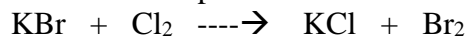


Name: _____

Period: _____

Limiting Reactants and Percent Yield

1. Chlorine can replace bromine in bromide compounds forming a chloride compound and elemental bromine. The following equation is an example of this reaction.



When 0.855 mole of Cl_2 and 3.305 g of KBr are mixed in solution, which is the limiting reactant? How many grams of Br_2 are formed?

2. Heating zinc(II) sulfide in the presence of oxygen yields zinc(II) oxide and sulfur dioxide: If 1.72 mol of ZnS is heated in the presence of 3.04 mol O_2 , which reactant will get used up first and which one would will be left over?

3. In the production of copper from ore containing copper(II) sulfide and reacting it with oxygen gas producing copper (II) oxide and sulfur dioxide. If 100 g of CuS and 56 g of O_2 are available, which reactant is limiting, and which is the excess reactant?

4. When 3.3 moles of Ni react with 159.3 grams of AgNO_3 , which is the limiting and which is the excess reactant?

