

I. Synthesis (2 or more reactants)

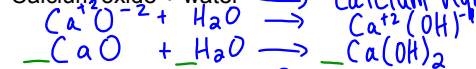
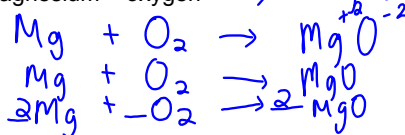
1. element + element \rightarrow compound

If water is a reactant

2. $\underline{\text{MO}} + \text{H}_2\text{O} \rightarrow \underline{\text{MOH}}$ 3. $\underline{\text{NMO}} + \text{H}_2\text{O} \rightarrow$ oxyacid

Mar 6-7:56 AM

Examples

Calcium oxide + water \rightarrow calcium hydroxideSulfur dioxide + water \rightarrow Sulfurous acidmagnesium + oxygen \rightarrow magnesium oxide

Mar 6-8:01 AM

II. Decomposition (1 reactant)

Ask yourself is the reactant a polyatomic?

1. Carbonate $\underline{\text{MCO}_3} \rightarrow \underline{\text{MO}} + \text{CO}_2$ 2. Hydroxide $\underline{\text{MOH}} \rightarrow \underline{\text{MO}} + \text{H}_2\text{O}$ 3. Chlorate $\underline{\text{MClO}_3} \rightarrow \underline{\text{MCl}} + \text{O}_2$

Mar 6-8:01 AM

Ask yourself is the reactant an acid?

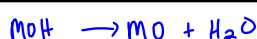
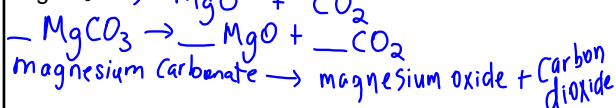
4. Oxyacid oxyacid \rightarrow $\underline{\text{NMO}} + \text{H}_2\text{O}$

-neither polyatomic or acid

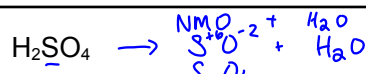
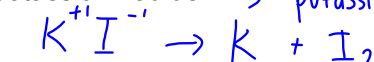
5. compound \rightarrow element + element

Mar 6-8:08 AM

Examples

calcium hydroxide \rightarrow calcium oxide + waterpotassium chlorate \rightarrow potassium chloride + oxygen $\text{MgCO}_3 \rightarrow \text{MgO} + \text{CO}_2$ 

Mar 6-8:10 AM

sulfuric acid \rightarrow sulfur trioxide + waterpotassium iodide \rightarrow potassium + iodine

Br HON Cl IF

Mar 6-8:17 AM