

element	compound	mixture

Elements: one type of atom

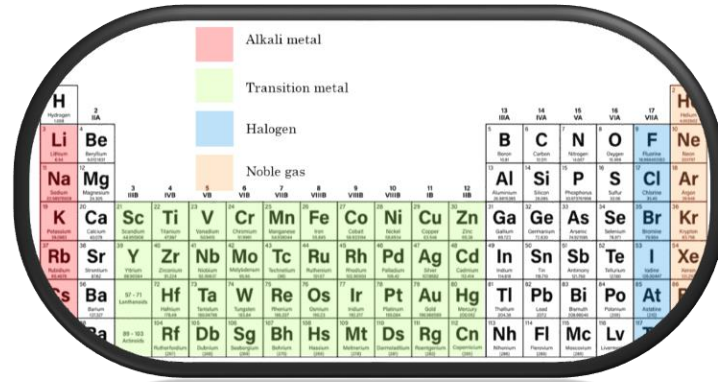
Compounds: Different atoms chemically joined

Mixtures: Different atoms not chemically joined

Elements are substances made up of **one type** of atom.

Different elements have different **properties** from one another.

All elements are either **metal** or **non-metal**.



Soluble – dissolves

Insoluble – doesn't dissolve

Solute – the thing that's dissolving

Solvent – the liquid doing the dissolving

Saturated – no more can dissolve

SOLUTE SOLVENT SOLUTION

Elements, Compounds & Mixtures
Knowledge Organiser
S1 Chemistry

Most elements are **solid**, but there are 2 **liquids** (Hg & Br) and 12 **gases** (including O, H, N, He).

Different elements have different properties and they can be sorted into groups like the ones in the periodic table above.

Getting hotter →

ADD ENERGY →

melting evaporating

Solid Liquid Gas

freezing condensing

← REMOVE ENERGY

← Getting colder

Melting, evaporation, freezing and condensing are the state change processes.

Different substances have different melting and boiling points.

below melting point = solid
 above boiling point = gas
 in between = liquid

Magnets
 separates something magnetic from something not magnetic (like iron and sulfur)

Chromatography
 separates mixtures of liquids (like ink from a pen)

Separating Techniques

Filtration
 separates an insoluble solid from a liquid (sand and water)

Evaporation
 separates a soluble solid from a liquid (like salt and water)