

SUBJECT: SCIENCE		ARMY PUBLIC SCHOOL, CHENNAI		ANNUAL LESSON PLAN - 2025 -2026	
CLASS : 9			SEC:	TEACHER'S NAME:	
MONTH	NO. OF WORKING DAYS	TOPIC(With Sub-Topics)	NO. OF PERIODS	LEARNING OBJECTIVE	ACTIVITIES
APRIL	20	<p>Phy-Ch1 Matter in our surroundings i)Matter - its definition ii)Characteristics iii) States of matter. iv) Change of state. v) Effect of temp. on the change of state</p> <p>Chem-Ch 2 Is Matter Around us Pure i)Pure substances and its types</p> <p>Biology-Ch 1:Cell - Basic Unit of life : Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall.</p>	12	<p>To make the students</p> <ol style="list-style-type: none"> 1. Learn about the states of matter . 2. Differentiate between the three states of matter. 3. Know about the effect of temperature and pressure on the change of state. <p>To make the students</p> <ol style="list-style-type: none"> 1. Differentiate between different classifications of matter based on its physical and chemical properties 2. Understand about elements and compounds <p>After studying these topics, students will be able to</p> <ol style="list-style-type: none"> 1. Understand about the structure of cell and its parts 2. Analyze the structure of cells based on different functions 	<ol style="list-style-type: none"> 1. Live demonstrations showing the characteristics of matter 2. Quiz competition on the chapter taken 3. Differentiating between metals and non metals using real objects <p>Experiments in Biology:</p> <ol style="list-style-type: none"> 1. Preparation of slide and observation of cells in onion peel cells. 2. Preparation of slide and observation of human cheek cells.
JUNE	20	<p>Chem-Ch 2 Is Matter Around us Pure:ii)Mixtures and its types iii)Physical and Chemical changes PHY: Ch 8 Motion: Distance, Displacement,speed, Velocity, Acceleration, Average speed, Average velocity,Graphical representation of Motion,Distance-time graph, velocity time graph, equations of motion(derivation and numerical),circular motion.</p> <p>Biology: Ch 1 : Cell, the basic unit of life: cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.</p>	12	<p>To make the students</p> <ol style="list-style-type: none"> 1. Identify the physical and chemical changes happening around them. 2. Understand different properties of mixtures <p>To make the students</p> <ol style="list-style-type: none"> 1. Differentiate between the distance and displacement and calculate them in real situations. 2. Calculate and compare speed of an object at different intervals of time,velocity and acceleration of a moving body. 3. Differentiate between uniform and nonuniform motion. 4. Interpret and draw the graphs related to motion and solve the related numericals. 5. Define the circular motion and calculate the speed,distance and displacement of a body moving in a circle. <p>After studying these topics,students will be able to</p> <ol style="list-style-type: none"> 1. Understand and list out the functions performed by different organelles in cell. 	<p>Term I Activities: Multiple Assessment Activity (Worksheet/PPT/Model/Collage/Chart) Portfolio Class work copy</p> <p>Preparation of:</p> <ol style="list-style-type: none"> a) A true solution of common salt, sugar and alum b) A suspension of soil, chalk powder and fine sand in water c) A colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency filtration criterion stability <p>The students are asked to be in groups and solve the numericals given to them related to the chapter.</p> <p>Experiments in Biology:</p> <ol style="list-style-type: none"> 1. Study of Plasmolysis in onion peel.
JULY	20	<p>PHY: Ch 9-Force and laws of motion: Force and its effects,balanced and unbalanced force , inertia, Newton's 1st law ,momentum, Newton's 2nd Law,Third Law of Motion, Law of conservation of Momentum, Numerical problems related to law of conservation of momentum</p> <p>Biology: Ch 2: Tissues: Structure and functions of plant tissues</p>	8	<p>To make the students</p> <ol style="list-style-type: none"> 1. Correlate everyday life examples with Newton's 1st Law, 2nd law and 3rd law 2. Derive the mathematical form of Newton's 2nd Law. 3. Solve the Numericals related to momentum, Newtons laws <p>After studying these topics, students will be able to</p> <ol style="list-style-type: none"> 1. Learn about the structure of various plant tissues and state their functions 	<p>Asking the students to conduct a Role Play on the topic - "Which laws of Newton is the Best?" - that could show the applications of Newtons laws in real life, finally coming up with which law applies the most.</p> <p>Experiments in Biology:</p> <ol style="list-style-type: none"> 1. Observation of permanent slides of Parenchyma, Collenchyma, Sclerenchyma, Xylem, Phloem
AUGUST	20	<p>PHY: Ch.10 Gravitation: Universal law of Gravitation, Free Fall, Mass and Weight, Buoyancy, Relative density</p> <p>Chem:Ch3-Atoms and Molecules Laws of Chemical combination, Law of conservation of mass, Law of constant proportions,</p> <p>Biology: Ch 2:Tissues: Structure and functions of Animal tissues</p>	12	<p>To make the students</p> <ol style="list-style-type: none"> 1. know about the importance of gravitational force 2. Differentiate between mass and weight 3. Use formula to calculate the value of 'g'. 4. Understand the relation between radius of the earth and acceleration due to gravity. <p>To make the students</p> <ol style="list-style-type: none"> 1. State the law of conservation of mass and law of constant proportions 2. Solve numericals based on laws of chemical combination <p>After studying these topics, students will be able to</p> <ol style="list-style-type: none"> 1. Learn about the structure of various animal tissues and state their functions 	<p>PRACTICALS: Determination of the density of a solid (denser than water) by using a spring balance and a measuring cylinder. Establishing the relation between the loss in weight of a solid when fully immersed in. a) Tap water. b) Strongly salty water with the weight of. water displaced by it by taking at least two different solids Verification of the law of conservation of mass in a chemical reaction.</p> <p>Experiments in Biology:</p> <ol style="list-style-type: none"> 1. Observation of permanent slides of Cardiac, Skeletal and Smooth muscles
SEPTEMBER	20	<p>Chem:Ch3-Atoms and Molecules: What is an Atom? Atomic Mass, Writing chemical Formulae, Molecular Mass, Mole Concept</p> <p>Chem-CH 4 Structure of the Atom: Thompsons atomic model, Rutherford's atomic model, Bohrs atomic model</p> <p>Biology:Ch 3:Improvement in Food Resources: Plant and animal breeding and selection for quality improvement and management;</p>	8	<p>To make the students</p> <ol style="list-style-type: none"> 1. understand about an atom 2. Frame the chemical formula of a compound using criss cross method 3. Differentiate between atomic mass and mass number <p>To make the students</p> <ol style="list-style-type: none"> 1. Differentiate between the different atom models 2. Understand about the structure of atom 3. Compare the properties of protons, electrons and neutrons. <p>After studying these topics, students will be able to</p> <ol style="list-style-type: none"> 1. Learn and understand about the process of plant and animal breeding and selection of desired varieties for crop improvement 	<p>The students are asked to be in groups and to frame out the chemical formulas for the given compounds</p> <p>The students are asked to make the atomic models assigned to them</p> <p>Activity in Biology:</p> <ol style="list-style-type: none"> 1. Grow a plant and note down the requirements and conditions for its growth
OCTOBER	20	<p>Chem-CH 4 Structure of the Atom: Electron distributions in different shells, Atomic number, mass number, isotopes, isobars</p>	12	<p>To make the students</p> <ol style="list-style-type: none"> 1. Differentiate between isotopes and isobars 	<p>Term I Activities: Multiple Assessment Activity (Worksheet/PPT/Model/Collage/Chart) Portfolio Class work</p>

