

BASIC CONCEPTS OF CHEMISTRY

Chapter 12

Aqueous Solutions

Objectives:

- * Describe the forces that interact during the formation of aqueous solutions of ionic compounds, strong acids, and polar molecules
- * Describe the effects of temperature and pressure on the solubility of solids and liquids in a liquid
- * Perform calculations of concentration involving percent by mass, ppm, and ppb
- * Perform calculations involving molarity and the dilution of solutions
- * Perform calculations involving titrations and other solution stoichiometry
- * Explain the differences between nonelectrolytes, strong electrolytes, and weak electrolytes
- * Calculate the boiling and melting points of aqueous solutions of electrolytes and nonelectrolytes