

5.5 – Dalton's Law of Partial Pressures – Worksheet

1. 15.0 g of ammonia gas, NH_3 , is collected at 12.0°C over water. If a pressure gauge connected to the container reads 18.5 kPa, what is the partial pressure of the ammonia gas?
2. Hydrogen gas is collected over water at 333K. If the partial pressure of the hydrogen is 80.0 kPa, what is the total pressure in the container?
3. 27.5 g of fluorine gas is collected over water. If the gas is at 5.00°C , what is the volume of the fluorine gas if the total pressure of the water and the fluorine gas is 32.0 kPa?
4. 25.0 g of carbon monoxide is collected over water in a 50.0 mL container. If the temperature is 70.00°C , what is the total volume?
5. The total pressure inside of a container holding 3.00 moles of an unknown gas collected over water is 50.0 kPa. If the temperature is 63.5°C , and the volume of the gas is 552 mL, what is the partial pressure of the water vapour?