Electrovalent Bond	The bond formed due to the electrostatic attraction between the positively and negatively charged ions
Covalent Bond	The bond formed by the sharing of a pair of electrons between the two atoms
Electronic Theory of Chemical Bonding	Given by Kössel and Lewis in 1916 **Octet Rule** Atoms combine either by transfer of valence electrons or by sharing of valence electrons in order to complete the octet in their valence shells

Lattice Enthalpy	The energy required to separate one mole of a solid ionic compound into its gaseous constituent ions
Bond Length	The distance between the nuclei of two bonded atoms in a molecule The bond length decreases from the single bond to double bonds and to triple bonds (C-C > C=C > C≡C)
Bond Angle	The angle between the bonding orbitals around the central atom in a molecule It helps in determining the shape of a molecule

Bond Enthalpy	The amount of energy required to break one mole of bonds between two atoms in a gaseous state The larger the bond dissociation enthalpy, the stronger will be the bond in the molecule
Bond Order	The number of bonds between the two atoms in a molecule Isoelectronic molecules and ions have identical bond orders Bond enthalpy increases with increase in bond order, and bond length decreases
Dipole Moment	The product of the magnitude of the charge and the distance between them. It is designated by 'μ'. Dipole moment (μ) = charge (Q) × distance of separation (r) In case of polyatomic molecules dipole moment of a molecule is the vector sum of the dipole moments of various bonds

The Valence Shell Electron Pair Repulsion (VSEPR) Theory	Pairs of electrons in the valence shell repel one another and they tend to occupy such positions so as to minimise repulsion and maximise distance between them Decreasing order of repulsion: Lone pair (lp) – Lone pair (lp) > Lone pair (lp) – Bond pair (bp) > Bond pair (bp) – Bond pair (bp)
Hybridisation	Intermixing of the atomic orbitals to form a new set of equivalent orbitals called hybrid orbitals The hybrid orbitals are used in bond formation
Types of Hybridisation	sp - Linear sp^2 - Trigonal planar sp^3 - Tetrahedral dsp^2 - Square planar sp^3d - Trigonal bipyramidal sp^3d^2 - Square pyramidal / Octahedral d^2sp^3 - Octahedral