

## Year 7 Types of Reactions Knowledge Organiser



1. Word equations	
Keyword	Meaning
Word equations	Show the names of all the chemicals involved in a reaction.
Reactants	The chemical(s) at the start of a chemical reaction
Products	The chemical(s) at the end of a chemical reaction

3. Types of reactions	
Thermal decomposition	Breaking down a compound by heating it
Oxidation	A reaction where oxygen is added to a substance
Complete combustion	Burning a substance in plenty of oxygen
Incomplete combustion	Burning where there is a limited supply of oxygen
Hydrocarbon	A compound that only contains carbon and hydrogen
Fuel	A material that is burned to release energy e.g coal
Exothermic	A reaction that transfers energy to the surroundings

2. Conservation of mass	
Keyword	Meaning
Conservation of mass	Total mass of products = Total mass of reactants.

## Reactants Products

sodium hydroxide + hydrochloric acid  $\rightarrow$  sodium chloride + water sodium hydroxide + sulfuric acid  $\rightarrow$  sodium sulfate + water sodium hydroxide + nitric acid  $\rightarrow$  sodium nitrate + water magnesium oxide + hydrochloric acid  $\rightarrow$  magnesium chloride + water magnesium oxide + sulfuric acid  $\rightarrow$  magnesium sulfate + water magnesium oxide + nitric acid  $\rightarrow$  magnesium nitrate + water

## The Fire Triangle

