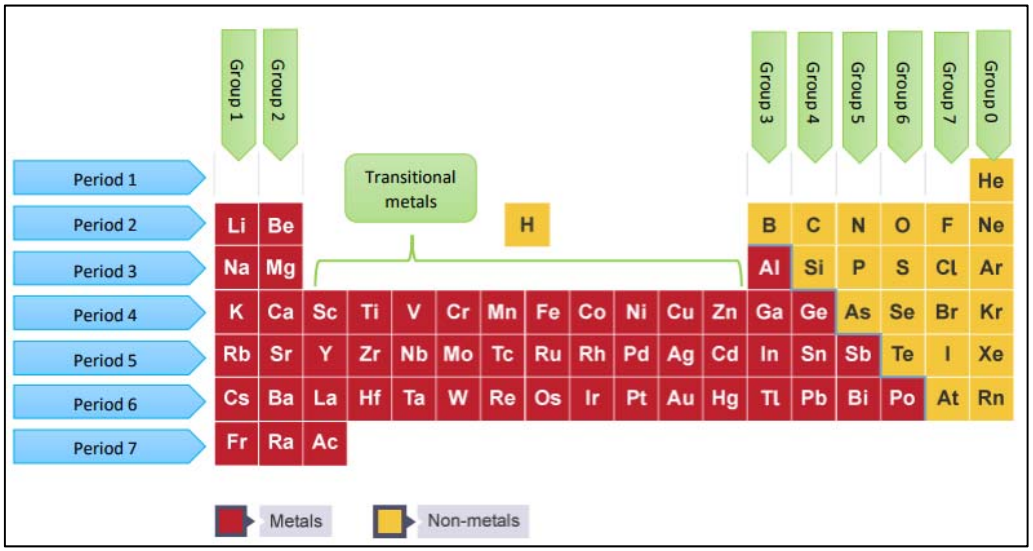
Science Knowledge Organiser

Glossopdale School

Y8 Matter: Periodic Table



Key Terms:

Boiling point	The temperature at which a substance boils.
Chemical properties.	Features of the way a substance reacts with other substances.
Density.	The mass of a material in a certain volume.
Group.	A vertical column of the Periodic Table. The elements in a group have similar properties.
Melting point.	The temperature at which a substance melts.
Metal.	Elements on the left of the stepped line of the Periodic Table.
Metalloid.	Elements near the stepped line of the Periodic Table are metalloids.
Non-metal.	Elements on the right of the stepped line of the Periodic Table.
Period.	A horizontal row of the Periodic Table.
Periodic table	Shows all the elements arranged in rows and columns.
Physical properties.	A property of a material that you can observe or measure without changing the substance.

Group 1 – The Alkali Metals

H

Li Lithium
Na Sodium
K Potassium
Rb Rubidium
Cs Cesium
Fr Francium

Physical properties:
- Melting point decreases from top to bottom of Group 1.
- Boiling point decreases from top to bottom of Group 1.

Chemical properties:
- Very reactive – reactivity increases as you go from top to bottom.
- Produce alkaline solutions when reacting with water.

Group 7 – The Halogens

F ← fluorine
Cl ← chlorine
Br ← bromine
I ← iodine
At ← astatine

Physical properties:
- Melting point increases from top to bottom of Group 7.
- Boiling point increases from top to bottom of Group 7.

Chemical properties:
- Reactivity decreases as you go from top to bottom.

Group 0 – The Noble Gases

He ← helium
Ne ← neon
Ar ← argon
Kr ← krypton
Xe ← xenon
Rn ← radon

Physical properties:
- Melting point increases from top to bottom of Group 0.
- Boiling point increases from top to bottom of Group 0.
- Melting and boiling points are very low.

Chemical properties:
- Unreactive. We say they are inert.