

Balancing and Identifying Chemical Reactions

Level 1: Identify types of reactions

REACTION	TYPE
$4\text{Li}_{(s)} + \text{O}_{2(g)} \rightarrow 2\text{Li}_2\text{O}_{(s)}$	
$\text{CH}_{4(g)} + 2\text{O}_{2(g)} \rightarrow \text{CO}_{2(g)} + 2\text{H}_2\text{O}_{(g)}$	
$2\text{NaClO}_{3(s)} \rightarrow 2\text{NaCl}_{(s)} + 3\text{O}_{2(g)}$	

Level 2: Identify and balance

REACTION	TYPE
$\text{C}_5\text{H}_{12} + \text{O}_{2(g)} \rightarrow \text{CO}_{2(g)} + \text{H}_2\text{O}_{(g)} + \text{energy}$	
$\text{KClO}_3 \xrightarrow{\Delta} \text{KCl} + \text{O}_2$	
$\text{P}_4\text{O}_{10} + \text{H}_2\text{O} \rightarrow \text{H}_3\text{PO}_4$	
$\text{C}_4\text{H}_{10} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	
$\text{H}_2\text{O}_2 \xrightarrow{\Delta} \text{H}_2\text{O} + \text{O}_2$	
$\text{Ag} + \text{S}_8 \rightarrow \text{Ag}_2\text{S}$	

Level 3: Identify, predict products and balance

REACTION	TYPE
$K_{(s)} + Br_{2(l)} \rightarrow$	
$Ba + O_{2(g)} \rightarrow$	
$Li_2O_{(s)} + H_2O_{(l)} \rightarrow$	
$Cu(OH)_2 \xrightarrow{\Delta}$	
Zinc oxide reacts with water	
Lithium reacts with phosphorous	
Rubidium carbonate is heated and breaks down	
The combustion of octane (C_8H_{18})	