

KNOWLEDGE ORGANISER

Keyword	Definition
Oxidation	Reaction of other elements with oxygen
Combustion	Burning fuel in oxygen
Reactivity series	List of metals in order of reactivity
Displacement	A more reactive metal will displace a less reactive metal from its compound
Reactant	A substance that reacts together with another substance to form products during a chemical reaction.
Product	A substance formed in a chemical reaction.
Conservation of Mass	The total mass of the products in a chemical reaction will be the same as the total mass of the reactant.

Metals

Shiny in colour, solids at room temperature (except mercury), high density, strong, malleable, good conductor of heat and electricity.

Non-Metals

Dull in colour, can be solids, liquids or gases at room temperature, low density, brittle, poor conductors of heat and electricity.

GAS TEST	METHOD	RESULT
Hydrogen	Lit splint	Squeaky pop
Oxygen	Glowing splint	Splint relights
Carbon dioxide	Bubble through limewater	Turns cloudy

REACTANTS	PRODUCTS
Metal + Acid	Salt + hydrogen
Metal oxide + acid	Salt + water
Metal carbonate + acid	Salt + water + carbon dioxide

Reactivity Series

Some metals are very unreactive. This means they don't take part in chemical reactions. For example platinum. Some metals are very reactive and they take part in chemical reactions easily to form new substances.



Displacement Reactions

Displacement reactions involve a metal and a compound of a different metal. In displacement reactions, a more reactive metal will displace a less reactive metal from its compound.



Magnesium is more reactive than copper, so it displaces (pushes out) the copper within the compound.

