



The Camford International School

ANNUAL LESSON PLAN 2023-2024

GRADE :10

SUBJECT: SCIENCE

MONTH	CHAPTER NO. AND NAME	DETAIL CONCEPTS TO BE COVERED	PRACTICALS
MARCH	PHYSICS: Chapter : 10 Light reflection and refraction.	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..	
	CHEMISTRY: Chapter: 1 Chemical Reactions And Equations	Concept map for the lesson, Chemical reactions and equation equation, Balanced chemical equation, implications of a balanced chemical equation.	
	BIOLOGY: Chapter:6 Life Processes	Nutrition in organisms, types, amoeba, photosynthesis, digestion in human, respiration types, Human respiration.	CO ₂ is released during respiration. Temporary mount of stomata.

APRIL	<p>PHYSICS:</p> <p>Chapter : 10</p> <p>Light reflection and refraction.</p>	<p>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</p>	<p>Determination of the focal length of: Unit-III i) Concave mirror ii) Convex lens by obtaining the image of a distant object</p> <p>Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.</p>
	<p>CHEMISTRY:</p> <p>Chapter: 1</p> <p>Chemical Reactions And Equations</p>	<p>Types of chemical reactions: Combinations, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction. Effects of oxidation reactions in everyday life. Corrosion and rancidity.</p>	<ul style="list-style-type: none"> Performing and observing the types of chemical reactions
	<p>BIOLOGY:</p> <p>Chapter:6</p> <p>Life Processes</p>	<p>Transportation in humans, transportation in plants.</p>	
MAY	<p>PHYSICS:</p> <p>Chapter : 11</p> <p>The Human Eye and the Colourful World</p>	<p>Functioning of a lens in human eye, defects of vision and their corrections,</p>	

	<p>CHEMISTRY:</p> <p>Chapter: 2</p> <p>Acids, Bases And Salts</p>	<p>Concept map for Acids, bases and salts - Their definitions in terms of furnishing of H⁺ and OH⁻ ions, General physical and chemical properties, examples and uses, concept of pH scale. Importance of pH in everyday life;</p>	<p>Finding the pH of laboratory samples by using pH paper and artificial indicators.</p>
	<p>BIOLOGY:</p> <p>Chapter:6</p> <p>Life Processes</p>	<p>Excretion in humans and plants</p>	
JUNE	<p>PHYSICS:</p> <p>Chapter : 11</p> <p>The Human Eye and the Colourful World</p>	<p>Applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life</p>	<p>Tracing the path of the rays of light through a glass prism.</p>
	<p>CHEMISTRY:</p> <p>Chapter: 2 Acids, Bases And Salts</p>	<p>Introduction to salts, application of salts, Preparation and uses of sodium hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.</p>	<p>Studying the properties of acids and bases (HCl & NaOH) by their reaction.</p> <p>Observing the action of Zn, Fe,Cu, Al with the salts.</p>
	<p>BIOLOGY:</p> <p>Chapter:6</p> <p>Life Processes</p>	<p>Tropic movements in plants, Introduction to plant hormones.</p> <p>Control and coordination in animals, nervous system, voluntary, involuntary and reflex action. Chemical coordination: Animal hormones.</p>	

JULY	PHYSICS: Chapter : 12 Electricity	Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends.	Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
	CHEMISTRY: Chapter: 3 Metals And Non metals	Concept map for the lesson, Properties of metals and non-metals, metal reactivity series, occurrence of metal, steps involved in the extraction of metals from its ore, enrichment and refining of metals, corrosion and prevention of corrosion.	<ul style="list-style-type: none"> • Observing the action of Zn, Fe, Cu and Al metals on the salt solutions. Reactions involved metal reactivity series (displacement reactions)
	BIOLOGY: Chapter:8 How do organisms reproduce	Reproduction in animals and plants (asexual and sexual) reproductive health- need and methods of family planning. Safe sex versus HIV/ AIDS. Child bearing and women's health.	Budding in yeast and binary fission in amoeba. Structure of Dicot Seed. Class room discussion on reproductive health and its importance.
AUGUST	PHYSICS: Chapter : 12 Electricity	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.	Determination of the equivalent resistance of two resistors when connected in series and parallel.

	<p>CHEMISTRY:</p> <p>Chapter: 4</p> <p>Carbon And Its Compounds</p>	<p>Concept map for the lesson, Allotropes of carbon, IUPAC nomenclature of organic compounds, Covalent bonding in carbon compounds. Versatile nature of carbon.</p>	
	<p>BIOLOGY:</p> <p>Chapter:9</p> <p>Heredity</p>	<p>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).</p>	
SEPTEMBER	<p>PHYSICS:</p> <p>Chapter : 12</p> <p>Electricity</p>	<p>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.</p>	
	<p>CHEMISTRY:</p> <p>Chapter: 5</p> <p>Periodic Classification Of Elements</p>	<p>Homologous series, nomenclature of carbon compounds, addition and substitution reaction. Important carbon compounds (Ethanol and Ethanoic acid) and soaps and detergents.</p>	<ul style="list-style-type: none"> ● Esterification reaction, ● Preparation of soaps
	<p>BIOLOGY:</p> <p>Chapter:15</p> <p>Our Environment</p>	<p>Our environment: Eco-system, Energy flow, 10% law, Trophic levels, Biomagnification, Environmental problems, Ozone depletion, waste production and their solutions, Biodegradable and non-biodegradable substances.</p>	