

Subject : Science
Grade : VI
Year : 2018-19

Year Planner

Text book used: Collins Science Now (Revised Edition)

Month & No. of Teaching Days	Units	Sub- Units	Objectives	Activities Planned	Evaluation
March & April (19)	3: The World of the Living	L-7: Things Around us <ul style="list-style-type: none"> ● Characteristics of living things ● Habitat ● Biotic components ● Abiotic components 	<ul style="list-style-type: none"> ● To study the characteristics of living organisms ● Distinguish between Living and Non-Living things ● Identify different Biotic and Abiotic components of the environment ● To understand the concept of habitat. 	<p>Lab. Activity:</p> <ul style="list-style-type: none"> ● Observation of stomata and Amoeba to study the cells. <p>Class Activity:</p> <ul style="list-style-type: none"> ● Text book activity(Project) ● Design a habitat with biotic and abiotic components. 	Worksheet-1
June (20)	7: Natural Resources	L-15 – Water <ul style="list-style-type: none"> ● Availability of water on Earth ● Uses of water ● States of water ● Change of forms of water ● Water cycle ● Drought and Flood ● Conservation of water 	<ul style="list-style-type: none"> ● To understand the importance of water. ● To study the states of water. ● Define how water is circulated through water cycle ● Sensitize towards natural calamities like floods, drought etc., ● Realize the necessity for water conservation. 	<p>Lab. Activity:</p> <ul style="list-style-type: none"> ● Evaporation and Condensation. ● States of water <p>Class Activity:</p> <ul style="list-style-type: none"> ● Grow a plant without soil and tabulate your observations and draw conclusions. 	Worksheet-2 Slip Test - 1
	3: The World of the Living	L-8: Plants <ul style="list-style-type: none"> ● Root – systems, functions and modifications ● Stem - functions and modifications ● Leaf - Parts of a leaf, functions and modifications ● Flower-Parts of a flower ● Pollination 	<ul style="list-style-type: none"> ● To recognize the different parts of a plant and realize the importance of how they work together towards the growth of the plant ● Identify the various ways in which plant parts are modified for different functions ● To describe the structure and function of a flower ● Generalize how pollination is vital 	<ul style="list-style-type: none"> ● Arrange a twig to study different parts of a plant ● Observation of different types of roots ● Study of various attributes of leaves <p>Lab. Activity:</p> <ul style="list-style-type: none"> ● Activity to show transport of water through the stem ● Display of specimens 	Worksheet-3

			for the survival of a plant species	<p>showing root, stem and leaf modifications.</p> <ul style="list-style-type: none"> ● To observe transpiration in plants ● Study of parts of a flower and cutting sections of ovary to observe ovules <p>Class Activity: Observe the given specimen and record it.</p>	
July (24)	6: Natural Phenomena	<p>L-14: Light, Shadows & Reflections</p> <ul style="list-style-type: none"> ● Sources of light ● Transparent, translucent and opaque objects ● Propagation of light ● Reflection of light ● Pin-hole camera 	<ul style="list-style-type: none"> ● To explain different sources of light ● Distinguish between transparent, translucent and opaque objects ● To understand about rectilinear propagation of light ● Generalize the conditions necessary for a shadow to be formed ● List the differences between shadows and images ● To identify the different types of reflecting surfaces 	<ul style="list-style-type: none"> ● Classify different materials as transparent, translucent or opaque ● Formation of shadow and study its characteristics ● To show difference between image and shadow ● Model making: Pinhole Camera, Kaleidoscope, etc. <p>Lab. Activity: Propagation of light.</p>	<p>Worksheet-4</p> <p>Slip Test - 2</p> <p>Revision Worksheet-1</p>
	1: Food	<p>L-1: Food and its sources</p> <ul style="list-style-type: none"> ● Plants as a source of food ● Animals as a source of food ● Food habits of animals 	<ul style="list-style-type: none"> ● To understand that different parts of a plant and animal products serve as sources of food for human beings ● To identify dairy products –Paneer, Cheese, Cream, Butter, Ghee, Curd ● To classify animals based on food habits – herbivores, carnivores, omnivores, scavengers and decomposers ● Generalize that different types of animals possess distinct 	<ul style="list-style-type: none"> ● Germination of seeds- moong dal, chickpea, etc. ● Display of samples of different animal and plant products <p>Class Activity:</p> <ul style="list-style-type: none"> ● Identify the ingredients and source present in the dishes prepared by each group 	Periodic Test -1

			characteristics that allow them to eat a particular kind of food		
	1: Food	L-2: Components of Food <ul style="list-style-type: none"> ● Understand the importance of nutrients ● Carbohydrates ● Fats ● Proteins ● Vitamins ● Minerals ● Dietary fibres ● Balanced diet 	<ul style="list-style-type: none"> ● Categorize food into various components and understand the importance of a balanced diet ● To identify the diseases that are caused due to deficiencies of certain food components and list their symptoms 	Lab. Activity: <ul style="list-style-type: none"> ● Test the presence of sugar, starch, fat & proteins in the food items. ● Inviting a dietician for a brief presentation. 	
August (21)	2: Materials	L-5: Sorting Materials <ul style="list-style-type: none"> ● Grouping of materials on the basis of common properties – Lustre, Texture, Hardness, State Transparency, Solubility, Floatation, Attraction towards a magnet, Conduction of heat and electricity 	<ul style="list-style-type: none"> ● To study the properties of materials ● Generalize the advantages of grouping things ● Identify the basis of classification ● To classify the materials, present in around us on the basis of certain common properties 	<ul style="list-style-type: none"> ● Collecting and grouping things on the basis of gross properties e.g., roughness, lustre, transparency, solubility, sinking/floating ● To classify the given materials as magnetic and non-magnetic substances 	Worksheet-5 Slip Test-3
	2: Materials	L-3: Separation of Substances <ul style="list-style-type: none"> ● Pure substance and mixture ● Types of mixtures ● Threshing, winnowing, hand-picking, and sieving ● Sedimentation and decantation ● Filtration ● Evaporation and condensation ● Solution and solubility 	<ul style="list-style-type: none"> ● To understand and gain practical knowledge of different methods used for separation of substances ● To study the methods of separating substances and understand the underlying principles behind each method ● Identify different kinds of solutions, and pick out the solutes and solvents in each 	Lab. Activity: <ul style="list-style-type: none"> ● To demonstrate the process of winnowing, sieving & hand-picking ● To observe cleaning of rice by sedimentation and decantation ● To separate a mixture of sand and water by filtration ● Testing the solubility of commonly available substances 	Worksheet-6 Slip Test-4
September (10)		REVISION - HALF-YEARLY EXAMINATION			Subject Enrichment Assessment -1

					Revision worksheet-2
October (14)	2: Materials	L-6: Change around Us <ul style="list-style-type: none"> ● Reversible and irreversible changes ● Physical and chemical changes ● Expansion and contraction of materials ● Real life applications 	<ul style="list-style-type: none"> ● To understand the different types of Changes-Physical and Chemical ● Predict the causes and effects of changes ● Explain about reversible and irreversible changes ● To identify the physical and chemical changes ● To recognize that substances expand on heating and contract on cooling 	<ul style="list-style-type: none"> ● Discussion on reversible and irreversible changes-child growing, ripening of fruits, curdling of milk etc. Lab. Activity: <ul style="list-style-type: none"> ● Contraction and expansion of substances 	Worksheet-7
	6: Natural Phenomena	L-12: Electricity & Circuits Electric current <ul style="list-style-type: none"> ● Sources of electric current ● Flow of electric current ● Electric circuit ● Electric Bulb ● Electric torch ● Conductors and insulators ● Safety precautions 	<ul style="list-style-type: none"> ● To study about electricity and its importance ● To understand the concept of Electric current and Structure of a dry cell ● To examine the working of an electric bulb and an electric torch and analyze electric cells ● Differences between conductors and insulators ● Adopt safety measures while handling electric appliances 	<ul style="list-style-type: none"> ● Display of an electric bulb and its parts ● Making a simple electrical circuit - Open and closed circuit. ● Study of battery or cell ● Demonstration of working of an electric torch ● To identify conductors and insulators from a given set of materials 	Slip Test-5
November (19)	7: Natural Resources	L-16 – Air <ul style="list-style-type: none"> ● Composition of air ● Air and life ● Balance of oxygen and carbon-dioxide in nature ● Air pollution 	<ul style="list-style-type: none"> ● To explain how air supports life and balance of various gases existing in nature ● To examine the oxygen cycle ● To realize how our personal and industrial activities cause pollution of air 	Lab. Activity: <ul style="list-style-type: none"> ● Presence of Oxygen and Nitrogen in air. ● Discussion on air pollution 	Worksheet-8
	3: The World of the Living	L-9: Movement in Animals <ul style="list-style-type: none"> ● How animals move ● Movement in earthworm, snail, cockroach, fish, birds, 	<ul style="list-style-type: none"> ● To study the movements in different animals and humans ● Explain how an animal moves are 	<ul style="list-style-type: none"> ● Human Skeleton model. ● Observation of specimens: Earthworm, Snail, Cockroach, Fish, 	Worksheet-9

		snakes, and human beings <ul style="list-style-type: none"> ● Joints and movement ● Cartilage 	linked to its body structure.	Birds and Snake.	Slip Test-6
December (22)	2: Materials	L-4: Fibre to Fabric <ul style="list-style-type: none"> ● History of clothing ● Fibre and fabric ● Types of fibres ● Importance of natural fibres ● Obtaining fabric from fibre. 	<ul style="list-style-type: none"> ● To recall the brief history of clothing ● To understand the process of converting yarn to fabric ● Distinguish between weaving and knitting ● Study the different types of fibres, their sources, properties and uses ● Explain about the process involved in the production of jute and cotton 	<ul style="list-style-type: none"> ● Weaving with paper strips ● Display of different types of fibres and fabrics. <p>Lab. Activity:</p> <ul style="list-style-type: none"> ● Burning test to differentiate natural and artificial fibres 	Worksheet-10
	7: Natural Resources	L-17: Waste management <ul style="list-style-type: none"> ● Types of wastes. ● Segregation of waste. ● Management of biodegradable wastes. ● Management of non-biodegradable wastes. ● Role of Municipality & public's role. 	<ul style="list-style-type: none"> ● To differentiate between the types of wastes – biodegradable and non-biodegradable wastes. ● To analyze the procedure involved in composting and landfilling. ● Realize the importance of recycling and become aware of the need to control wastes and help in reducing and reusing things. 	<ul style="list-style-type: none"> ● Model making – green bin and blue bin. ● structure of landfill and vermicomposting 	Revision worksheet-3
January (19)	5:How Things Work	L-13 : Magnets <ul style="list-style-type: none"> ● Discovery of magnets ● What is a magnet? ● Natural & artificial magnets ● Poles of a magnet ● Attraction and repulsion ● Earth as a magnet & magnetic compass ● Care of magnets ● Uses of magnet 	<ul style="list-style-type: none"> ● To learn about magnets and their properties ● Explain the significance of poles of a magnet ● To differentiate between magnetic and non-magnetic substances ● Describe the mechanism of attraction and repulsion ● Study how magnets are made ● Analyze how and where magnets are used 	<ul style="list-style-type: none"> ● To find the poles of a magnet, shapes of magnets ● Attraction and repulsion ● Making a magnet ● Magnetic compass <p>Lab. Activity:</p> <ul style="list-style-type: none"> ● To prove that freely suspended magnet always aligns itself in a particular direction 	Periodic Test -3 Worksheet-11

	3: The World of the Living	L-10: Habitat and Adaptation <ul style="list-style-type: none"> Habitats on the earth – Forest, Grassland, Deserts, Mountains & Polar region, and Aquatic habitat Adaptations of organisms in different habitats Acclimatization 	<ul style="list-style-type: none"> To generalize the various distinctive features of each habitat Understand the importance of adaptations for the survival of species Evaluate adaptations and study the adaptive features of animals and plants living in their natural habitat To describe about acclimatization 	<ul style="list-style-type: none"> Observation of specimens Group discussion on effects of environmental factors (water availability & temperature) affect living organisms 	Subject Enrichment Assessment -2
February (22)	4: Moving Things, People, and Ideas	L-11 : Measurement & Motion <ul style="list-style-type: none"> What is measurement? SI system of units Estimation Motion and Rest Types of motion 	<ul style="list-style-type: none"> To summarize the history of transportation To understand how people measured time and distance in ancient times Realize the need of standard units of measurements Explain the importance of measurement in life Learn the concept of motion and identify the different types of motion 	<ul style="list-style-type: none"> Identifying different types of motions. (bicycle wheel, fan, top, clock, sun etc.) Measuring length of different objects. 	Worksheet-12 Revision worksheet-4
March	ANNUAL EXAMINATION				