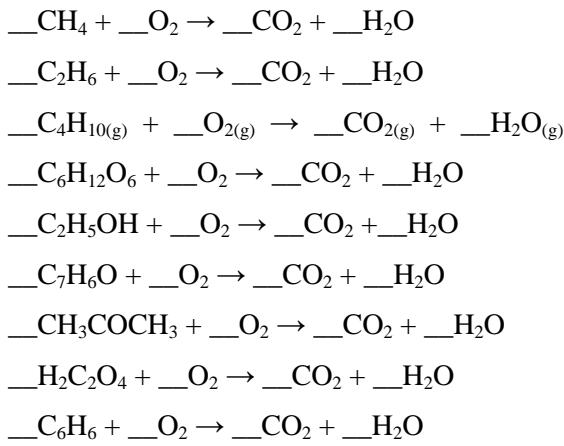


Balancing Equations Mega Worksheet!

<u>Synthesis</u>	<u>Decomposition</u>
Two into One	One into Two
$\underline{\hspace{1cm}} \text{MgCl}_2 + \underline{\hspace{1cm}} \text{O}_2 \rightarrow \underline{\hspace{1cm}} \text{Mg}(\text{ClO}_3)_2$	$\underline{\hspace{1cm}} \text{Ni}(\text{ClO}_3)_2 \rightarrow \underline{\hspace{1cm}} \text{NiCl}_2 + \underline{\hspace{1cm}} \text{O}_2$
$\underline{\hspace{1cm}} \text{Na} + \underline{\hspace{1cm}} \text{O}_2 \rightarrow \underline{\hspace{1cm}} \text{Na}_2\text{O}$	$\underline{\hspace{1cm}} \text{Ag}_2\text{O} \rightarrow \underline{\hspace{1cm}} \text{Ag} + \underline{\hspace{1cm}} \text{O}_2$
$\underline{\hspace{1cm}} \text{K}_2\text{O} + \underline{\hspace{1cm}} \text{H}_2\text{O} \rightarrow \underline{\hspace{1cm}} \text{KOH}$	$\underline{\hspace{1cm}} \text{HNO}_2 \rightarrow \underline{\hspace{1cm}} \text{N}_2\text{O}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O}$
$\underline{\hspace{1cm}} \text{N}_{2(g)} + \underline{\hspace{1cm}} \text{H}_{2(g)} \rightarrow \underline{\hspace{1cm}} \text{NH}_{3(g)}$	$\underline{\hspace{1cm}} \text{NaCl}_{(l)} \rightarrow \underline{\hspace{1cm}} \text{Na}_{(s)} + \underline{\hspace{1cm}} \text{Cl}_{2(g)}$
$\underline{\hspace{1cm}} \text{NH}_{3(g)} + \underline{\hspace{1cm}} \text{H}_2\text{O}_{(l)} \rightarrow \underline{\hspace{1cm}} \text{NH}_4\text{OH}_{(aq)}$	$\underline{\hspace{1cm}} \text{H}_2\text{O}_{(l)} \rightarrow \underline{\hspace{1cm}} \text{H}_{2(g)} + \underline{\hspace{1cm}} \text{O}_{2(g)}$
$\underline{\hspace{1cm}} \text{P}_{(s)} + \underline{\hspace{1cm}} \text{Cl}_{2(g)} \rightarrow \underline{\hspace{1cm}} \text{PCl}_{3(g)}$	$\underline{\hspace{1cm}} \text{HgO}_{(s)} \rightarrow \underline{\hspace{1cm}} \text{Hg}_{(l)} + \underline{\hspace{1cm}} \text{O}_{2(g)}$
$\underline{\hspace{1cm}} \text{Na}_{(s)} + \underline{\hspace{1cm}} \text{Cl}_{2(g)} \rightarrow \underline{\hspace{1cm}} \text{NaCl}_{(s)}$	$\underline{\hspace{1cm}} \text{KClO}_{3(s)} \rightarrow \underline{\hspace{1cm}} \text{KCl}_{(s)} + \underline{\hspace{1cm}} \text{O}_{2(g)}$
$\underline{\hspace{1cm}} \text{CO}_{2(g)} + \underline{\hspace{1cm}} \text{H}_2\text{O}_{(l)} \rightarrow \underline{\hspace{1cm}} \text{H}_2\text{CO}_{3(aq)}$	$\underline{\hspace{1cm}} \text{Ca}(\text{OH})_{2(s)} \rightarrow \underline{\hspace{1cm}} \text{CaO}_{(s)} + \underline{\hspace{1cm}} \text{H}_2\text{O}_{(g)}$
$\underline{\hspace{1cm}} \text{MgO}_{(s)} + \underline{\hspace{1cm}} \text{H}_2\text{O}_{(l)} \rightarrow \underline{\hspace{1cm}} \text{Mg(OH)}_{2(s)}$	$\underline{\hspace{1cm}} \text{CaCO}_{3(s)} \rightarrow \underline{\hspace{1cm}} \text{CaO}_{(s)} + \underline{\hspace{1cm}} \text{CO}_{2(g)}$
$\underline{\hspace{1cm}} \text{C}_{(s)} + \underline{\hspace{1cm}} \text{O}_{2(g)} \rightarrow \underline{\hspace{1cm}} \text{CO}_{2(g)}$	$\underline{\hspace{1cm}} \text{H}_2\text{CO}_{3(aq)} \rightarrow \underline{\hspace{1cm}} \text{H}_2\text{O}_{(l)} + \underline{\hspace{1cm}} \text{CO}_{2(g)}$
$\underline{\hspace{1cm}} \text{Mg}_{(s)} + \underline{\hspace{1cm}} \text{O}_{2(g)} \rightarrow \underline{\hspace{1cm}} \text{MgO}_{(s)}$	$\underline{\hspace{1cm}} \text{Fe}(\text{OH})_3 \rightarrow \underline{\hspace{1cm}} \text{Fe}_2\text{O}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O}$
$\underline{\hspace{1cm}} \text{P}_2\text{O}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O} \rightarrow \underline{\hspace{1cm}} \text{H}_3\text{PO}_3$	$\underline{\hspace{1cm}} \text{Zn}(\text{CO}_3) \rightarrow \underline{\hspace{1cm}} \text{ZnO} + \underline{\hspace{1cm}} \text{CO}_2$
$\underline{\hspace{1cm}} \text{BaO} + \underline{\hspace{1cm}} \text{CO}_2 \rightarrow \underline{\hspace{1cm}} \text{BaCO}_3$	$\underline{\hspace{1cm}} \text{Cs}_2\text{CO}_3 \rightarrow \underline{\hspace{1cm}} \text{Cs}_2\text{O} + \underline{\hspace{1cm}} \text{CO}_2$
$\underline{\hspace{1cm}} \text{BeO} + \underline{\hspace{1cm}} \text{CO}_2 \rightarrow \underline{\hspace{1cm}} \text{BeCO}_3$	$\underline{\hspace{1cm}} \text{Al}(\text{OH})_3 \rightarrow \underline{\hspace{1cm}} \text{Al}_2\text{O}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O}$
$\underline{\hspace{1cm}} \text{Al}_2\text{O}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O} \rightarrow \underline{\hspace{1cm}} \text{Al}(\text{OH})_3$	$\underline{\hspace{1cm}} \text{H}_2\text{SO}_4 \rightarrow \underline{\hspace{1cm}} \text{SO}_3 + \underline{\hspace{1cm}} \text{H}_2\text{O}$
$\underline{\hspace{1cm}} \text{N}_2\text{O}_5 + \underline{\hspace{1cm}} \text{H}_2\text{O} \rightarrow \underline{\hspace{1cm}} \text{HNO}_3$	$\underline{\hspace{1cm}} \text{RbClO}_3 \rightarrow \underline{\hspace{1cm}} \text{RbCl} + \underline{\hspace{1cm}} \text{O}_2$
$\underline{\hspace{1cm}} \text{NaCl} + \underline{\hspace{1cm}} \text{O}_2 \rightarrow \underline{\hspace{1cm}} \text{NaClO}_3$	$\underline{\hspace{1cm}} \text{RaCl}_2 \rightarrow \underline{\hspace{1cm}} \text{Ra} + \underline{\hspace{1cm}} \text{Cl}_2$
$\underline{\hspace{1cm}} \text{Ra} + \underline{\hspace{1cm}} \text{Cl}_2 \rightarrow \underline{\hspace{1cm}} \text{RaCl}_2$	

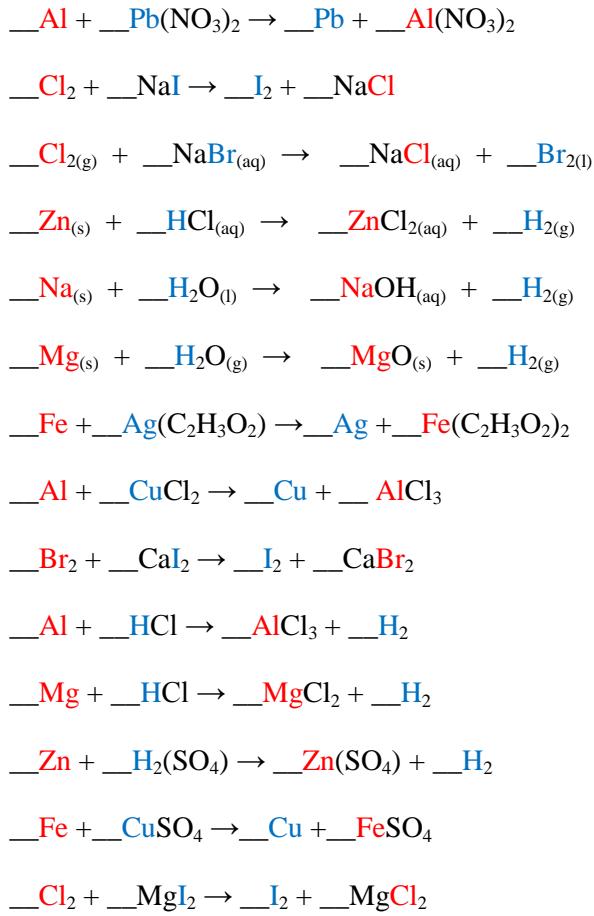
Combustion

Always make carbon dioxide and water



Single Replacement

SWAP cation for cation, or anion for anion



Double Replacement

SWITCH cations and anions

