

Reactions of metals

Reactants	Products
Metal + acid	Salt + hydrogen
Metal + oxygen	Metal oxide
Metal + water	Salt + metal hydroxide

Properties of metals and non-metals

Metals	Non-metals
High melting point	Low melting point
Good conductors of heat	Poor conductors of heat
Form basic oxides	Form acidic oxides
High density	Low density
Sonorous	Not sonorous
Ductile and malleable	Brittle

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Most reactive

A more reactive metal will displace a less reactive metal from a compound

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Least reactive

potassium

sodium

calcium

magnesium

aluminium

zinc

iron

lead

(hydrogen)

copper

mercury

silver

gold

Reactions with oxygen

Iron filings	Burns producing yellow sparks
Magnesium ribbon	Burns with a bright light; grey ash formed
Sodium	Shiny surface quickly tarnishes (becomes full)
Carbon	Carbon dioxide gas is formed

Key Vocabulary

1	<b>Oxidation</b>	The reaction where a substance combines with oxygen
2	<b>Displacement</b>	A reaction a more reactive metal takes the place of a less reactive metal in a compound
3	<b>Reactivity series</b>	A list of elements which shows how reactive they are compared to each other
4	<b>Sonorous</b>	Rings when it is hit (e.g a metal)
5	<b>Malleable</b>	Can be hammered into shape
6	<b>Ductile</b>	Can be pulled into a wire