

Chem I

Name _____

Date _____ Per _____

Worksheet # C48: Stoichiometry and the Volumes of Gases

1. What was Avagadro's big insight? _____

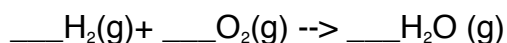
2. All the gases we'll be considering for this worksheet will be at STP. What does STP stand for? _____

a. What is standard temperature? _____

b. What is standard pressure? _____

3. What is the volume of one mole of any gas at STP? _____

4. If you're burning hydrogen gas in the lab according to this equation,



a. How many grams of $\text{H}_2(\text{g})$ would it take to completely react 5.00 g of $\text{O}_2(\text{g})$?

b. How many liters of $\text{H}_2(\text{g})$ would it take to completely react 5.00 g of $\text{O}_2(\text{g})$?

c. How many liters of $\text{O}_2(\text{g})$ would it take to completely react 15.00 liters of $\text{H}_2(\text{g})$?

d. How many grams of $\text{O}_2(\text{g})$ would it take to completely react 500. mL of $\text{H}_2(\text{g})$?

