

Name _____

Stoichiometry Worksheet
Honors Chemistry

1. Given the equation $\text{Ba} + 2 \text{HNO}_3 \rightarrow \text{Ba}(\text{NO}_3)_2 + \text{H}_2$

Calculate how many grams of nitric acid are needed to make 32.1 g barium nitrate.

1. _____

2. Given the equation $\text{CH}_4 + 2 \text{O}_2 \rightarrow 2 \text{H}_2\text{O} + \text{CO}_2$

How many grams of carbon dioxide will be produced from 43 g of CH_4 (methane)?

2. _____

3. BALANCE the equation $\text{K} + \text{H}_2\text{O} \rightarrow \text{KOH} + \text{H}_2$

If 56.1 g of water (DHMO) is completely reacted, how many grams of hydrogen will be produced?

3. _____

4. Balance the equation: $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3$

How many grams of iron (III) oxide will be produced from 36 grams of iron?

How many grams of iron (III) oxide will be produced from 319 g of oxygen?

5. Balance this equation: $\text{K}_3\text{PO}_4 + \text{Ca}(\text{SO}_4) \rightarrow \text{K}_2\text{SO}_4 + \text{Ca}_3(\text{PO}_4)_2$

How many grams of Potassium sulfate can be produced from 58.1 g of Calcium sulfate?

How many grams of potassium sulfate can be produced from 33.6 g of potassium phosphate?