

Limiting Reactant & Percent Yield

Name: _____

1a) Identify the limiting reactant when 1.22 L of oxygen gas reacts with 2.05 L of hydrogen gas to produce water. How many grams of water should be produced?

b) If 1.53 g of water are actually produced by the reaction, what is the percent yield?

2) Identify the limiting reactant when 43.25 g of CaC_2 reacts with 33.71 g of water to produce $\text{Ca}(\text{OH})_2$ and C_2H_2 . How many liters of C_2H_2 gas (at STP) should be produced?

b) What is the percent yield for the reaction if 13.2 L of C_2H_2 are actually produced?

3) Identify the limiting reactant when 74.68 g of Na_2CO_3 reacts with 65.14 g of CaCl_2 to produce CaCO_3 and NaCl . How many grams of NaCl should be produced?

Answers: 1a) 1.65 g water

2b) 87.2 %