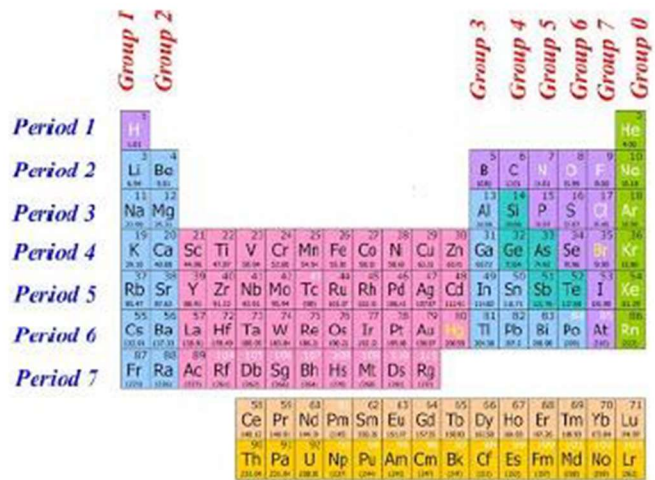


Knowledge Organiser

Keyword	Definition
Periodic Table	A tabular representation of all known elements in order based on atomic number.
Atomic Number	The number of protons in the nucleus of an atom. Also called the proton number.
Periods	A horizontal row in the periodic table.
Groups	A vertical column in the periodic table containing elements with similar chemical properties.
Element	A substance made of only one type of atom.
Compound	A Substance where two or more elements have chemically joined together.
Mixture	Two or more substances that are not joined together. The substances can be elements, compounds or both.
Reactive	The tendency of a substance to undergo a chemical reaction.

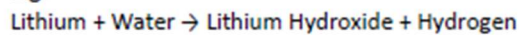


Group 1 – Alkali Metals

Group 1 metals are very soft metals which can be cut with a knife. They have very low melting and boiling points and are very reactive compared to other metals. The elements become more reactive as you go down group 1.

When the group 1 metals react in water they produce a metal hydroxide and hydrogen gas.

E.g.



Group 7 – The Halogens

Group 7 elements become less reactive when you move down the group. This can be shown as a displacement reaction.

Group 0 – The Noble Gases

Group 0 elements are not reactive. This is because the atoms have full outer shells.

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
Lithium - Li Sodium - Na Potassium - K	Beryllium - Be Magnesium - Mg Calcium - Ca	Boron - B Aluminium - Al Gallium - Ga	Carbon - C Silicon - Si Germanium - Ge	Nitrogen - N Phosphorus - P Arsenic - As	Oxygen - O Sulfur - S Selenium - S	Fluorine - F Chlorine - Cl Bromine - Br	Helium - He Neon - Ne Argon - Ar