

Download Chemistry Limiting Reagent Packet

Unit 6 Packet - Page 1 of 12 Honors Chemistry – Unit 8– Stoichiometry VOCABULARY Assignment:

stoichiometry percentage yield mole ratio mass-mass problem limiting reagent excess reagent. OBJECTIVES:

Be able to do stoichiometry problems (mass-mass problems). Be able to calculate the limiting reagent for a given chemical reaction. Which one is the limiting reagent? 2. Consider the reaction represented by the equation

$2 \text{Fe} + \text{O}_2 \rightarrow 2 \text{FeO}$. There are 9 moles of Fe. There are 2.7 moles of O_2 Which one is the limiting reagent? 3.

Consider the reaction represented by the equation $2 \text{H}_2 + \text{O}_2 \rightarrow 2 \text{H}_2\text{O}$. There are 7.6×10^{23} atoms of H_2

There are 3.3×10^{23} atoms of O_2 Dougherty Valley HS Chemistry Stoichiometry – Extra Limiting Reagent

Stoich Practice 11) Mg metal reacts with oxygen to give magnesium oxide, MgO. If 5.00 g of Mg and 5.00 g of O_2 are allowed to react, what weight of MgO is formed, and what weight of which reactant is left in excess?

1.71 g O_2 To figure out the amount of product produced, it must be determined reactant will limit the chemical

reaction (the limiting reagent) and which reactant is in excess (the excess reagent). One way of finding the

limiting reagent is by calculating the amount of product that can be formed by each reactant; the one that

produces less product is the limiting reagent.