**IDEAL GAS LAW WORKSHEET**

1) What mass of oxygen gas at 100°C does it take to fill a 1.00 L flask to a pressure of 1.50 atm?

2) A camping stove uses a 5.0 L propane tank that holds 3.0 kg of liquid C3H8. How large a container would be needed to hold the same amount of propane as a gas at 25°C and a pressure of 3.0 atm?

3) What volume would be occupied by 100 g of oxygen gas at a pressure of 150 kPa and a temperature of 25°C?

4) On a warm day, an amusement park balloon is filled with 47.8 g of helium. The temperature is 33°C and the pressure in the balloon is 2.25 atm. Calculate the volume of the balloon.

5) A ten-liter gas cylinder contains 3.8 X 102 g of nitrogen. What pressure, in kPa, is exerted by the nitrogen at 25°C?

6) How many moles of air are there in a 125 mL erlenmeyer flask if the pressure is 65 kPa and the temperature is 20°C?