

CHEMISTRY DAILY PLAN

Class:

Date:

Subject: *Solutions and Classification of Solutions*

Time:

Draw the classification of matter,

Homogeneous Mixtures are Called "Solutions.

Mixing of water and NaCl is a solution. In this solution NaCl is solute and water is solvent. Generally in all solution water is used as a solvent.

Solution can be classified in many ways

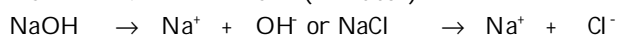
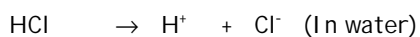
According to Physical States

STATE	SOLUTE	SOLVENT	EXAMPLE
Gas	Gas	Gas	Air
Gas	Liquid	Gas	
Gas	Solid	Gas	
Liquid	Gas	Liquid	
Liquid	Liquid	Liquid	
Liquid	Solid	Liquid	
Solid	Gas	Solid	
Solid	Liquid	Solid	
Solid	Solid	Solid	

According to Electrical Conductivity

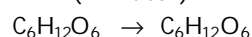
Ionic Solutions: Acid, base, and salt solutions are called ionic solutions. **Molecular Solutions:** Molecular compounds such as sugar.

Ionic Solution



Molecular Solution

(In water)



According to Solubility of Solutes

Unsaturated Solutions: Solutions, which have less amount of solute, they can dissolve is unsaturated solution. We know that 37 g of NaCl can be dissolve in 100 g of water. If we dissolve less than 37 g NaCl in 100 g water. This solution is unsaturated solution.

Saturated Solutions : Solutions, which dissolve the maximum amount of solute, they can dissolve is saturated solution. If 37 g of NaCl dissolve in 100 g water. This solution is saturated solution.

Super Saturated Soln : Solutions which dissolve more than maximum amount of solute, they can dissolve is super saturated solution.

*** Super Saturated Solutions are extremely unstable solutions. They can be easily destroyed by slightly changing temperature or condition.

According to Amount of Solute:

Diluted Solutions : Solutions, which contain relatively small amount of solute

Concentrated Solns : Solutions, which contain relatively high amount of solute