

Solutions Notes

Mixtures

- a combination of _____ substances that do not combine chemically, but remain the same individual substances; **can be** _____ by physical means
- Two types:
 - _____
 - _____

Heterogeneous Mixture

- “Hetero” means _____
- consists of visibly different substances or _____ (solid, liquid, gas)
- a _____ is a special type of heterogeneous mixture of larger particles that eventually settle
- Examples:
 - _____
 - _____
 - _____

Homogeneous Mixture

- “Homo” means _____
- has the same uniform _____ and _____ throughout; maintain one phase (solid, liquid, gas)
- Commonly referred to as _____
- Examples:
 - _____
 - _____
 - _____

Solution

- a mixture of two or more substances that is _____ throughout

- can be physically _____
- composed of _____ and _____
- solute: _____
- solvent: _____
- Give 3 examples of colloids:
 - _____
 - _____
 - _____

Solutes Change Solvents

- The amount of _____ in a solution determines how much the physical properties of the _____ are changed
- Lowering the freezing point
 - The freezing point of a liquid solvent _____ when a solute is dissolved in it.
 - Example: _____
- Raising the Boiling Point
 - The boiling point of a solution is _____ than the boiling point of the solvent. Therefore, a solution can remain a _____ at a higher temperature than its pure solvent.
 - Example: _____

Concentration

- the amount of solute _____ in a solvent at a given temperature
- described as _____ if it has a low concentration of solute
- described as _____ if it has a high concentration of solute
- described as _____ if contains more dissolved solute than normally possible

Solubility

- the amount of solute that _____ in a certain amount of a solvent at a given _____ and _____ to produce a saturated solution
- influenced by:
 - Temperature:
 - Solids _____
 - Gases _____
 Example: _____
 - Pressure:
 - Solids _____
 - Gases _____
 Example: _____