

BASIC CONCEPTS OF CHEMISTRY

Chapter 10

The Gaseous State

Objectives:

- * List the general properties of gases based on the postulates of Kinetic Molecular Theory
- * Calculate the effect changing pressure has on the volume of a gas (Boyle's Law)
- * Using the gas laws, perform calculations involving relationships between volume, temperature, pressure, and the amount of gas
- * Using the ideal gas law, calculate one condition of a gas given the other stated conditions
- * Using Dalton's law, calculate the partial pressure of a gas
- * Convert between volume, moles, and density of a gas measured at STP
- * Using the molar volume at STP, perform stoichiometric calculations involving gas volumes