



# The Camford International School

## ANNUAL LESSON PLAN 2025-2026

**GRADE: 10**

**SUBJECT: SCIENCE (086)**

MONTH	CHAPTER NO. AND NAME	DETAIL CONCEPTS TO BE COVERED	PRACTICALS	AIL/AIP
MARCH	<b>PHYSICS:</b> Chapter: 10 Light reflection and refraction	Reflection of light by curved surfaces		
	<b>CHEMISTRY:</b> Chapter: 1 Chemical Reactions and Equations	Concept map for the lesson, Chemical reactions and equation, Balancing chemical equation.		
	<b>BIOLOGY:</b> Chapter:6 Life Processes	Nutrition in organisms, types, amoeba, photosynthesis, nutrition in human beings		Compare the cuisines of West Bengal and Tamil Nadu and comment on their health benefits and harms.

APRIL	<b>PHYSICS:</b> Chapter: 10 Light reflection and refraction.	Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.		
	<b>CHEMISTRY:</b> Chapter: 1 Chemical Reactions and Equations	Types of chemical reactions: Combinations, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction Effects of oxidation reactions in everyday life. Corrosion and rancidity.	Types of Chemical reactions(combination and decomposition)	Types of ores and metals places around Tamil Nadu and West Bengal. A comparative study report. (ppt)
	<b>BIOLOGY:</b> Chapter:6 Life Processes	Mechanism and physiology of respiration in plants and animals, Transportation in plants and in human beings	To prepare a temporary mount a leaf to show stomata.	
MAY	<b>PHYSICS:</b> Chapter: 10 Light reflection and refraction.	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	Determination of the focal length of: Unit-III i) Concave mirror ii) Convex lens by obtaining the image of a distant object  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.	

	<b>CHEMISTRY:</b> Chapter: 2 Acids, Bases and Salts	Concept map for Acids, bases and salts - Their definitions in terms of furnishing of $H^+$ and $OH^-$ ions,	Finding the pH of laboratory samples by using pH paper and artificial indicators.	
	<b>BIOLOGY:</b> Chapter:6 Life Processes	Transportation in plants.	To show experimentally that carbon dioxide is given out during respiration	
JUNE	<b>PHYSICS:</b> Chapter : 11 The Human Eye and the Colourful World	Functioning of a lens in human eye, defects of vision and their corrections,		
	<b>CHEMISTRY:</b> Chapter: 2 Acids, Bases and Salts	General physical and chemical properties of acids and bases, examples and uses, concept of pH scale. Importance of pH in everyday life Introduction to salts, application of salts, Preparation and uses of sodium hydroxide, bleaching powder, baking soda, Washing soda and Plaster of Paris.		
	<b>BIOLOGY:</b> Chapter:6 Life Processes	Transportation in plants and in human beings. Mechanism of excretion.		

<b>JULY</b>	<b>PHYSICS:</b> Chapter : 11 The Human Eye and the Colourful World	Applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life	Tracing the path of the rays of light through a glass prism.	
	<b>CHEMISTRY:</b> Chapter: 3 Metals and Non-metals  <b>CHEMISTRY:</b> Chapter: 4 Carbon and Its Compounds	Concept map for the lesson, Properties of metals and non-metals, metal reactivity series, occurrence of metal and extraction of metals  Concept map for the lesson, Allotropes of carbon, IUPAC nomenclature of organic compounds, Covalent bonding in carbon compounds. Versatile nature of carbon.	Studying the properties of acids and bases (HCl & NaOH) by their reaction.  Observing the action of Zn, Fe, Cu, Al with the salts.	
	<b>BIOLOGY:</b> Chapter:7 Control and coordination	Tropic movements in plants, Introduction to plant hormones. Reflex action and chemical coordination: Animal hormones.		
<b>AUGUST</b>	<b>PHYSICS:</b> Chapter: 12 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.	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.	Sources of electricity and power generation from Tamil Nadu and West Bengal (ppt/video/poster making)

	<b>CHEMISTRY:</b> Chapter: 3 Metals and Non-metals	Extraction of metals from its ore, enrichment and refining of metals, corrosion and prevention of corrosion.	Observing the action of Zn, Fe, Cu and Al metals on the salt solutions. Reactions involved metal reactivity series (displacement reactions)	
	<b>BIOLOGY:</b> 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.	
SEPTEMBER	<b>PHYSICS:</b> Chapter: 13 Magnetic effects of electric current	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.	Determination of the equivalent resistance of two resistors when connected in series and parallel.	
	<b>CHEMISTRY:</b> Chapter: 4 Carbon and Its Compounds	Homologous series, nomenclature of carbon compounds, addition and substitution reaction. Important carbon compounds (Ethanol and Ethanoic acid) and soaps and detergents.	Esterification reaction and Preparation of soaps	
	<b>BIOLOGY:</b> Chapter: 9 Heredity  Chapter: 15	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)  Our environment: Eco-system, Energy flow, 10% law,		

	Our Environment	Trophic levels, Biomagnification, Environmental problems, Ozone depletion, waste production and their solutions, Biodegradable and non-biodegradable substances. .		
--	-----------------	---	--	--