

**Objectives**

To develop scientific temperament.  
To enable critical thinking  
To enquire and verify the given facts  
to enhance logical skills

**General Skills to be developed**

To articulate thoughts and ideas effectively using oral, written, non-verbal communication skills

experimental skills-to perform experiments under guidance

Research skills -to be able to gather information critically and analyse it.

Observational skill- observe the given situation carefully and are expected to infer it.

Data interpretations

Diagrammatic representation/expression- to be able to draw and label even complex diagram

Creative Thinking- express ideas in the form of a paragraph, make many working models and PPTs

**Term I**

Concept / Content	Objectives	Skills	Learning Style	Activities	Subject Integration	Outcome	Assessment
<b>FOOD WHERE DOES IT COME FROM?</b>	TO ENABLE THE STUDENTS TO					AT THE END OF THE LESSON THE STUDENTS WILL BE ABLE TO KNOW	
	* Recall the importance of food	Listening , Speaking & Reading	Linguistic	Listing keywords/new concepts in note book	ENGLISH-New words /concepts,for comprehension and expression.	*the importance of food	PEN PAPER TEST SA CLASS TEST NOTE BOOK -ASSESSMENT
	* Comprehend about the various food ingredients & their sources	Understanding, comprehension		Map activity - 5 states & their staple diet	S.Sc - Foods grown in different areas	* Comprehend whether - ingredients from plant or animal source	
	* Apply knowledge to segregate plant & animal sources	Application	Apply knowledge in day to day life		ART-DIAGRAMS		
	* List out the foods obtained from plants & animal along with their uses	Observational	Bodily Kinesthetic	Observation / Touch germination of seeds Role of spices in our daily life.(English name and common name)		* List the foods on the basis of their sources & uses	
	* Analyse which of the plants or animals give us more varieties of food	Analytical	Understand and analyse			* Analyse that plants are better source	
	* Evaluate why do different animals eat different foods	Evaluation		New food chains Sprout Making		* Know the varieties of foods eaten by animals	

	<p>* Differentiate / classify humans &amp; animals on the basis of food they eat</p> <p>Solve the back exercise</p>	<p>Diagrammatic expression</p> <p>Listening, analysing &amp; answering</p> <p>Content organisation</p>	<p>Visual</p> <p>Intrapersonal</p> <p>Interpersonal, logical</p>	<p>New diagrams / show charts</p> <p>By answering oral as well as written question. Quiz</p> <p>Group discussion &amp; answering logical question &amp; discussing back exercise</p>		<p>* Classify humans &amp; animals into carnivorous, herbivorous, omnivorous &amp; humans as vegetarians/non-vegetarians &amp; eggitarians</p>	
<b>COMPONENTS OF FOOD</b>	<p>TO ENABLE THE STUDENTS TO</p> <p>* Recall the foods which we get from plants &amp; animals &amp; their functions</p> <p>* Understand the various components of food &amp; analyse their role in body</p> <p>* Evaluate the various food components in food material by testing in lab</p> <p>* Define &amp; analyse the constituents of balanced diet &amp; its importance</p> <p>* Define under-nutrition &amp; malnutrition &amp; the health hazards caused due to over &amp; under eating</p> <p>* List out various diseases(deficiencies) due to deficiency of various components &amp; their effects</p> <p>Answer question /answers,Back exercise</p>	<p>Listening , Speaking &amp; Reading</p> <p>Comprehension</p> <p>Experimental Skill</p> <p>Analytical</p> <p>Content - Organisation</p> <p>Logical</p>	<p>Linguistic</p> <p>Interpersonal,Intrapersonal</p> <p>Visual, Bodily Kinesthetic</p> <p>Intrapersonal</p> <p>Interpersonal</p>	<p>Listing keywords/concepts</p> <p>By discussion</p> <p>Activity - Comparative study of diet of Manager &amp; Laboure rDiet Chart for a day</p> <p>Lab test, Protein, Sugar, Starch, Fat, Vit - C</p> <p>Tabulate the diseases along with their effects.</p> <p>Answering oral as well as written</p> <p>Group discussion, Quiz, Note book work, questions</p>	<p>ENGLISH- Newwords/concepts,for comprehension,expression.</p> <p>S.Sc - Foods grown in different areas</p>	<p>AT THE END OF THE LESSON THE STUDENTS WILL BE ABLE TO KNOW</p> <p>* the various components of food &amp; analyse their role in body</p> <p>* Experiment the presence of various components of food in given food material</p> <p>* know the importance of of balanced diet</p> <p>* List out various deficiency diseases caused due to the deficiency of various food components</p> <p>* know the difference between under-nutrition &amp; malnutrition</p>	<p>PEN PAPER TEST SA</p> <p>CLASS TEST, UNIT TEST NOTE BOOK ASSESSMENT</p> <p>LAB ASSESSMENT</p>

SEPARATION OF SUBSTANCES	TO ENABLE THE STUDENTS TO					AT THE END OF THE LESSON THE STUDENTS WILL BE ABLE TO KNOW	
* define mixtures, pure & impure substances & comprehend them		Listening , Speaking & Reading	Linguistic by learning new words	By writing keywords	ENGLISH-New words/concepts and for comprehension and expression.	* define mixture pure & impure substances	PEN PAPER TEST SA
* analyse the purpose/ understand the need of separating the constituents of the mixture		Experimentation	Bodily Kinesthetic by lab work (filtration) evaporation, sedimentation etc	Labwork - * sedimentation & decantation * filtration * evaporation * condensation * solubility of various substances	Art - neat presentation of diagrams	* understand the purpose of separation	UNIT TEST
* learn the various methods for separating the constituents of a mixture		Application	logical by knowing how to separate a solid from solid, sol. solid from liquid & sol. solid from solution	Tabulation of substances on the basis of solubility in water		* learn the various methods of separation	CLASS TEST
* separating a solid from other solids				Video clips of all the topics in chapter		* know methods of separating a solid from other solids	LAB ASSESSMENT
* separating insoluble solids from liquids				Separation using Alum		* separation using alum	NOTEBOOK
* separating soluble solids from its solution		Observation/ Evaluation	Visual/ spatial by watching the demonstration & activities			* evaluate that water is a universal solvent	ASSESSMENT
* define evaporation/condensation		comprehend				* define evaporation/condensation	
* apply knowledge to separate materials using more than one method		Application	Naturalistic by understanding natural process	By Demonstration.		* learn about separation, using more than one method of separation	
* evaluate that water is a universal solvent		Evaluation	Interpersonal	By discussion			
* analyse how much of any substance / solute, water can dissolve.		Analytical	Intrapersonal/ Visual	By demonstration			
Do the question/answers and back exercise		Content organisation	Expression-verbal/written	By writing question answers in notebook after discussion			

<b>MEASUREMENT OF DISTANCE &amp; MOTION</b>	<p>TO ENABLE THE STUDENTS TO-</p> <ul style="list-style-type: none"> <li>* Recall the importance of measurement of distance &amp; time</li> <li>* Define, understand, importance of measurement</li> <li>* Analyse the need of standard unit of measurement</li> <li>* Evaluate the conversion of one unit into another depending on the length to be measured</li> <li>* Acquire knowledge about correct measuring devices, used to measure length alongwith the correct way of using the devices</li> <li>* Analyse the way of measuring the length of a curved line using a thread</li> <li>* Define &amp; understand motion, rest &amp; types of motion</li> <li>* List various motions &amp; identify their types Do the question/answers,back exercise</li> </ul>	<p>THE SKILLS WHICH WILL BE ACQUIRED</p> <ul style="list-style-type: none"> <li>Listening &amp; Speaking</li> <li>Comprehension</li> <li>Obsevation</li> <li>Comprehension</li> <li>Observation / Visual</li> <li>Visual</li> <li>Observation</li> <li>Listening /answering /expression Content organisation</li> </ul>	<ul style="list-style-type: none"> <li>Linguistic</li> <li>Learning and understanding</li> <li>Kinesthetic</li> <li>Logical</li> <li>Kinesthetic</li> <li>bodily kinesthetic</li> <li>Visual</li> <li>Intrapersonal</li> <li>Epression-written/verbal</li> <li>Logical</li> </ul>	<p>Keywords / Key concepts</p> <p>Math - conversion table, simple numericals</p> <p>ENGLISH-NEW WORDS/CONCEPTS and FOR COMPREHENSION AND EXPRESSION.</p> <p>ARTS-Diagrams</p> <p>Measuring length by palm,handspan, the foot, the foot step, the cubit</p> <p>Conversion table, converting one unit into another</p> <p>Lab work - use of scale, footrule, measuring tape, Measure 5 commonly used articles each having different shape &amp; size with standard measuring techniques/devices</p> <p>Measure curved line using thread</p> <p>Activities related to motion in the class.Show pendulum.</p> <p>Explanation of types of motion, using Role play Oral, written by answering question Hots questions</p>	<p>AT THE END OF THE LESSON THE STUDENTS WILL BE ABLE TO KNOW-</p> <ul style="list-style-type: none"> <li>* define, understand the importance of measurement</li> <li>* the conversion table &amp; be able to do simple numericals related to conversion</li> <li>* know the correct way of measuring length by using the appropriate device</li> <li>* know the way to measure curved line using a thread</li> </ul>	<p>PEN PAPER TEST/ UNIT TEST SA CLASS TEST NOTEBOOK ASSESSMENT QUIZ</p>	
<b>GETTING TO KNOW PLANTS</b>	<p>To enable the students to-</p> <ul style="list-style-type: none"> <li>*Recall the terms herbs,shrubs and trees and list out some of their examples.</li> <li>differentiate plants</li> </ul>	<p>Skills which will develop are-</p> <p>Observational</p>	<p>Naturalistic</p>	<p>Nature walk in the school garden.</p>	<p>Arts-diagrams</p>	<p>*The students will be able to know and understand various terms related to plant life.</p> <p>*Get the depth knowledge of various parts of a plant and their functions.</p>	<p>Class Test</p> <p>Practical</p> <p>Notebook assessment Term-1</p>

	<p>on the basis of their life cycle.</p> <p>*View and understand the different parts of a plant.</p> <p>*Understand the types,functions and evaluate the importance of root for the growth of a plant.</p> <p>*Know the importance and the functions of stem.</p> <p>*Analyse how roots and stems are modified to give extra functions.</p> <p>*Understand the structure and function of leaf.</p> <p>*Analyse the relation between venation of leaves and roots.</p> <p>*Understand the structure of flower and its function.</p>	<p>Listening,speaking and reading.</p> <p>Observational</p> <p>Diagrammatic</p> <p>expression.</p> <p>Observational/</p> <p>Diagrammatic expression</p> <p>Observational</p>	<p>Linguistic</p> <p>Visual/ Naturalistic</p> <p>Creative/Visual</p> <p>Naturalistic</p> <p>Interpersonal</p> <p>Visual,naturalistic</p> <p>creative.</p> <p>Logical</p> <p>Visual/Naturalistic / Creative</p> <p>Interpersonal</p> <p>Intrapersonal</p>	<p>Keywords.</p> <p>View the plant parts in chart.</p> <p>By drawing diagrams,viewing specimen and charts.</p> <p>Discussion on various plant parts and functions.</p> <p>Pasting of root and shoot.</p> <p>By observing different kinds of leaves,pencil shading of leaves and venation.</p> <p>By answering Hots questions.</p> <p>By viewing parts of flower,making diagram.</p> <p>Discussion on various plant parts.</p> <p>By answering written and oral questions.</p>		<p>*Understand the structure of leaf,types of venation and functions of leaf.</p> <p>Know the structure of a flower,its parts and their functions.</p>	
<p><b>Lights ,Shadows, Reflections</b></p>	<p>Recall various terms related to light</p> <p>define luminous (manmade and natural)and non-luminous bodies</p> <p>Analyse why The Moon 'which gives us light' is a non-luminous body.</p>			<p>key words</p>	<p>Art : diagrams; sand art</p>	<p>students will be able to define ,differentiate and give examples of various terms -luminous, nonluminous, shadows, opaque,transparent;translucent,mirror and reflection</p>	<p>Class test</p> <p>Quiz</p>

compare and contract : transparent ,translucent, opaque objects. List out their examples						
identify these three different types objects in their surroundings		linguistic	group discussion	dance: shadow dance; shadow puppets;	differentiate between shadow and image	Unit Test
Analyse how shadows are formed comprehend the occurrence of eclipse (solar and lunar)	listening reading	logical	create pinhole camera with cardboard box viewing different types of objects and study their behaviour with light.		create a pinhole camera and explain its working	Term Exams written work (notebook)
define shadows and list out the requirements for the formation of a shadow	speaking		create shadow with help of torch in the class room			
comprehend that light travels in a straight line and its application in our day to day life	analytical					
create a pin hole camera	observational	Visual	diagram of shadow; pinhole camera;			
analyse the advantages and disadvantages of pin hole camera	diagrammatic representation	bodily kinaesthetic	draw ray diagram using mirror			
understand and define the terms Mirror and reflection		interpersonal				
differentiate between shadow and image		intrapersonal	diagram of eclipses			
comprehend the happening of eclipses						

**TERM 2**

Content	Objectives	Skills	Learning Styles	Activity	Subject Integration	Outcome	Assessment
<b>BODY MOVEMENTS</b>	Enable the students to- *Define and comprehend locomotion and movement. *Differentiate between locomotion and movement. *Understand the human skeleton system,its main parts and their functions. *List out various joints in the human body. *Analyse how muscles along with bone help in the movement.	The skills which will develop are- listening and speaking by reading. Observational(charts and models) Creative Self smart Observational	Verbal/linguistic by learning new words.  Visual and naturalistic  Interpersonal  Intrapersonal	List of key words. Shown charts and model of human skeleton (in lab).  Making diagrams  By dicussing concepts.  By giving answers	Arts-diagrams of bones and joints. Maths-knowing about the number of bones S.S.t-movement in different animals	At the end of the lesson the students will be able to know-  *Define locomotion and movement. *Differentiate between locomotion and movement. *Various parts of human skeleton system,joints and bones of human skeleton.  *That muscles along with bones help in the movement. *How different organisms with or without backbones move.	Pen paper test- 2 Class test Notebook assessment Oral presentation
	<b>The living organisms and Their surroundings</b>	Analyse how different organisms like cockroches,birds to enable the students to: 1.undersatnd the different kinds of habitat and adaptations  2.differentiate between biotic ans abiotic factors of the environment. 3.Analyse how different plants and animals are well adapted to live in their habitat: a. Desert : camel, lizards, rattle snake, b. Mountains: polar bear c. Grasslands: tigers, deer d. Oceans/ponds /lakes: sharks, whales, other aquatic animals 4. Analyse the characteristic of living things. 5. compare and contract the living and non-living things 6. Evaluate the importance of reproduction in living beings	comprehension listening speaking experimentation analytical logical observational critical thinking	Bodily  linguistic  visual  interpersonal	By making different postures showing the joints  drawing  verbal presentation  question/answers	Social Science (distribution of vegetation ans animals)  English, Arts	the students will be able to understand different kinds of habitat, how different animals and plants are able to survive in various habitats.  Know characteristics of living beings

<p><b>CHANGES AROUND US</b></p>	<p>To enable the students to -</p> <p>*List the changes-reversible and irreversible.</p> <p>*Apply the uses of various changes taking place</p> <p>around us.</p> <p>*Understand the terms physical and chemical changes.</p> <p>*Evaluate the advantages and applications of changes in day to day life.</p> <p>*Analysing the conditions in which objects expand and contract.</p>	<p>The skills which will develop are-</p> <p>Listening,speaking and reading.</p> <p>Observation/ experimentation.</p> <p>Spatial Agility and Adaptability</p> <p>Creative</p>	<p>Linguistic</p> <p>Bodily- Kinesthetic</p> <p>Visual</p> <p>Experiments</p> <p>Interpersonal</p> <p>Intrapersonal</p>	<p>Learning new terms.</p> <p>Demonstration by students to show various changes taking place on heating and cooling. By doing experiment in lab and class.</p> <p>Lab work activity showing physical and chemical changes. Discussion in the classroom.</p> <p>Answering the questions.</p>	<p>Arts-diagrams of various changes.</p> <p>S.St-Changes in weather conditions,atmospheric conditions.</p>	<p>At the end of the lesson the students will be able to know-</p> <p>*Reversible and irreversible changes.</p> <p>*Physical and chemical changes.</p> <p>*Why changes take place.</p> <p>*Application of changes in our day to day life.</p>	<p>Unit Test-2</p> <p>Class Test</p> <p>Notebook assessment</p> <p>Term-2</p>
<p><b>How Things Work ( Electricity and Circuits)</b></p>	<p>have an idea about how electricity is generated , hydroelectricity; thermal; nuclear)</p> <p>apply the use of dry cell /battery</p> <p>study the internal and external structure of cell.</p> <p>comprehend the structure of simple torch and bulb</p> <p>create the diagrams of dry cell; bulb; torch</p>	<p>experimental</p> <p>listening</p> <p>speaking</p> <p>observational</p> <p>spatial</p>	<p>linguistic</p> <p>kinesthetic and visual</p>	<p>learning new terms</p> <p>experiments related to electricity, making of circuits and show its working</p> <p>group discussion</p> <p>how to save electricity and discussion of question and answers related to their knowledge</p>	<p>Art: drawing of diagrams</p> <p>work education: making of circuits</p> <p>S.Sc. : different ways of electricity production in different states</p>	<p>At the end of the lesson students will be able to know: how electricity is generated; structure and working of dry cell, bulb, torch ;create electricity circuits; draw diagrams of electric circuits using symbols; comprehend the meaning and use of conductors and insulators</p>	<p>Pen Paper test</p> <p>Unit Test</p> <p>notebook work</p> <p>oral quiz</p> <p>Term II exam</p>

	<p>analyze the working of bulb and torch</p> <p>create simple circuits using a bulb, wires, switch, cell</p> <p>draw simple diagram of circuits using symbols</p> <p>compare and contract the terms conductors and insulators</p> <p>give examples of conductors and insulators</p> <p>evaluate the importance of conductors and insulators</p>	<p>creative</p> <p>organisational</p>	<p>interpersonal</p> <p>group work</p> <p>logic smart</p> <p>naturalistic</p>	<p>making of circuits (working model) in groups</p> <p>by reasoning and testing - insulators and conductors</p> <p>cell ,torch, and bulb will be shown in class</p>			
<b>FIBRE TO FABRIC</b>	<p>To enable the students to-</p> <p>*Recall the different types of clothing materials used.</p> <p>*Analyse the different types of fibres of fabrics and their sources like plants,animals or chemicals.</p> <p>*Comprehend in detail the process of cultivation of cotton,its processing and conversion of cotton fibre into fabric.</p> <p>*List the uses of cotton fibres.</p> <p>*Enhance the knowledge of cultivation of jute,its properties and uses.</p> <p>*Evaluate the importance of cloths along with history</p>	<p>The skills which will be developed are-</p> <p>Reading,listining and speaking</p> <p>Observational</p> <p>Comprehension/ content organisation</p>	<p>Linguistic</p> <p>Visual/ naturalistic</p> <p>Interpersonal Intrapersonal</p> <p>Interpersonal</p> <p>Logical</p> <p>Observational</p> <p>Visual</p>	<p>Key words/concepts in the notebook</p> <p>Study/paste different types of fibres of different fabrics</p> <p>By discussing the concepts. By answering the questions.</p> <p>Group discussion why is the production of silk objected by Animals Rights Activist. By answering hots questions. View the charts of synthetic fibre. Video clips of making cotton fibres and youth fibres.</p>	<p>S.S.T-different areas</p> <p>growing different plant fibres.</p>	<p>At the end of the lesson the students will be able to know-</p> <p>*The different types of fibres of fabrics.</p> <p>*Get the in depth knowledge of the process of cultivation of cotton along with the conversion of fibre to fabric.</p> <p>*Understand the properties and uses of jute along with its cultivation.</p> <p>*The history of clothing material and its development.</p>	<p>Class test</p> <p>Notebook assessment</p> <p>Term 2</p>

	of clothing materials and their development.		Bodily-  kinesthetic  Visual	Map activity-jute and cotton producing states. Making wick from cotton,weaving with paper stripes. View samples of plants,animals and synthetic fibres. View the process of fibres to wool and silk in a scrab book. Ironing symbols/various symbols and their meanings related to various cloths.			
<b>FUN WITH MAGNET</b>	list all types and shapes of magnets differentiate between magnetic and non magnetic substances comprehend the properties of magnets  analyse the interaction of two magnetic poles  evaluate the working of compass list out the uses of magnets understand the working of a compass know about the methods by which de-magnetisation can be prevented. create their own temporary magnet anaylse how repulsion is a sure test of magnetism	linguistic by speaking and listening  observational  visual spatial  creative  organisational  experimental	linguistic  kinesthetic and visual  interpersonal  intrapersonal logical  naturalistic	performing experiments to dipicting the charecteristics of magnets  to test magnetic and non-magnetic materials to test how poles of a magnets attarct /repel each other to check directions with magnet  demostrate the working of a compass  (campass will be shown) to create thier own temporary magnets	Art/ work education Social Science (where magnets are found)	at the end of the lesson students will be able to know 1. all types of magnets  2. differentiate between magnetic and non-magnetic and give examples  3. comprehend all properties of magnets and demonstrate them as well  4. list out uses of magnets	oral quiz  written work (notebook)  Term Exams  class test spell bee contest

