BLOOM PUBLIC SCHOOL

C-8 Vasant Kunj, New Delhi

Syllabus for the Session 2023-24

Class: X

Subject: Science

SYLLABUS		
MONTH	**CHAPTER (NCERT Text book)**	**CONTENT**
April	Ch. 1: Chemical Reactions and Equations	**Chemical reactions**: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic and exothermic reactions, oxidation and reduction.
	Ch 6: Life Processes	**Life Processes:** 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.
	Ch 10: Light - Reflection and Refraction	**Light**: Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification. Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens
May	Ch. 1: Chemical Reactions and Equations(Cont'd)	**Chemical reactions**: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic and exothermic reactions, oxidation and reduction.
	Ch. 2: Acids, Bases and Salts	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.
	Ch 7: Control and Coordination in animals and plants	**Control and Coordination in animals and plants:** Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action; Chemical co-ordination: animal hormones.
	Ch 10: Light - Reflection and Refraction (cont'd)	**Light**: Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification. Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens
July	Ch. 2: Acids, Bases and Salts (Cont'd)	**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.
	Ch 8: How do Organisms Reproduce?	**Reproduction**: Reproduction in animals and plants (asexual and sexual) reproductive health - need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.
	Ch 11: Human Eye and Colourful world	**Human Eye and Colourful World** Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life (excluding colour of the sun at sunrise and sunset)
		Electricity: Electric current, potential difference and

	Ch 12: Electricity.	electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.
August	Ch 3: Metals and Non metals Ch 9: Heredity and Evolution Ch 12: Electricity(cont'd)	**Metals and nonmetals**: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds, Basic Metallurgical processes, Corrosion and prevention. **Heredity and Evolution**: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction: (topics excluded - evolution; evolution and classification and evolution should not be equated with progress). **Electricity**: Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.
September	Ch 3: Metals and Non metals (Cont'd) Ch 4: Carbon and it's Compound Ch 9: Heredity and	**Metals and nonmetals**: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds, Basic Metallurgical processes, Corrosion and prevention. **Carbon 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 hydro carbons 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 **Heredity and Evolution**: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex

	Evolution (cont'd) Ch 12: Electricity(cont'd) Chapter 13: Magnetic Effect of Electric Current	determination: brief introduction: (topics excluded - evolution; evolution and classification and evolution should not be equated with progress). **Electricity**: Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R. Magnetic effects of 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, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.
October	Ch 4: Carbon and it's Compounds (Cont'd) Ch 13: Magnetic Effect of Electric Current (cont'd) Ch 15: Our Environment	**Carbon 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 hydro carbons 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. **Magnetic effects of 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, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits. **Our Environment**: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.
November	Revision	

	Pre-Board Exam	
December	Revision Pre-Board Exam	
January	Revision	
February	Revision	
March	Board Exams	

ASSESSMENT SYLLABUS

PERIODIC ASSESSMENT -1	Chapter 1: Chemical reactions and equations Chapter 6: Life Processes Chapter 10: Light - Reflection and Refraction
PERIODIC ASSESSMENT -2	Chapter 2: Acids, bases and salt Chapter 7: Control and Coordination Chapter11: Human Eye and Colourful world Chapter 12: Electricity (Done till July 31)
MID-TERM EXAM	Chapter 1: Chemical reactions and equations Chapter 2: Acid bases and salt Chapter 3: Metals and Non metals(Done till Sep 10) Chapter 6: Life Processs Ch-7: Control and Coordination Chapter 8: How do Organisms Reproduce (done till August 31) Chapter 10: Light - Reflection and Refraction Chapter11: Human Eye and Colourful world Chapter 12: Electricity (Done till August 31)
PRE-BOARD EXAM	Chapter 1: Chemical reactions and equations Chapter 2: Acid bases and salt Chapter 3: Metals and Non metals Chapter 4: Carbon and its compound Chapter 6: Life Processes Chapter 7: Control and Coordination

	Chapter 8: How do organisms Reproduce? Chapter 9: Heredity and Evolution Chapter 10: Light – Reflection and Refraction Chapter 11: Human eye and colourful world Chapter 12: Electricity. Chapter 13: Magnetic effects of current Chapter 15: Our Environment
BOARD EXAM	Chapter 1: Chemical reactions and equations Chapter 2: Acid bases and salt Chapter 3: Metals and Non metals Chapter 4: Carbon and its compound Chapter 6: Life Processes Chapter 7: Control and Coordination Chapter 8: How do organisms Reproduce? Chapter 9: Heredity and Evolution Chapter 10: Light – Reflection and Refraction Chapter 11: Human eye and colourful world Chapter 12: Electricity. Chapter 13: Magnetic effects of current Chapter 15: Our Environment