SUBJECT: SCIENCE	ARMY PUBLIC SCHOOL, CHENNAI -2026	ANNUAL LESSON PLAN - 2025

CLASS : 6		SEC:		TEACHER'S NAME:	
MONTH	**NO. OF WORKING DAYS**	**TOPIC(With Sub-Topics)**	**NO.OF PERIODS**	**LEARNING OBJECTIVE**	**ACTIVITIES**
APRIL	20	CH 1 NUTRITION IN PLANTS - Mode of nutrition in plants- Autotrophic and Heterotrophic nutrition *Photosynthesis Types of Heterotrophic nutrition Insectivorous(Parasitic) plants, Saprotrophs, Symbiosis relationship Process of nutrients replenished in the soil		*Recall details/definitions specific to autotrophic mode of nutrition in plants / photosynthesis *Understands that the plant stores carbohydrates in the form of starch. * *Distinguish between autotrophs and heterotrophs. parasites and saprotrophs *Describe the process of photosynthesis with the help of word/chemical equation. *Evaluate plants to study the pigments present. *Draw schematic diagram of a section of leaf.	*Bread mould growth *Visit a green house and observe how they grow plants *Growing a sweet potato in water
JUNE		**Ch-2:Nutrition in Animals** *Digestion in humans *Various parts of alimentary canal-Buccal Cavity, Oesophagus, Stomach, Small Intestine, Large intestine, Rectum, Anus, Digestion in ruminating animals - Feeding and digestion in amoeba		*Recall details/definitions specific to autotrophic mode of nutrition in plants / photosynthesis *Understands that the plant stores carbohydrates in the form of starch. *Distinguish between autotrophs and heterotrophs. parasites and saprotrophs *Describe the process of photosynthesis with the help of word/chemical equation. *Evaluate plants to study the pigments present *Draw schematic diagram of a section of leaf. *Define the terms- digestion and rumination, recalls different modes of acquiring food. *Explain the different steps of nutrition, digestive system of the human being, mode of nutrition in cow and amoeba * Compares the digestive system of human and that of ruminants *Illustrate and explains human digestive system with the help of a well labelled diagram *Classifies animals based on their modes of feeding.	*Effect of saliva on starch *Test for starch in food items *Preparation of Oral Rehydration Solution- *Count your teeth and then find out which type of teeth is used for cutting, grinding etc while eating food - *Find out different regions of taste in our tongue - *observing the specimen slides of Amoeba

		CH 3 HEAT - *Measuring temperature using thermometer - *Types of thermometer-Clinical, Laboratory - *Precautions using thermometers - *Transfer of heat(Different modes) - *Conduction-Insulators and conductors - *Convection- Land breeze and Sea - Radiation		*Defines temperature, thermometer, conduction,radiation - *Distinguish the Clinical thermometer from Laboratory thermometer (range, least count, units of measurement) - *List precautions while using a clinal and laboratory thermometer - *Devises an activity to elaborate the process of thermal conduction, convection & radiation *Recall the role of food as source of energy *Explain why a substance remains in the same temperature in a Thermos flask or vacuum bottle	*To observe the rate of heat transferred in different materials *Measure body temperature using clinical and digital thermometers *Observe the range of Laboratory and clinical thermometer *Take one black painted can and one white painted can and measure temperature of water in both cans using Lab thermometer *Making convection spiral *Flow of heat through a metal strip.					
		PT 1 IN JULY MAXIMUM MARKS - 40 (30% OF TERM I)								
JULY		**Ch-4 :Acids,Bases and Salts** *Acids and Bases - *Natural Indicators Around us - Litmus,turmeric and China rose as natural indicator - *Neutralisation - *Neutralisation in everyday life		*Recognise substances as sour and bitter - *Examine the common substance used at home based on taste and touch and classify them as acidic or basic - *Summarizes observations with respect to behavior of indicators in acidic and basic solutions - *Analysis neutralization reactions and its characteristics - *Evaluate the effectiveness of certain neutralization reactions employed in everyday life. - *Analysis neutralization reactions and its characteristics - *Evaluate the effectiveness of certain neutralization reactions employed in everyday life	*Test the samples of acidic ,basic and neutral substances using blue and red Litmus paper - *Make a greeting card using turmeric paper - *Prepare china rose indicator and red cabbage indicator to test different solutions - *Process of neutralisation using phenolphthalein indicator - *Observing the use of milk of magnesia, baking soda, calamine solution ,quick lime etc in our daily life					
AUGUST		**Ch-5: Physical and Chemical Changes -** *Physical changes and Chemical changes - *Activities of Chemical changes - *Rusting of Iron - Crystallisation		*Defines physical, chemical changes, reversible and irreversible change - *Differentiates physical changes from other changes - *Design an activity to prevent rusting by painting,oiling - *Illustrate the usage of crystallization in purification of various salts - *Applies related concepts in his daily life situations.	*Activities to show physical changes - *Burning of magnesium ribbon - Reaction of CuSO4 with iron - *Reaction of Vinegar with baking soda and the gas released will turn lime water milky - *Process of crystallisation					
		Ch 6: Respiration in Organisms - *Why do we respire? - *The process of breathing - *Breathing in other animals - *Do plants also respire?		*Understand respiration as breakdown of food for energy - *Differentiate aerobic and anaerobic respiration - *Illustrate the respiratory system with labeling - *Compare respiration and breathing - *Analysis the position of diaphragm during inhalation and exhalation - *Analysis the position of diaphragm during inhalation and exhalation - explain the process of breathing in plants and animals	*Compare the breathing rate of self, parents, children and old people - *Anulom Vilom Yoga - *Make model to show mechanism of breathing - *To check the effect of exhaled air on lime water - *Collect and share information about *Artificial respiration					

SEPTEMBER	**REVISION - HALF-YEARLY EXAMINATION (30 + 20 = 50% OF Annual Syllabus) PT2 in Sep Max M: 80 (Weightage 80 m)**									
OCTOBER		**Ch 7: Transportation in Animals and Plants -** *Circulation - *Blood, Blood vessels and heart - *Heartbeat - *Excretory system in humans - *Transport of substances in plants - *Transport of water and minerals in plants		*Discuss the importance of transportation in organisms - *List the components of Circulatory system - *Diagrammatic representation of heart - *Analysis the role of heart in blood circulation - *Discuss the role of excretory system in transportation - *Evaluate the role of artificial kidney in blood filtration	* To check the pulse rate of children and adults and compare - *Model of a stethoscope - *Find out the blood groups and their importance - *Find out the blood groups and their importance - *Potato activity to show transportation of water through cells - *Collect and share information about ECG and Dialysis - *Activity for transpiration					
NOVEMBER		CH 8 REPRODUCTION IN PLANTS - *Modes of reproduction, - *Asexual reproduction- Vegetative propagation, - budding, fragmentation,Spore formation - *Vegetative propagation from leaf, stem and root - *Pollination - *Fertilization - *Fruit and seed formation - *Seed dispersal		*Define reproduction - *Distinguish asexual and sexual reproduction - *List the modes of asexual reproduction - *Analysis the role of vegetative parts of a plant in reproduction *Classify asexual reproduction into different types - *List examples for the types of asexual reproduction - *Examine the role of flower in reproduction - *Compare self and cross pollination - *Evaluate the concept of seed dispersal in plant reproduction - dispersal of seeds	*Observe vegetative propagation in potato, carrot, bryophyllum etc - *Examine the parts of flower and understand the importance of them - *Specimen of different types of seeds to study seed dispersal				
		CH 9 MOTION AND TIME - *Slow or fast - *Speed - *Measurement of time - *Units of time and speed - *Measuring speed - *Distance-time graph		*Recall the types of motion - *Define speed and demonstrate time period on simple pendulum - *Compare uniform and non uniform motion - understand the relation between speed, distance and time - *Solve numericals on speed - *Analyse distance and time graph - *Learn to plot a bar graph and line graph	*Calculate the time period of a simple pendulum *Calculating speed of animals in Table 13.4 - *Plot a distance-time graph of an object moving with Uniform and Non uniform speed - *Model of a sand clock - *Distance-time graph					
		CH 10 ELECTRIC CURRENT AND ITS EFFECTS - *Symbols of electric components - *Open and closed circuit, circuit diagram - *Heating, lighting, Magnetic effects of electric current - *Electromagnets		*List the uses of electricity in daily life - *Draw the symbols of electricity - *Demonstrate the flow of current through a circuit - *Schematic representation of circuit using symbols of battery, wire, switch and bulb - *Differentiate between open and close circuit - *Analysis the two effects of current: heat and magnetic	Make an electric circuit					
		PT-3 in Dec Max M: 40 (Weightage 40m) PT3-30% of Term 2 (Oct to Nov syllabus)								

		CH 11 LIGHT - *Properties of light - *Plain Mirror and Spherical mirror, images formed by these mirrors - *Uses of plane and spherical mirror - *Concave and convex lens, images formed by these lens - *Uses of concave and convex lens - *Dispersion of white light using prism		*Recall light as a form of energy and its uses in daily life - *Examine that light travels in a straight line - *Demonstrate image formation by using candle and mirror - *Introduce the terms image, object and light source - *Explain the concept of reflection by citing relevant examples - *Introduce the concept of lateral inversion by giving real life examples - *Explain the two types of mirrors: concave and convex - *Demonstrate the image formation in concave and convex mirrors and identify the properties of the image formed - *Illustrate with an activity that white light is made of seven colors using a prism - *Construction of a colour wheel	*Light travels in a straight line - *Locating image in a plane mirror - *Image formation in a spoon - *Paper burning activity by capturing image of sun - *Images formed by a concave and convex mirror - *Newton's disc - *Refraction through prism
DECEMBER		**CH 12 FORESTS - OUR LIFELINE -** *Diversity in Forest flora and fauna *Types of canopy in forest plants *Plants and their products *Food chain - interrelation between various organisms *Effects of deforestation		*Recollect the uses of forests - *Analysis the structure of a forest - *List the flora and fauna present in forests - *Value forest as a treasure of natural resources - *Appreciate forest as the main contributor of rainwater - *Develop ways to improve and save forest from depletion	*Collect pictures of different types of trees - *Write few uses of the products obtained from forests - *Plant a sapling on any important day
JANUARY		**CH 12 - CONTD.**			
		CH 13 WASTER WATER STORY - *Water our life line- its uses *Waste water *Waste water treatment plant *Sanitation and Disease *Better housing practices, sewage disposal and sanitation at public places		*Recall the significance of water to all living organisms - *List the different ways for waste generation - *Examine the effects of waste water on health of living organisms - *Explain the role of treatment plants in sewage treatment before disposal - *Discuss the sanitation methods to reduce pollution of water - *Create new ways of waste disposal to diminish waste generation	*Multi- layer filtration of muddy water - *Collect pictures of diseases caused due to poor sanitation - *To segregrate wet and dry waste separately
FEBRUARY	REVISION				
MARCH	ANNUAL EXAMINATION - March Max M: 80 (Weightage 80 m) (20% of Term 1+ The entire syllabus of Term 2)				

Signature of the Teacher **Signature of the coordinator** **Signatur of the Principal**
