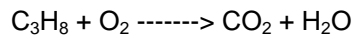


Name _____

Limiting Reactant Worksheet #1

You Must Show Your Work to receive credit

1. Given the following reaction: (Balance the equation first!)

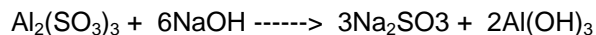


a) If you start with 14.8 g of C_3H_8 and 3.44 g of O_2 , which one will be the limiting reactant? (Use CO_2 as the product).

b) determine the number of moles of carbon dioxide produced

c) determine the number of grams of carbon dioxide produced

2. Given the following equation: (It is already balanced for you)

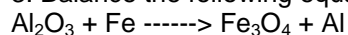


a) If 10.0 g of $\text{Al}_2(\text{SO}_3)_3$ is reacted with 10.0 g of NaOH, determine the limiting reagent (Use $\text{Al}(\text{OH})_3$ as the product)

b) Determine the number of moles of $\text{Al}(\text{OH})_3$ produced

c) Determine the number of grams of $\text{Al}(\text{OH})_3$ produced

3. Balance the following equation:



a) If 25.4 g of Al_2O_3 is reacted with 10.2 g of Fe, determine the limiting reagent (Use Al as the product)

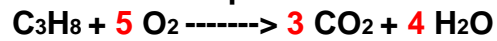
b) Determine the number of moles of Al produced

c) Determine the number of grams of Al produced

Name _____

Answers: Limiting Reactant Worksheet #1

1. **Balanced equation:**



a) O_2

b) 0.065 mol CO_2

c) 2.86 g CO_2

2a) $\text{Al}_2(\text{SO}_4)_3$

b) 0.068 mol $\text{Al}(\text{OH})_3$

c) 5.3 g $\text{Al}(\text{OH})_3$

3. **Balanced equation:**



a) Fe

b) 0.16 mol Al

c) 4.3g Al