

**KLE ENGLISH MEDIUM SCHOOL**  
**JULE – SOLAPUR**  
**GRADE- IX SYLLABUS SPLIT 2023-24**

**SCIENCE**

Sr. No.	Month	Unit / Subunit	Values	Activities/Practical	Examination
1	April/June	Motion Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, derivation of equations of motion by graphical method; elementary idea of uniform circular motion	Appreciates explaining motion in terms of speed, velocity, acceleration.		
2	April/June	Matter In Our Surroundings: Definition of matter; Solid liquid & gas; Characteristics - shape, volume, density; change of state - melting, freezing, evaporation, condensation, sublimation.	Appreciates Environment	To determine melting point of ice and boiling point of water.	
3	April/June	The fundamental Unit Of Life Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.	Appericate the body organization of both plants & animals	preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells and to record observations and draw their labelled diagrams.	
4	July	Force and laws of motion Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration. Elementary idea of conservation of Momentum	Appreciates force using Newton's laws and using the terms like inertia, momentum, action- reaction. Use of momentum in daily life	Determination of the density of solid by using a spring balance and a measuring cylinder.	
5	July / August	Is matter around us Pure Elements, compounds and mixtures. Heterogeneous and homogenous	Environmental sensitivity	To carry out chemical reactions and classify them as physical changes and chemical changes.	

		mixtures, colloids and suspensions			
6	July / August	Tissues Structure and functions of animal and plant tissues (only four types of tissues in animals; Meristematic and Permanent tissues in plants).	Appreciate the body organization of both plants & animals	Identification of tissue in plants.	<b>Periodic Test-2</b>
7	September	Gravitation- Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Free fall.	Appreciates force of gravity for rocket/missile launching.	Lab Activities	<b>Periodic Test-2</b>
8	October/November	Gravitation- Thrust and pressure ,fluids, Archimedes principle	Use of pressure in air (parachutes), water.	Determination of the speed of the pulse propagated through a stretched string .	<b>Periodic Test-2</b>
9	November / December	Atoms and Molecules: Law of chemical combination, chemical formula of common compounds, atomic and molecular masses.		Lab Activities	<b>Periodic Test-2</b>
10	November / December	Improvements of Food Resources - Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming	Appreciate new technology in farming	Lab Activities	
11	December	Work and Energy Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy.	Explanation of work done, explanation of energy in terms of Kinetic and potential energy	Lab Activities	
12	January	SOUND: Nature of sound and its propagation in various media, speed of sound, range of hearing in humans, ultrasound; reflection of sound; echo.	Use of ultrasound, SONAR navigation purpose	Verification of the law of reflection of sound.	
13	January / February	Structure of atom - Electrons, Protons & Neutrons, Valency, chemical formula of common compounds. Isotopes and Isobars	Aesthetic values	To separate components of mixture by sublimation.	

14	March	TERM-2 EXAMINATION
		<b>ALL CHAPTERS ARE THERE FOR TERM-2 EXAMINATION</b>

