EVERETT COMMUNITY COLLEGE

TRiO STUDENT SUPPORT SERVICES

MIXED GAS LAWS WORKSHEET

1) How many moles of gas occupy 98 L at a pressure of 2.8 atmospheres and a temperature of 292 K?

2) If 5.0 moles of O_2 and 3.0 moles of N_2 are placed in a 30.0 L tank at a temperature of 25^0 C, what will the pressure of the resulting mixture of gases be?

3) A balloon is filled with 35.0 L of helium in the morning when the temperature is 20.0^0 C. By noon the temperature has risen to 45.0^0 C. What is the new volume of the balloon?

4) A 35 L tank of oxygen is at 315 K with an internal pressure of 190 atmospheres. How many moles of gas does the tank contain?