

## 5.4 – The Ideal Gas Equation – Worksheet

1. What is the pressure, in kPa, exerted by 2.50 moles oxygen gas if it occupies 10.2 liters, and is at 25.0 °C?
2. An unknown gas has a volume of 2.15 liters, exerts a pressure of 1.35 atm, and is at a temperature of -30.0 °C. How many moles of that gas are in the container?
3. A tank contains 1250 g of neon gas. It has a pressure of 57 atm at a temperature of 20.0°C. Calculate the volume of the tank.
4. A helium-filled balloon has a volume of 208 L and it contains 9.95 moles of gas. If the pressure of the balloon is 135 000 Pa, determine the temperature in Celsius degrees.
5. A tank of oxygen has a volume of 1650 L. The temperature of the gas inside is 35°C. If there are 15.0 kg of oxygen in the tank what is the pressure in atm?