

PERIODIC TABLE

- Non-metal $\rightarrow$ 20%

Metal $\rightarrow$ 80%

* Protons = the number of electrons

METALS

1. Good conductors of heat
2. $\checkmark$ Conduct electricity
3. They are shiny when polished / freshly cut
4. Have high melting / boiling points
5. Their oxide form basic oxides
6. They are ductile (can be drawn into wire)
7. Are malleable (can be easily shaped)

Both in
nucleus

Protons = Positive charge

Mass $\rightarrow$ 1

Neutrons = no charge

Mass $\rightarrow$ 1

Electrons = Negative charge

$\uparrow$ spin around the nucleus

Mass $\rightarrow$ $1/1840$ (0)

Non-metals

1. Bad conductors
2. $\times$ Conduct electricity
3. Tend to be brittle whilst solid
4. Low melting / boiling points
5. Oxide form acidic solution

Electron $\rightarrow$ responsible for atom's chemical properties

Electrons are arranged in energy levels / electron shells & it spins really fast around the nucleus.

Relationship of electron configuration with group number $\downarrow$

The last digit of configuration is the group number.

The outer shell is full in noble gases.

Number of circles in configuration = period number

LUSTROUS $\rightarrow$ when metals are polished

FLEXIBLE $\rightarrow$ can bend

DUCTILE $\rightarrow$ can be drawn into wires

MALLEABLE $\rightarrow$ can be easily shaped

SONOROUS $\rightarrow$ sounds

ELECTRICAL CONDUCTOR $\downarrow$

conduct electricity

THERMAL CONDUCTOR $\downarrow$

conduct heat