

NAME: \_\_\_\_\_

## STOICHIOMETRY: VOLUME EXERCISES WORKSHEET

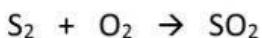
Solve the following stoichiometry problems and write the correct answer with units (For example: mol, g or L) Round up to 2 decimals.

1. How many liters of  $\text{H}_2$  are created from the reaction of 20.0g K?



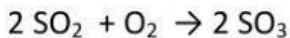
Answer: \_\_\_\_\_

2. How many liters of  $\text{SO}_2$  will be produced from 26.9L  $\text{O}_2$ ?



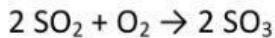
Answer: \_\_\_\_\_

3. How many liters of oxygen gas are needed to react with 0.234 grams of  $\text{SO}_2$  gas at STP?



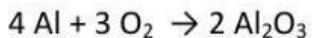
Answer: \_\_\_\_\_

4. How many liters of oxygen gas are needed to produce 36.5 liters of  $\text{SO}_3$  gas at STP?



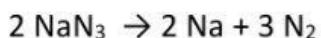
Answer: \_\_\_\_\_

5. Calculate the volume (in liters) of oxygen gas required to react with 50.0 g of aluminum at STP.



Answer: \_\_\_\_\_

6. An automobile airbag inflates when  $\text{N}_2$  gas results from the explosive decomposition of sodium azide ( $\text{NaN}_3$ ). Calculate the mass of  $\text{NaN}_3$  required to produce 50.0 L of  $\text{N}_2$  gas at STP



Answer: \_\_\_\_\_