

Name _____

Date _____

Molar Volume Practice

1. What does standard temp. & pressure mean? (STP)
2. What is the molar volume of any gas @ STP?
3. How many particles exist in any gas @ STP?
4. Do different gases with the same molar volume have the same mass? why/why not?

Solve the following

5. What is the volume (L) of 1.5 moles of gas at STP?
6. What is the volume (L) of 0.91 moles of N_2 gas at STP?
7. What is the volume, in ml of 1.54 moles of CO_2 gas at STP?

8. How many moles occupy a volume of 8.3 L of a gas at STP?

9. How many moles occupy a volume of 21.2 L of a gas at STP?

10. How many moles occupy a volume of 125 ml of a gas at STP?

Challenge (use the roadmap)

11. How many atoms occupy a volume of 25.8 L of a gas at STP?

12. What is the mass of 13.6 L of a gas at STP?

13. What is the volume of Cl_2 gas if it has a mass of 43.2 g at STP?