

### Must Remember

- In the Periodic Table, metals are on the left of the stripped line, and non-metals are on the right.
- Most metals have a high melting point. They are good conductors of heat and electricity. They are shiny and have densities. They are malleable, ductile, and sonorous.
- Most non-metals have low melting points. They are poor conductors of heat and electricity. In the solid state they are dull and brittle.
- Metal oxides are basic. Those that dissolve in water form alkaline solutions. Non-metal oxides are acidic.
- Physical properties describe things you can observe and measure.
- Chemical properties describe how substances take part in chemical reactions.
- You can use the arrangement of elements in the Periodic Table to explain and predict patterns in physical and chemical properties.
- In the Periodic Table, the horizontal rows are periods.
- In the periodic table, the vertical columns are groups.

1		2		group number										0				
														He				
Li	Be											B	C	N	O	F	Ne	
Na	Mg											Al	Si	P	S	Cl	Ar	
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
Fr	Ra	Ac																

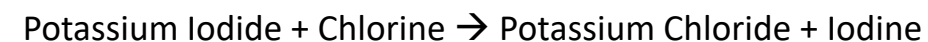
- Group 1 elements have low melting and boiling points, and low densities. They are reactive.
- Group 1 elements react vigorously with water to make hydroxides and hydrogen. The reactions get more vigorous from top to bottom of the group.
- Going down Group 7, melting and boiling points increase. The colours of the elements get darker. They are reactive.
- Group 0 elements are called noble gases. They are unreactive.

### Nice to know that...

- Group 1 elements are also known as the alkali metals, this is because they react with water to form alkaline solutions.



- Group 7 elements are also known as the halogens. This group are involved in displacement reactions.
- Displacement reactions are where an element from higher up in the group takes the place of one from lower down the group in a compound.



- Group 0 elements are also known as the noble gases as they are unreactive.
- The noble gases are very unreactive, have low boiling points, and are gases at room temperature.

### Key Terms

#### Group 0:

**Group 0 is on the right of the Periodic Table. Group 0 elements include helium, neon, argon, and krypton.**

#### Group 1:

**The elements in the left column of the Periodic Table, including lithium, sodium, and potassium.**

#### Group 7:

**Group 7 is the second from the right of the Periodic Table. Group 7 elements include fluorine, chlorine, bromine, and iodine.**

### Further Study

[BBC Bitesize – The Periodic Table](#)