

OBJECTIVES FOR UNIT 9

GASES

CHARACTERISTICS OF GASES

ASSOCIATIONS WITH GASES:

1. PRESSURE (P)
2. TEMPERATURE (T)
3. AMOUNT OF SUBSTANCE (n)
4. VOLUME (V)

STANDARD TEMPERATURE AND PRESSURE (STP)

GAS LAWS

CHARLES LAW

BOYLE'S

GAY-LUSSAC'S LAW

COMBINED GAS LAW

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

AVOGADRO'S LAW

THE IDEAL GAS LAW

$$PV = nRT$$

MOLECULAR MASS CALCULATIONS

DENSITY CALCULATIONS

GAS STOICHIOMETRY