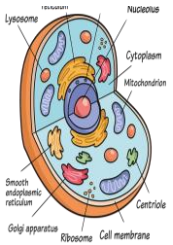
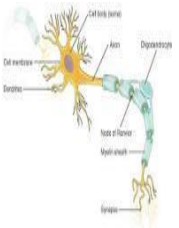
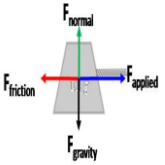
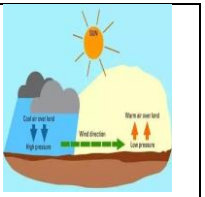
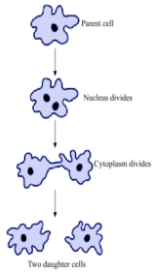
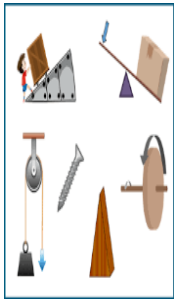
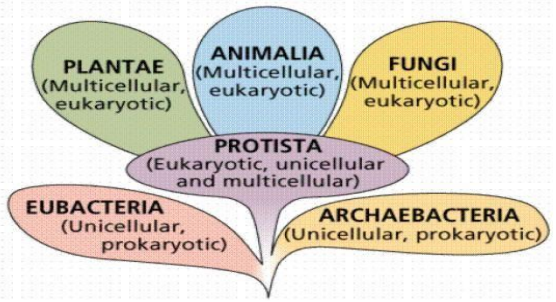
KOTHARI INTERNATIONAL SCHOOL
GRADE: 9 ANNUAL PLANNER (2026-27)
SUBJECT: SCIENCE SUBJECT CODE: 086

S.No	TERM	MONTH	TOPIC	SUBJECT ENRICHMENT
1.	**Periodic Assessment 1** 25% of the Syllabus (PA1- 27 April to 22 May 2026)	APRIL Working Days -20	**1. THE FUNDAMENTAL UNIT OF LIFE** Discovery of cell • Plant and animal cells • Prokaryotic and eukaryotic cells • Cell as a structural and functional unit of life; structure and function of key organelles (nucleus, mitochondria, chloroplast, endoplasmic reticulum, vacuoles, plasma membrane, cell wall) • Permeability of cell membranes • Cellular division and cancer • Recent advancement in cell biology **2. MOTION** Motion — displacement, velocity, acceleration • Graphical representation of motion for an object moving in a straight line in one direction (with constant velocity, and constant acceleration) • Kinematic equations for motion in a straight line with constant acceleration (by graphical method) • Elementary idea of uniform circular motion	Subject Enrichment Activities (Practicals) will be updated later as per CBSE notification. 
		MAY Working Days -15	**1. EXPLORING MIXTURES AND THEIR SEPARATION** Homogeneous and heterogeneous mixtures; • Solutions, suspensions, colloids and their properties • Various ways to express concentration of solutions (mass by mass percentage of a solution, mass by volume percentage of a solution, volume by volume percentage of a solution)	Subject Enrichment Activities (Practicals) will be updated later

			• Separation techniques based on the physical properties of components, including crystallisation, distillation, paper chromatography, sublimation, centrifugation and coagulation **<u>2. TISSUES</u>** Tissues: Introduction and importance • Level of organisation in the living organisms • Plant and animal tissues • Types of plant tissues • Meristematic tissues (types and function of each) • Permanent tissues (types, structure and function of each) • Animal tissues Overview (epithelial,connective, muscular and nervous tissues — types, structure and function of each) • Elementary idea of musculoskeletal system • Care of musculoskeletal system: injuries, postural care, nutrition and exercise	as per CBSE notification.  
2.	**Periodic Assessment 2** 40% of the total syllabus (Period- 6 July to 10 August 2026)	JULY Working Days -22	**<u>1. TISSUE CONTD.</u>** Animal Tissues **<u>2. FORCE AND LAWS OF MOTION</u>** Force; balanced and unbalanced forces • Force of friction • Newton's first law of motion • Newton's second law of motion • Newton's third law motion **3. <u>EARTH AS A SYSTEM: ENERGY, MATTER AND LIFE</u>** • Earth as interconnected system • Nature of solar energy: solar radiation, electromagnetic spectrum and speed of light	Subject Enrichment Activities (Practicals) will be updated later as per CBSE notification. 

			• Solar energy interaction with the Earth's Surface and differential heating of the Earth (the role of the atmosphere and the Earth's surface) • Differential warming of the Earth causes winds • Biogeochemical cycles (water cycle, carbon cycle, nitrogen cycle, oxygen cycle) • Human impact on Earth's system	
		AUGUST Working Days -19	**<u>1. STRUCTURE OF THE ATOM</u>** • Atoms are the basic units of elements • Atoms consist of subatomic particles • Atomic Models (Thomson's Model, Rutherford's Model, and Bohr's Model) • Distributions of electrons in elements (up to 18 elements) • Symbols • Valency as the combining capacity • Atomic number • Mass number • Isotopes • Isobars **<u>2. REPRODUCTION</u>** • Introduction to different forms of reproduction — sexual and asexual • Types of asexual reproduction with examples • Sexual reproduction in flowering plants (flower and its parts, pollination, fertilisation, seed dispersal) • Sexual reproduction in humans: male and female reproductive systems (structure and function, formation of gametes, sperm and egg, fertilisation, pregnancy and development of embryo, menstrual cycle) • Reproductive health and hygiene • Introduction to birth control methods and importance	Subject Enrichment Activities (Practicals) will be updated later as per CBSE notification. **VIVA will be conducted** 
3.	**Mid Term** 70% of the Syllabus (Period- 7 Sep to 22 September 2026)	SEPTEMBER Working Days- 21	**<u>Revision & Examination</u>**	

		OCTOBER Working Days- 18	**<u>1. ATOMS AND MOLECULES</u>** Law of conservation of C-1.1 mass • Law of constant proportion • Dalton's Atomic theory • Molecules of elements, Molecules of covalent compounds and their properties • Ions, Ionic compounds and their properties • Writing chemical formulae • Molecular mass • Formula unit mass **<u>2. WORK, ENERGY AND SIMPLE MACHINES</u>** Concept of work; work done by a constant force • Work-Energy theorem • Mechanical energy, kinetic and potential energy, and conversion between potential energy and kinetic energy • Conservation of energy • Power • Simple machines and their mechanical advantage (pulley, inclined plane, lever)	Subject Enrichment Activities (Practicals) will be updated later as per CBSE notification. 
4.	**Periodic Assessment 3** Remaining 30% Syllabus (Period- 2 Nov to 30 Nov 2026)	NOVEMBER Working Days- 16	**<u>1. DIVERSITY</u>** • Importance classification • Five kingdoms and their key features with examples • Major division of animals and plants • Binomial nomenclature • Acellular entities: viruses 	Subject Enrichment Activities (Practicals) will be updated later as per CBSE notification. **VIVA will be conducted**
		December Working Days- 20	**<u>1. SOUND</u>** Production of sound • Propagation of sound (as a longitudinal wave through a medium)	Subject Enrichment Activities

			• Graphical representation of sound wave • Characteristics of sound wave (wavelength, frequency, time period, amplitude, intensity, speed) • Human perception of sound (pitch, loudness) • Propagation of sound in different media (solid, liquid) • Reflection of sound(echo, reverberation), echolocation	(Practicals) will be updated later as per CBSE notification.
		JANUARY Working Days -18	**Revision**	
5.	ANNUAL EXAMINATION 100% (5 February -17 Feb 2027)	FEBRUARY Working Days -19	**Annual Examination**	