

GHS HONORS CHEMISTRY
GAS LAWS WORKSHEET 2
THE IDEAL GAS LAW(S)

NAME: _____ DATE: _____ BLOCK: _____

- I. Determine the densities of 1.0 mole of the following gases at the indicated conditions:
 - a) Sulfur (IV) oxide, SO_2 , at 2.0 atmospheres and 20.0 C

 - b) Carbon dioxide, CO_2 , at 800.0 mm of Hg and 50.0 C

 - c) Nitrogen gas, N_2 , at 202.6 kPa of Hg and 10.0 C

2. Calculate the volume in liters of 4.0 moles of oxygen gas at a temperature of 40.0 C and a pressure of 500.0 mm of Hg.

3. 1.2×10^{24} molecules of xenon gas occupy a volume of 20.0 liters at a temperature of 60.0 C. Determine the pressure in millimeters of Hg.

4. If 5.0×10^{-2} moles of neon gas have a volume of 200.0 ml at a pressure of 50.0 mm of Hg, then calculate the centigrade temperature.