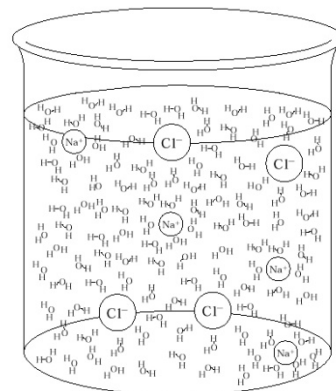


Unit 10: Solutions
10.1: Intro to Solutions

AIM:

• **Solutions**

- Most _____
 - _____ = aluminum, gold, hydrogen
 - _____ = salt water, air, mayonnaise
- Solutions _____
- Most _____
- A solution _____
 - Homogenous _____
 - Contain _____
 - Spread _____
 - Ex: salt water solution = NaCl stirred into water.
Ions of salt separate (Na^+ & Cl^-) and uniformly spread throughout the water



• **Types of Solutions**

- Solid _____
 - Brass _____
 - Metals _____
- Gases _____
 - _____
- Solid _____
 - Most _____ Ex: _____

• **Parts of Solutions**

- Solute: _____
- Solvent: _____
 - Water _____
 - (aq) _____
 - $\text{NaCl}(s) \rightarrow \text{Na}(aq) + \text{Cl}(aq)$
 - Ex: NaCl dissolved in water
 - NaCl = _____
 - Water = _____
- Once _____
 - Liquid _____
 - Light _____

• **Properties of Solutions**

- Can have _____
 - Copper _____
- Do not _____
 - Sodium _____
- Dissolved _____
 - Separate _____
 - Boil _____

Regents Questions

- When a teaspoon of sugar is added to water in a beaker, the sugar dissolves. The resulting mixture is
 - (1) A compound
 - (2) A homogeneous solution
 - (3) A heterogeneous solution
 - (4) An emulsion

- A small quantity of a salt is stirred into a liter of water until it dissolves. In the resulting mixture, the water is
 - (1) The solvent
 - (2) The solute
 - (3) Dispersed material
 - (4) A precipitate

- A solution
 - (1) Will separate on standing
 - (2) May have color
 - (3) Can be cloudy
 - (4) Can be heterogeneous

- The process of recovering a salt from a solution by evaporating the solvent is known as
 - (1) Crystallization
 - (2) Filtration
 - (3) Reduction
 - (4) decomposition