

Gas Laws Podcast #4: Ideal Gas Law; SC6 a,b,c

1. What pressure will be exerted by 0.450 mol of a gas at 25°C if it is contained in a vessel whose volume is 650mL?
2. What volume will 12.0 g of oxygen gas (O₂) occupy at 25°C and a pressure of 0.520 atm?
3. If 4.5 g of methane (CH₄) is introduced to an evacuated 2.00L container at 35°C, what is the pressure in the container in atmospheres?
4. A 5.00 L flask at 25° C contains 0.200 mol of Cl₂. What is the pressure in the flask?
5. What is the pressure exerted by 32 g of O₂ in a 20-L container at 30.0°C?
6. How many moles of N₂ are in a flask with a volume of 250 mL at a pressure of 0.56 atm and a temperature of 300 K?