

BIFURCATION OF SYLLABUS (2023-24)**CLASS: - VI****SUBJECT: - SCIENCE****TEXT BOOK – NCERT SCIENCE**

Term	Assessment & Marks	Month	Chapters / Subtopics	Learning Objectives	Activities	syllabus Coverage
TERM-1 APRIL TO SEPTEMBER		April	Ch -1. Food: Where does it come From?(Rationalised) <ul style="list-style-type: none">● Food variety● Foods eaten by living organisms● Sources of food● Food habits of people● Some steps to avoid wastage of food	<ul style="list-style-type: none">● Analyze the food items in order to Identify the ingredients used in different food items.● Identify the sources of ingredients which are used to prepare food items.● Observe different food ingredients in order to recognize if their origin is from the part of the plant and recognize the respective part● List the animal products in order to understand how we depend on them for our food.● Categorize organisms into Herbivores, carnivores & omnivores based on their food habits or nutrition	<ol style="list-style-type: none">1. Naming the parts of the plant used in an ingredient.2. Sprouting of moong and grams to prepare sprouted salad.	
			Ch-2.Components of Food <ul style="list-style-type: none">● Nutrients in food● Composition of some food items● Balanced diet● Diseases due to imbalance in the diet● Deficiency diseases	<ul style="list-style-type: none">● Acquire the skill of testing the main food nutrients.● Explain the function of each nutrient in order to discuss the importance of nutrients in good health.● Hypothesize consequences of eliminating any one major nutrients in order to make a healthy food choice.● Explain the importance of balanced diet.● Design a balance diet plan in order to provide body sufficient nutrients it	<ol style="list-style-type: none">1. Preparing a diet chart to provide balance diet to a 12 yr old child. The diet chart will include food items which are not expensive and are commonly available in our area.2. Demonstration	

				<p>need to function properly</p> <ul style="list-style-type: none"> ● Develop healthy food habits. 	<p>of starch and protein test on food sample.</p> <p>3. Testing the food usually eaten by cattle or a pet to find out which nutrients are present in animal food.</p>	
		May	<p>Ch-3 Fibre to Fabric.(Rationalised)</p> <ul style="list-style-type: none"> ● Variety in fabrics ● Fibre ● Kind of fibres ● Some plant fibres ● Spinning of cotton yarn ● Yarn to fabric ● Uses of cotton, jute and coconut fibre 	<ol style="list-style-type: none"> 1. Examine various fabrics in order to predict what they are made up of. 2. Classify the given fabrics as Natural or Synthetic based on their source. 3. Describe the processing of cotton and jute fibres into yarn in order to conclude the required conditions to grow them. 4. Explain the various processes of making yarn from fibres in order to create the fabric. 	<ol style="list-style-type: none"> 1.Virtual visit to handloom or powerloom unit and observing the weaving or knitting of fabric. 2.Finding out if any crop is grown in our region for obtaining fibre. If yes, what is it used for? 3.India has been a major producer of cotton and its fabric. India exports cotton fabrics and items to many other countries. Finding out, how it helps us? 	
	PT-1(July) Max M:40 (Weightage 5 marks)	July	<p>Ch-4 Sorting Materials into Groups</p> <ul style="list-style-type: none"> ● Objects around us ● Important properties of materials ● How are materials grouped? 	<ul style="list-style-type: none"> ● List the objects around us in order to analyse the materials they are made up of. ● Observe the appearance of the materials in order to differentiate them as luster and non-luster material. ● Examine the materials by compressing or scratching them in 	<ol style="list-style-type: none"> 1. From a large collection of materials present in classroom or home, making groups of objects having different properties like transparency, 	PT-1 30% of Term-1

				<p>order to categorize them as hard and soft material</p> <ul style="list-style-type: none"> ● Observe the solubility of the object when added to water in order to categorize them as soluble and insoluble materials. ● Investigation of various objects to classify them based on whether the object sink or float in water 	<p>solubility in water and other properties.</p>	
			<p>Ch-5.Separation of Substances.</p> <ul style="list-style-type: none"> ● Need of separation of mixtures ● Methods of separation of mixtures ● Separation of insoluble solids from a mixture ● Separation of soluble solids from a mixture 	<ul style="list-style-type: none"> ● Identify properties of given items and select a property that would help them easily separate the items from each other. ● Examine the solubility of salt in water in certain conditions in order differentiate the solution as saturated and unsaturated. ● Explain how multiple processes can be employed when the mixture has a soluble and insoluble component ● Outlines methods that can be adapted in everyday life situations such as separation of husk from grains, separation of fine sand from coarse sand 	<ol style="list-style-type: none"> 1. Virtual Visit to a dairy and reporting about the processes used to separate cream from milk. 2. Demonstration of process of Loading in the classroom. 3. Showing activity of magnetic separation. 4. Demonstration of process of filtration using filter paper. 	

		August	<p>Ch-6 Changes Around Us(Rationalised)</p> <ul style="list-style-type: none"> ● Examples of a few changes taking place around us ● Changes caused by heating ● Changes caused by pressure or force ● Reversible and irreversible changes 	<ul style="list-style-type: none"> ● Classifies these changes based on interpretations into reversible and irreversible changes ● Organizes the observation to make generalizations about various changes ● Illustrates with examples of changes to find out the factors that can bring about specific changes ● Checks the effect of various factors on materials with the help of simple activities 	<ol style="list-style-type: none"> 1. Observing preparation of dishes at your home. Identifying two changes that can be reversed. 2. Maintaining a record for one year of the seasonal changes in vegetables, clothing, nature and events around. Identifying the changes that can or cannot be reversed. 	
			<p>Ch-7. Getting to Know Plants</p> <ul style="list-style-type: none"> ● Parts of a plant ● The root system ● The Shoot system ● The leaf ● The flower 	<ul style="list-style-type: none"> ● Analyze the parts of a plant and their function to in order to classify them into root and shoot system ● Compare the roots of different plants in order to classify them into tap roots and fibrous roots. ● Compare the features of Herbs, Shrubs & Trees in order to classify them considering their physical features / appearance ● Recognize patterns on leaves of different plants in order to classify them into reticulate venation and parallel venation. ● Examine the stems of different plants and design an activity to demonstrate water conduction 	<ol style="list-style-type: none"> 1. Visit to schools herbal garden. Exploration and classification of plants. 2. Showing two different types of roots. 3. Demonstration of conduction of water through stem. 4. Collection of leaves having different types of venation for 	

				<p>through stem (from roots).</p> <ul style="list-style-type: none"> ● Demonstrate the process of transpiration in order to describe the functions of the leaf. ● Illustrate the structure of a (typical) flower with at least 6 labelling & elaborate on each (Labelling) 	tracing	
	PT-2 (September) Max M:80 (Weightage 80 m)	Sept.	<p>Ch-8.Body Movements</p> <ul style="list-style-type: none"> ● Movement and locomotion ● Human body and its movements ● Skeletal system in other animals ● Locomotion in animals- " Gait of animals " 	<ul style="list-style-type: none"> ● Identify the type of joints in human body & their extent of movement. ● Compare the characteristics features of body movements of various organisms ● Identify the structure and function of skeletal system. ● Demonstrate how muscles work in order to explain its functions 	1. Identifying different types of joints in fingers and toes.	PT-2 30+20=50% of Annual syllabus
TERM -2 OCTOBER TO MARCH		October	<p>9.The Living Organisms and their Surroundings</p> <ul style="list-style-type: none"> ● Living places of organisms ● Habitat and adaptation ● Types of organisms on the basis of habitat ● Components of a habitat ● Adaptations in different habitats <p>10. Motion and Measurement</p>	<ul style="list-style-type: none"> ● Summarize the key features of living organisms that contribute to their survival in their habitats. ● Differentiate between terrestrial & aquatic habitats based on abiotic factors. ● Devise an experiment to show the importance of abiotic factors for the growth & sustenance of life on earth ● Identify the function of different physical feature that assist inhabitants to survive in harsh conditions. ● Explore various adaptive features of different organisms in their habitats. 	1.A journey through different habitat through ppt. and videos. Showing migratory birds and fishes.	

			<p>of Distances</p> <p>Story of transport</p> <ul style="list-style-type: none"> ● Need to measure distance ● What is measurement ● Need for measuring scale ● Need for standard scale or standard unit ● Introduction to motion ● Rest and Motion 	<ul style="list-style-type: none"> ● Sequence different modes of transport from earliest to the most recent in order to suggest possible modification occurring over the period of time. ● Construct a device by choosing appropriate materials in-order to measure length of given objects. ● Hypothesize reasons for utilisation/usage of Standard units of measurement. ● Summarize the rules associated with the measurement of length. ● Identify to find any errors associated with finding measurements using standard measurement devices. ● Compare the measurement of length for an object using a scientific instrument and a non scientific instrument in order to differentiate between standard and non-standard units of measurement. ● Distinguish between rest and motion in order to classify objects as in motion or at rest. ● Find out the similarities and differences between the two objects based on the types of motion. 	<ol style="list-style-type: none"> 1. Learning correct measurement of length of the school table with precaution avoiding errors. 2. Measurement of length of a curved line using a thread 	
		Nov.	<p>Ch-11. Light, Shadow and Reflection</p> <ul style="list-style-type: none"> ● What is light? ● Sources of light ● Everyday phenomenon which suggest that light travel in a straight line. ● Pinhole camera ● What is Shadow? 	<ul style="list-style-type: none"> ● Distinguishes objects based on the emission of light by them and visibility through them. ● Concludes that there should be a source of light, opaque object and a surface for shadows to form. ● Evaluates criteria for formation of 	<ol style="list-style-type: none"> 1. Demonstration of reflection laser light trough mirror. 2. Playing with shadow art. 3. Making a pin-hole camera using show box. 4. Making a simple 	

				<p>shadows and makes judgment about situations like, shadow of an airplane flying at a higher altitude and shadow of a bird flying nearer to the ground.</p> <ul style="list-style-type: none"> ● Represents working of a pinhole camera diagrammatically. ● Summarizes the characteristics of image formed by a pinhole camera. ● Distinguish between shadows & reflections. 	periscope.	
			<p>Ch-12. Electricity and Circuits</p> <ul style="list-style-type: none"> ● Electric cell ● Electric bulb ● Lighting of a bulb with an electric cell ● Electric Circuit ● Electric switch ● Electric conductors and insulator 	<ul style="list-style-type: none"> ● Describe the structure and function of the electric cell. ● Analyse the flow of current in a simple electric circuit with battery, bulb and wires to identify necessary condition to ensure flow of current. ● Distinguish between complete and incomplete circuit with a well labelled figure. ● Make a simple working model of an electric switch with easily available materials. ● Test items to classify them as conductor and insulator in order to examine the role of conductors and insulators in day-to-day life. 	<ol style="list-style-type: none"> 1. Making a simple electric circuit on a cardboard. 2. Making own switch using thumbnail and safety pin. 3. Checking conductivity of different materials and classifying them into groups. 	

	<p>PT - 3</p> <p>Max M:40 (Weightage 5 Marks)</p>	<p>Dec.</p>	<p>Ch-13. Fun with Magnets</p> <ul style="list-style-type: none"> ● Discovery of magnet ● Natural and artificial magnets ● Magnetic and Non- magnetic substances ● Poles of a magnet ● Attraction and repulsion between the magnets 	<ul style="list-style-type: none"> ● Outline the events responsible for the discovery of natural magnets. ● Classify given substances as magnetic & non-magnetic based on their ability to be attracted by magnets. ● Suggest an activity to determine the poles of a magnet. ● Create a set up using magnet in order to find the direction. ● Make a magnet in order to demonstrate how artificial magnets can be created. ● Make a magnet in order to demonstrate how artificial magnets can be created. ● Analyse what happens when two magnets are placed together in order to conclude the property of magnet. 	<ol style="list-style-type: none"> 1. Showing different shapes and sizes of artificial magnets. 2. Demonstrating properties of magnets. 3. Demonstration of working of magnetic crane. 4. Activity showing magnetization of iron bar. 	<p>PT – 3 30% of Term -2</p>
			<p>Ch-14. Water (Rationalised)</p> <ul style="list-style-type: none"> ● How do we use water? ● Oceans as the major source of water ● Transpiration as a means of adding water vapour to air ● How are clouds formed ● Precipitation or rain ● Water cycle ● Rain water harvesting 	<ul style="list-style-type: none"> ● List various sources of water in order to conclude the importance of oceans as a major source of water. ● Create a concept map of the water cycle in order to explain the processes that take place during water cycle. ● Establish the important role played by trees/plants in water cycle. ● Attribute natural calamities like drought & floods to the disturbance in water cycle. ● Infer the problems that may arise due to heavy rainfall in order to suggest possible measures that can be taken. ● Predict what will happen if rain doesn't happen in order to explain the significance of rain. 	<ol style="list-style-type: none"> 1. Poster making on conservation of water. 2. Finding new ways of water harvesting techniques. 3. Turn PET bottles into a sprinkler. 4. Water balloon art for fun. 5. Virtual visit to villages of Karnataka practicing rain water harvesting. 	

				<ul style="list-style-type: none"> Evaluate the consequences of mismanagement of water or excessive usage of ground water. 		
		January	<p>Ch-15. Air around Us</p> <ul style="list-style-type: none"> How do we know the presence of air? What is air made of? Atmosphere Respiration by organisms Why does the amount of oxygen does not change in air? 	<ul style="list-style-type: none"> Conduct activities in order to examine the presence of air around us. Execute an improvised plan to test the presence of CO₂, oxygen, water vapour, nitrogen, dust and smoke in air. Depict the composition of air using pie chart. Outline the causes & effects of Air pollution. Design and inquiry to prove the presence of air in water and soil in order to explain how oxygen becomes available to animals and plants. Illustrate the Oxygen cycle using well labelled figure. Evaluate the importance of air for the sustenance of life on earth. 	<ol style="list-style-type: none"> Making a colorful wind vane and a firki. Activity to show oxygen is necessary for burning process. Activity showing air has weight and occupies space. 	
			<p>Ch-16. Garbage in, Garbage out (Rationalised)</p> <ul style="list-style-type: none"> Waste Dealing with garbage- Some methods of managing solid waste Recycling of wastes Recycling of paper 	<ul style="list-style-type: none"> Discuss the waste management system in the community in order to explain the process of garbage disposal by 'Safai Karamcharis. Evaluate the reasons for layering the composting pit with different types of 	<ol style="list-style-type: none"> Making our own compost pit in an earthen pot using kitchen waste. Virtual visit to plastic recycling centre. 	

			<ul style="list-style-type: none"> ● Benefits of waste management 	<ul style="list-style-type: none"> ● materials. ● Compare distinguishing features between compostable waste and non-compostable waste, in connection with properties of the end product. ● Infer reasons for success or failure of vermicomposting, considering steps involved and resultant products, etc. ● Design a method to ensure effective disposal of garbage, in the context of different types of wastes, their properties, etc. ● Outline possible means of dealing with a specific type of waste (Plastics), in connection with composting, reuse, recycle, reduce etc. 		
		Feb	REVISION FOR ANNUAL EXAM			
	Annual Examination Max M:80 (Weightage 80 m)	March	ANNUAL EXAM			10% of Term-1 + Entire syllabus of Term-2 Annual Exam

Note:- *Rationalised chapters be taught through activities. Not to be tested.