

Percent Yield

Chem Worksheet 12-4

Name _____

Answer the following questions. Show all work and use the correct number of significant digits.

- Determine the percent yield for the reaction between 3.74 g of Na and excess O_2 if 5.34 g of Na_2O_2 is recovered.
- Determine the percent yield for the reaction between 6.92 g of K and 4.28 g of O_2 if 7.36 g of K_2O is produced.
- Determine the percent yield for the reaction between 82.4 g of Rb and 11.6 g of O_2 if 39.7 g of Rb_2O is produced.
- Determine the percent yield for the reaction between 46.1 g of Cs and 13.4 g of O_2 if 28.3 g of Cs_2O is produced.
- Determine the percent yield for the reaction between 28.1 g of Sb_4O_6 and excess C if 17.3 g of Sb is recovered along with an unknown amount of CO.
- Determine the percent yield for the reaction between 45.9 g of NaBr and excess chlorine gas to produce 12.8 g of NaCl and an unknown quantity of bromine gas.
- Determine the percent yield for the reaction in which 15.8 g of NH_3 and excess oxygen produce 21.8 g of NO gas and water.
- Determine the percent yield for the reaction between 98.7 g of Sb_2S_3 and excess oxygen gas if 72.4 g of Sb_4O_6 is recovered along with an unknown amount of sulfur dioxide.
- Determine the percent yield for the reaction between 46.5 g of ZnS and 13.3 g of oxygen if 18.14 g of ZnO is recovered along with an unknown quantity of sulfur dioxide.
- Determine the percent yield for the reaction between 15.0 g of N_2 and 15.0 g of H_2 if 10.5 g of NH_3 is produced.