



WORLD MATHS SCIENCE OLYMPIAD

CHEMISTRY

Class -11

Unit 1: Some Basic Concepts of Chemistry

- Moles, molar mass, empirical & molecular formula.

Unit 2: Structure of Atom

- Bohr's model, quantum mechanical model, orbitals.

Unit 3: Classification of Elements and Periodicity

- Modern periodic law, trends in properties.

Unit 4: Chemical Bonding and Molecular Structure

- Ionic, covalent, and coordinate bonds, VSEPR theory, hybridization.

Unit 5: States of Matter

- Gas laws, ideal gas equation, kinetic theory.

Unit 6: Thermodynamics

- System, surroundings, enthalpy, internal energy, Hess's law.

Unit 7: Equilibrium

- Chemical & ionic equilibrium, pH, buffers.

Unit 8: Redox Reactions, Hydrogen & s-Block Elements

Unit 9: Organic Chemistry (Basic Principles)

- Nomenclature, electronic displacement, mechanisms.

Unit 10: Hydrocarbons

- Alkanes, alkenes, alkynes, aromatic hydrocarbons.