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65. What is the volume occupied by 1.24 mol of a gas at 35°C if the pressure is 96.2 kPa?
66. What volume will 12.0 g of oxygen gas (O<sub>2</sub>) occupy at 25°C and a pressure of 52.7 kPa?
67. If 4.50 g of methane gas (CH<sub>4</sub>) is in a 2.00-L container at 35°C, what is the pressure in the container?
68. What pressure is exerted by 0.450 mol of a gas at 25°C if the gas is in a 0.650-L container?
69. A helium-filled weather balloon has a volume of 2.4 x 10<sup>2</sup>L at 99 kPa pressure and a temperature of 0.0°C. What is the mass of the helium in the balloon?
70. In your own words, state Dalton's law of partial pressure.
71. Which gas effuses faster: hydrogen or chlorine? How much faster?
72. Which gas effuses faster at the same temperature: molecular oxygen or atomic argon?