

CAIE Chemistry IGCSE

8.1 Arrangement of elements

Flashcards

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What is the periodic table?



What is the periodic table?

A method of classifying and arranging elements.



How is the periodic table arranged?



How is the periodic table arranged?

The elements are arranged in order of increasing atomic number. This places elements in vertical groups (columns) and horizontal periods (rows).

Elements in the same period have the same number of electron shells and elements in the same group have the same number of electrons in their outer shell.



Where are metals and non-metals found
in the periodic table?



Where are metals and non-metals found in the periodic table?

Metals make up most of the periodic table and are found towards the left of the table.

Non-metals are found towards the top right of the periodic table.



How does metallic character change
across a period?



How does metallic character change across a period?

It decreases across the period.



How does non-metallic character change across a period?



How does non-metallic character change across a period?

It increases across the period.



Why do elements in the same group have similar chemical properties?



Why do elements in the same group have similar chemical properties?

Chemical properties are determined by the number of electrons in the outer shell of an atom. Elements in the same group have the same number of electrons in their outer shell so they react in a similar way.



How many electrons are in the outer shell of a group V element?



How many electrons are in the outer shell of a group V element?

Five



What is the charge on group I and group II ions?



What is the charge on group I and group II ions?

Group I and group II elements are metals so they lose electrons to form positive ions.

Group I forms 1+ ions.

Group II forms 2+ ions.



What is the charge on group VI and group VII ions?



What is the charge on group VI and group VII ions?

Group VI and group VII elements are non-metals so they gain electrons to form negative ions.

Group VI forms 2- ions.

Group VII forms 1- ions.



Which group do lithium, sodium and potassium belong to?



Which group do lithium, sodium and potassium belong to?

Group I

