

Definitions and Concepts for WJEC (Eduqas) Chemistry GCSE

Topic 4 - The Periodic Table and Properties of Elements

*Definitions in **bold** are for higher tier only*

Definitions have been taken, or modified from the [WJEC \(Eduqas\) Specification for GCSE Chemistry, C410, Version 3 January 2019](#)

Alkali metals: The elements in Group 1 of the periodic table. They are typically soft and have relatively low melting points.

Atomic number: The number of protons in the nucleus.

Displacement: A chemical reaction in which a more reactive element displaces a less reactive element from its compound.

Flame test: Qualitative test used to identify metal ions (cations). Carried out by inserting a nichrome wire loop with the unknown compound on into a flame and observing the colour.

Group (periodic table): A column of the periodic table. Elements in the same group have similar chemical properties.

Halides: The ions formed by halogen atoms when they gain one electron. They have a 1- charge. E.g. Cl⁻, Br⁻ and I⁻.

Halogens: The elements in Group 7 of the periodic table. The halogens gain an electron to form halide ions with a 1- charge. Down the group the halogens get less reactive and have higher melting and boiling points.

Instrumental methods: Used to detect and identify elements and compounds. They are accurate, sensitive and rapid.

Metals: Elements that react to form positive ions. Found to the left and towards the bottom of the periodic table.

Noble gases: The elements in Group 0 of the periodic table. They have a stable full outer shell of electrons which makes them very unreactive.

Non-metals: Elements that react to form negative ions. Found towards the right and top of the periodic table.

This work by [PMT Education](#) is licensed under [CC BY-NC-ND 4.0](#)



Period (periodic table): A row of the periodic table. Elements in the same period have the same number of electron shells.

Periodic table: Table of elements arranged in order of increasing atomic number and such that elements with similar properties are in the same column (group).

Transition metal: A metal found between Groups 2 and 3 of the periodic table. Typical properties include high melting points, high densities, ability to form coloured compounds and catalytic activity.

