

Uses of the Elements : Notes-35

Here is a list of some important elements. Their sources, uses and properties are given on the right.

Alkali metals

Sodium	component of table salt
Potassium	component of fertilizers

Transition Metals and Group 2 elements plus Al, Pb and Sn

Magnesium	strong, light-weight metal, used in airplanes and wheel rims, similar to aluminum, but has a lower density
Calcium	found in fertilizers, cement, plaster, chalk, and limestone. your bones and teeth need it
Iron	component of the alloy steel (Fe + Ni). used in bridges, buildings, cars etc.
Copper	found in wire, pennies and pipes
Tungsten	used in the filaments of light bulbs. high melting point
Chromium	component of the alloy stainless steel (Fe + Ni + Cr). used as a coating on steel to prevent it from rusting
Nickel	component of the alloy steel (Fe + Ni). was used in five cent pieces (nickels), used in plating (to protect) other metals

Platinum	catalyst (speeds up chemical reactions)
Gold	used in coins and jewelry
Silver	old coins, cutlery
Zinc	used as a metal coating, prevents steel from rusting. (galvanizing)
Mercury	thermometers, dental fillings (amalgam)
Aluminum	aluminum cans, airplanes, low density, strong
Tin	solder, (with lead)
Lead	solder, lead-acid car batteries

Noble gases

Helium	noble gas, used in blimps, balloons and lasers
Neon	neon lights, lasers

Halogens

Cl, Br, I	disinfectants, chlorine is found in bleach
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Non-metals

Nitrogen	component of air, air is 80% nitrogen and 20% oxygen, used to make ammonia, fertilizer and explosives
Oxygen	component of air, necessary for combustion

Sulfur	used to make rubber
Si, Ge	computer chips
Hydrogen	component of water, used as a fuel (in rockets and fuel cells)
Carbon	used in pencils (graphite), filters
Phosphorus	component of fertilizers