixture/solution containing at least one metal. Ex: brass, steel, bronze
Aqueous	a homogenous mixture/solution in which a solute is dissolved in water.
Avogadro's Law	gases at the same temperature, pressure, & volume have the same number of molecules or particles.
Boiling Point	the temperature at which a liquid undergoes a phase change from liquid to gas; the temperature at which the vapor pressure of a liquid is equal to the atmospheric pressure.
Boiling Point Elevation	the boiling point of a solution is higher than the boiling point of the pure solvent (colligative property)
Colloid	a heterogeneous mixture composed of tiny particles suspended in another material. The particles are larger than the particles in a solution but smaller than particles in a suspension. Ex: milk, blood
Compound	pure substance composed of two or more different elements chemically combined.
Concentrated	Having a relatively large amount of substance present in a unit amount of mixture.
Concentration	A measure of the amount of solute present in a unit amount of mixture. PPM or Molarity
Cooling Curve	diagram showing phase changes for a substance as it loses energy and goes from gas phase all the way to solid phase.
Deposition	phase change from gas to solid.
Dilute	having a relatively low concentration of solute in a mixture.
Element	pure substance composed of one species of atoms.
Energy	the capacity to do work.
Evaporation	phase change from liquid to gas.
Extensive (property)	a physical property that depends on sample size or amount
Freezing Point Depression	the freezing point/melting point of a solution is lower than the freezing point/melting point of the pure solvent (colligative property)
Heat	form of energy measured in Joules (J).
Heat of Fusion	energy required to change 1 g of a substance from solid to liquid.
Heat of Vaporization	energy required to change 1 g of a substance from liquid to gas.
Heat Transfer	energy transferred from a substance with more (hotter) to a substance with less (cooler).
Heating Curve	diagram showing phase changes for a substance as it gains energy and goes from solid phase all the way to gas phase.
Heterogeneous	A sample of matter consisting of more than one pure substance or more than one phase

Term	Definition
Homogeneous	A sample of matter consisting of more than one pure substance with properties that do not vary within the sample
Insoluble	Refers to a substance that does not dissolve in a solvent to any significant degree
Intensive (property)	a physical property that does NOT depend on sample size or amount (Ex: melting point, boiling point, density)
Kinetic Energy	energy of motion; energy associated with a change in temperature.
Kinetic Molecular Theory (KMT)	a model used to explain the behavior of gases in terms of the motion of their particles.
Lattice	the unique crystal structure associated with any given solid.
Matter	anything that has mass and takes up space.
Melting Point	the temperature at which a phase change between solid and liquid occurs.
Miscible	Two liquids are considered "miscible" or mixable if shaking them together results in a single liquid phase with no visible separation
Mixture	two or more pure substance PHYSICALLY combined; a combination of two or more pure substances that can be separated by physical means
Mixture	two or more pure substances physically combined.
Molarity	a measure of concentration; $M = \text{moles of solute/liters of solution}$
Normal Boiling Point	the temperature at which a phase change between liquid and gas occurs at 1 atm or 101.3 kPa; the temperature at which the vapor pressure of a liquid is equal to the atmospheric pressure.
Parts Per Million	a measure of concentration; ppm = parts of solute/million parts of solution
Percent Composition (by mass or volume)	$\% \text{ comp} = (\text{part/whole}) \times 100$
Potential (AKA Physical) Energy	energy of position; energy associated with a phase change.
Precipitate	An insoluble substance that has been formed from a chemical reaction between substances dissolved in a solution
Saturated	a solution that has reached equilibrium; a solution which cannot dissolve any more solute
Solubility	a measure of the concentration of a substance in a saturated solution; a measure of how much of a substance can dissolve in a given amount of solvent
Soluble	capable of being dissolved in a solvent
Solute	A substance dissolved in a solvent to make a solution
Solution	a homogenous mixture
Solvent	The most abundant component in a solution
Sublimation	phase change from solid to gas.

Term	Definition
Supersaturated	a solution in which the concentration of solute is higher than the solubility; more solute is dissolved than should be under a given set of conditions
Suspension	A heterogeneous mixture in which relatively large particles are suspended in a liquid
Temperature	a measure of average kinetic energy.
Tyndall Effect	Light passing through a colloid is scattered by suspended particles (the light beam becomes clearly visible)
Unsaturated	A solution with a concentration lower than its equilibrium solubility; a solution in which more solute can be dissolved
Vapor Pressure	the upward pressure of a vapor in equilibrium with its liquid.