

3. Periodicity

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Keyword	Definition
Amphoteric	Reacts with both acids and bases.
Delocalised	When outer electrons are no longer attached to any particular atom and are free to flow throughout the substance.
Displacement Reaction	When a more reactive element displaces a less reactive element in a compound.
Effective Charge	The net positive charge experienced by an electron in a multi-electron atom. Any inner shell electrons are subtracted from the nuclear charge.
Electron Affinity	The energy change that occurs when one mole of electrons is added to one mole of gaseous atoms.
Electronegativity	The ability of an atom to attract electrons in a covalent bond.
First Ionisation Energy	The energy required to remove one mole of electrons from one mole of gaseous atoms in their ground state.
Giant Covalent	A giant structure of atoms held together by covalent bonds with little or no intermolecular forces.
Giant Ionic	A giant structure of ions in a regular, repeating arrangement.
Groups	Columns in the Periodic Table.
Halides	When halogens react to form ionic compounds.
Halogens	Group 17, a reactive group of non-metals.
Molecular Covalent	Small molecules with weak intermolecular forces. Often gases.
Noble Gases	Group 18, a very unreactive group of non-metals.
Nuclear Charge	The overall positive charge of the nucleus of an atom.
Periodicity	Regular periodic variations of properties of elements with increasing atomic numbers.
Periods	Rows in the Periodic Table.
Precipitate	When a solid substance forms from a solution.
Shielded	When outer electrons are repelled from the nucleus by the electrons in the inner shells.
Stable Octet	When an outer shell is full.

Higher Keywords

Keyword	Definition
Chelate	A complex containing at least one polydentate ligand.
Complex Ion	A substance with a metal ion at its centre with a number of other molecules or ions surrounding it.
Coordination Bond	Uses a lone pair of electrons to form a covalent bond.
Diamagnetism	A property of all materials which produces a very weak opposition to an applied magnetic field.
Domains	When unpaired electrons in large numbers of atoms line up with parallel spins.

Ferromagnetism	A property of selected materials which produces magnetisations greater than the applied field.
Heterogeneous Catalyst	A catalyst that is in a different state to the reactants.
Homogeneous Catalyst	A catalyst that is in the same state as the reactants.
Ligand	A species that uses a lone pair of electrons to form a coordinate bond with a metal.
Paramagnetism	A property of materials with unpaired electrons which produces magnetisation proportional to the applied field and in the same direction.
Spectrochemical Series	Arranges ligands according to amount of energy separation between the two sets of d orbitals.