

GAS DENSITY AND PERCENT COMPOSITION PRACTICE

Directions: Show all work. Check sig. figs and units. Circle all answers.

GAS DENSITY

- 1) The density of a gas is 2.2 g/L under STP conditions. What is its molar mass (in g/mol)?
- 2) At STP, 11.4 L of a gas has a mass of 15.0 g. Calculate the density of the gas (in g/L) and its molar mass (in g/mol).
- 3) The density of a gas is 6.500 g/L at STP. What is the molar mass of the gas, in g/mol?
- 4) 9.50 L of a gas has a mass of 44.0 g at STP. What is the density of the gas in g/L? What is the molar mass of the gas, in g/mol?
- 5) The density of a gas is 6.75 g/L under STP conditions. Calculate its molar mass in g/mol.

PERCENT COMPOSITION

- 6) What is the percent composition of nitric acid?
- 7) Find the percent composition of copper(II) nitride.
- 8) Calculate the percent composition of dinitrogen trioxide.
- 9) What is the percent composition of lithium sulfate?
- 10) Find the percent composition of phosphoric acid.