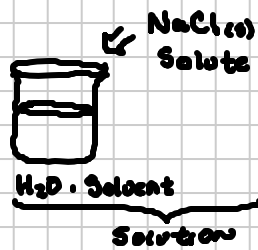


Lecture 1.1 Solutions

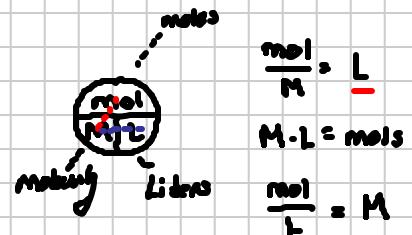
Note Title

15/11/2011

Review:



Concentration: Molarity (M) = $\frac{\text{moles solute}}{\text{Liters solution}}$



.. a closer look at solution formation

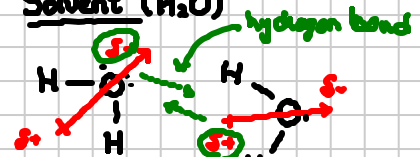
Solute (NaCl)

crystalline lattice



mp_{NaCl} = 801°C

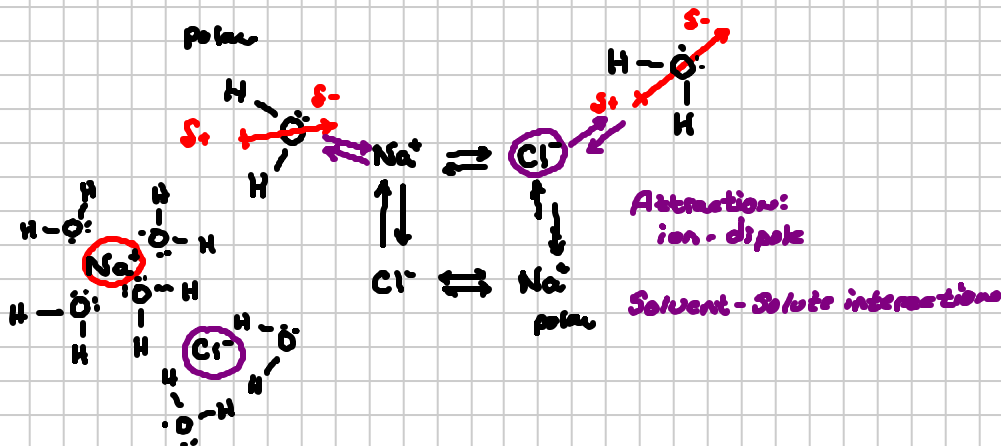
Solvent (H₂O)



Attraction: dipole-dipole

hydrogen bond.
O, N, F & H

Solvent-Solvent interaction.



3 situations:

Solute-solvent

Solute-solute

Solvent-solvent

Solution forms

soln. form

Soln. can form likely dilute

"Like dissolves like"

To dissolve a polar solute (NaCl), need a polar solvent.

To dissolve a non-polar solute ... need a non-polar solvent.