

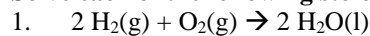
Name _____

Chemistry

___/___/___

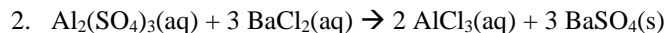
Stoichiometry

Solve each of the following stoichiometry problems on a separate sheet of paper.



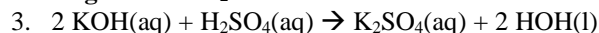
How many moles of O_2 are required to produce 0.60 moles of H_2O ?

0.30 moles O_2



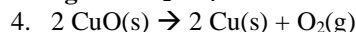
How many grams of barium chloride will react with 18.0 moles of aluminum sulfate?

11200 grams BaCl_2



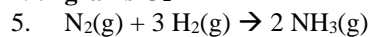
Potassium hydroxide reacts with hydrogen sulfate in a double replacement reaction. What is the mass of potassium sulfate produced if 19.6 g of KOH reacts with excess hydrogen sulfate?

30.4 grams K_2SO_4



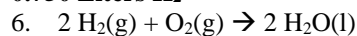
Copper(II) oxide decomposes to form solid copper and oxygen gas. If 95.4 g of copper(II) oxide decomposes, how many grams of oxygen are formed?

19.2 grams O_2



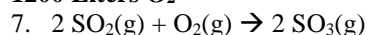
What volume of hydrogen, reacting with nitrogen, will produce 500. mL of NH_3 at constant conditions of temperature and pressure?

0.750 Liters H_2



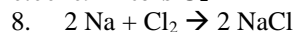
How many liters of oxygen gas are needed to produce 2.0 kilograms of water?

1200 Liters O_2



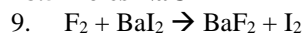
How many liters of oxygen would react with 2.20×10^{20} molecules of SO_2 ?

0.00409 Liters O_2



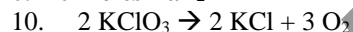
You are given 18.5 moles of sodium; calculate the number of moles of sodium chloride produced.

18.5 moles NaCl



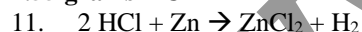
How many moles of barium fluoride can be produced from 88.3 grams of barium iodide?

0.226 moles BaF_2



Calculate the mass of potassium chloride that is produced as 12.4 grams of potassium chlorate decomposes.

7.55 grams KCl



Calculate the mass of zinc needed to fully react with the 124.9 grams of hydrogen chloride.

112.0 grams Zn



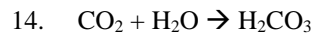
What mass of aluminum must be used to produce 15.0 g iron?

7.26 grams Al



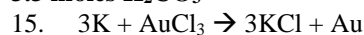
How many liters of carbon dioxide will be produced in the decomposition of 220. grams of calcium carbonate?

49.2 Liters CO_2



How many moles of hydrogen carbonate can be produced from 75 liters of carbon dioxide and an unlimited supply of water?

3.3 moles H_2CO_3



How many grams of potassium are needed to completely react with 125 grams of gold(III) chloride?

48.3 grams K