

Properties of metals

- Strong
- Conductors, heat + electricity

Uses of metals

Aluminium, window frames, aircraft - Low density - Corrosion resistant - Structural material	Copper, pipes, plumbing - Hard/strong - High melting point - Good conductor - Doesn't react with water	Gold, jewellery, tooth fillings, electric circuits - Shiny - Malleable - Doesn't react
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Iron rusts

Iron + Oxygen + Water → Hydrated iron oxide

Pure iron

- Bendy
- Irregular arrangement
- Soft
- Malleable

Iron converted into steel

- Alloy, mixture of two or more metals/ metal and non-metal
- Harder than pure metals

TYPE OF STEEL	PROPERTIES	USES
Low carbon steel (0.1% carbon)	Easily shaped	Car bodies
High carbon steel (1.5% carbon)	Very hard, inflexible	Blades for cutting tools, bridges
Stainless steel (chromium + nickel)	Rust-resistant	Cutlery, containers for corrosive substances

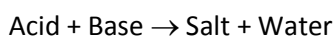
Gold alloys

- Proportion of pure gold in alloy, carats and fineness
 - Pure gold – 24 carats
 - 18 carats, 18 out of 24 parts are gold, 75% pure
 - Fineness, parts of pure gold per 1000

Acids, bases, Neutral

- Acid pH 6 and less
- Base/alkali pH 8 and more
- Neutral pH 7

Neutralisation reaction



- Salts used in fertilisers and fireworks as colouring agents

Stomachs produce hydrochloric acid

- Enzymes in the stomach work best as acidic levels
- Acid helps kill bacteria
- Indigestion, too much hydrochloric acid
 - Indigestion tablets contain bases that neutralise acid