

Subject	Topic Covered
Chemical Reactions and Equations	Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, and types of chemical reactions: combination, decomposition, displacement, doubles displacement, precipitation, neutralization, oxidation and reduction.
Acids, bases and salts	Their definitions in terms of furnishing of H ⁺ and OH ⁻ ions, General properties, examples and uses, concept of pH scale(Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of sodium hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.
Metals and non metals	Properties of metals and non-metals, reactivity series, formation and properties of ionic compounds, basic metallurgical processes, corrosion and its prevention.
Carbon and its Compounds	Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.
Periodic Classification of Elements	Need for classification, Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.
Life Processes	"Living being". Basic concept of nutrition, respiration, transport and excretion in plants and animals.
Control and Coordination	Tropic movements in plants; Introduction to plant hormones; control and co-ordination in animals: nervous system; voluntary, involuntary and reflex action, chemical co-ordination: animal hormones.
How do Organisms Reproduce?	Reproduction in animal and plants (asexual and sexual) reproductive health-need for and methods of family planning. safe sex vs HIV/AIDS. Child bearing and women's health.
Heredity and Evolution	Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction; Basic concepts of evolution.
Human Eye and Colourful World	TransWeb Educational Services Pvt. Ltd

Light - Reflection and Refraction	
Electricity	<p>Reflection of light at curved surfaces, Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), and magnification.</p> <p>Refraction; laws of refraction, refractive index.</p> <p>Refraction of light by spherical lens, Image formed by spherical lenses, Lens formula (Derivation not required), Magnification. Power of a lens; Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.</p> <p>Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.</p>
Magnetic Effects of Electric Current	Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's left hand rule. Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.
Sources of Energy	Different forms of energy, conventional and non-conventional sources of energy: fossil fuels, solar energy; biogas; wind, water and tidal energy; nuclear energy. Renewable versus non-renewable sources.
Our Environment	Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.
Management of Natural Resources	Conservation and judicious use of natural resources. Forest and wild life, coal and petroleum conservation. Examples of People's participation for conservation of natural resources.