

**Objectives**

- 1 To develop scientific temperament.
- 2 To enable critical thinking.
- 3 To enhance logical skills.
- 4 To enquire and verify the given facts.
- 5 To make well labelled diagrams to enhance creative skills.
- 6 To articulate thoughts and ideas effectively using oral, written, non-verbal communication skills.

**Generate skills to be developed**

- 1 Experimentation skills - to view experiments in class.
- 2 Observaion skills a) Observe the given situation carefully and are expected to infer it.  
b) Able to do data interpretation.
- 3 Diagramatic representation / expression - to be able to draw and label diagrams.
- 4 Analytical reasoning - analyse a situation and are expected to give reason behind it.

**TERM 1**

S.No.	Content	Objectives	Skills	Learning style	Activity	Subject Integration	Outcome	Assessment
1	<b>Chapter 7 Green Plants -The Producers</b>	To Enable the students to - 1 list out the different types of plants .  2 Comprehend the importance of plants. 3 Understand different parts of plants and their function.  4 Evaluate that light is an essential part of photosynthesis	Comprehension skill	Visual Naturalistic	To show plant parts Students will dry a leaf and stick in practical file.  Students will view the slide of stomata.	Language poems of plants   Music songs related to plants and nature.	The students will be able to   Comprehend parts of plants and their uses as well as function of each .  The process of photosynthesis will be understood and also the component required for photosynthesis.	paper test Note book assesment  Term 1
2	<b>Chapter 8 Adaptations in plants</b>	To enable the students to 1 List out groups of plants according to their habitat. 2 Analyse how different plants are adapted to various habitats. 3 Create neat and well labelled diagram of plants of different habitat. 4 Evaluate how some non-green plants acquire their food.	Creative skill  Evaluation skill	Visual Naturalistic  Bodily Kinesthetic  Intrapersonal	Visit to school garden to observe different types of plants  Students will touch and see the various plants.  Students will collect different types of leaves, belonging to different habitat and paste in	Social science: landforms and types of vegetation.   Drawing landscape of	The students will be able to list out and define different habitat and give their characteristics with examples. They will also be able to illustrate each types of plant with a well labelled diagram.	Oral - Quiz UT 1  Notebook assessment, Term 1

		<p>5 List out the names of insectivorous plants and non-green plants.</p> <p>6 Analyse how plants, growing in mineral deficient land, trap insects.</p> <p>7 Understand the types of aquatic plants and their characteristics.</p> <p>8 Evaluate how aquatic plants survive in water.</p> <p>9 Evaluate how grass family plants are useful in daily life and how they prevent soil erosion.</p>		<p>Visual linguistic Interpersonal</p> <p>Visual</p>	<p>herbarium tile and label it.</p> <p>Movie - CD on insectivorous plants will be shown to the students and quiz will be conducted afterwards.</p> <p>Video clips of different types of habitats and plants found there, will be shown while the teaching process.</p>	<p>hilly area / not dry coastal area / marshy area.</p>		
3	<p><b>Chapter 9</b></p> <p><b>Animals and their babies</b></p>	<p>To enable the students to</p> <p>1 Comprehend the importance of reproduction in our life.</p> <p>2 Understand the ways of reproduction- Egg laying and giving birth to young ones with examples.</p> <p>3 Understand the structure of an egg of a bird.</p> <p>4 Create a neat and well labelled diagram of structure of an egg.</p> <p>5 Comprehend the life cycles of some insects</p> <p>6 Analyse how some birds and mammals take care of their babies.</p> <p>7 List out the names of animals that give birth to their babies.</p> <p>8 List of animals and their babies.</p>	<p>Comprehension skills</p> <p>Creative skills</p>	<p>Naturalistic</p> <p>Intrapersonal</p> <p>Visual Intrapersonal</p> <p>Linguistic logical</p>	<p>To show specimen of life cycles of some insects in the science lab.</p> <p>Chart of structure of an egg (will draw in their note book.)</p> <p>Discuss about common animal around what their young ones are called.</p> <p>Diagram of structure of egg and life cycle of frog and butterfly.</p> <p>Demonstration of hen's egg in classroom, spellog, importance of reproduction process of metamorphosis.</p> <p>HOTS questions.</p> <p>Identify mammals.</p> <p>Make a list of animals laying egg and giving birth in your locality in tabular form - can paste pictures also.</p> <p>CD / Video clip viewing on life cycle of butterfly, frog and fist etc.</p>	<p>English - Animal and their babies.</p>	<p>The students will be able to define and comprehend the meaning of reproduction and its importance.</p> <p>Illustrate life cycle of frog and butterfly.</p> <p>Understand how animal take care of their young ones.</p> <p>Explain and draw the structure of egg.</p>	<p>Oral - Quiz UT 1</p> <p>Notebook Assessment, Test of diagrams.</p> <p>Class Test.</p>
4	<p><b>Chapter 10</b></p> <p><b>How animals survive</b></p>	<p>To enable the students to</p> <p>1 List out types of animals on the basis of their habitat.</p>	<p>Reading, speaking</p>	<p>Linguistic</p>	<p>Learning new words and new concepts eg camouflage, migration</p>		<p>The students will be able to identify animals and their habitats on the basis of their adaptive features.</p>	<p>UT 1</p>

		<p>2 Evaluate various adaptations of animals according to their habitat.</p> <p>3 Analyse adaptation based on food habits.</p> <p>4 Understand the various adaptations based on safety.</p> <p>5 Comprehend the importance of adaptations in animals life.</p> <p>6 List out the names of some extinct animals.</p>	<p>Evaluation skills</p> <p>Aesthetic</p> <p>Comprehension skills</p>	<p>Logical</p> <p>Interpersonal</p> <p>Musical</p> <p>Intrapersonal</p> <p>Bodily Kinesthetic</p> <p>Visual</p> <p>Naturalistic</p>	<p>How aerial animals are adapted to fly and adaptations of aquatic animals.</p> <p>Discussion on adaptations based on food habits.</p> <p>Singing the poem "Machli jal ki rani hai".</p> <p>Student will write the question and answers themselves under guidance of teacher.</p> <p>Activity of paper folding - students will make animals with folding origami sheet . Write about their adaptive features (FA2).</p> <p>A student will enact and others will guess the animal. Few students will make sounds of different birds.</p> <p>Showing specimens of different animals in the classroom. Showing charts of aerial animals.</p>	<p>Social science: Different land forms and climate related to migration.</p> <p>Music</p> <p>Craft - 2</p> <p>Paper folding and write their adaptation.</p>	<p>Explain with examples camouflage and migration. Understand the need of adaptation.</p>	<p>Written work in the notebook (HOTS)</p> <p>Activity of paper folding</p> <p>Term 1, Class Test</p>
5	<p><b>Chapter 4</b></p> <p><b>Solid, Liquid and Gas</b></p>	<p>To enable the students to</p> <p>1 Understand matter and its three states.</p> <p>2 Analyse properties of matter.</p> <p>3 Evaluate what happens when water is heated and cooled.</p> <p>4 Understand the terms room temperature and sublimation.</p> <p>5 To analyse why naphthalene balls disappear when kept in woolen clothes.</p>	<p>The skills which will be developed are</p> <p>Experimental</p> <p>Critical thinking</p> <p>Analysing</p> <p>Observational</p> <p>Co-relating to real life.</p>	<p>Visual</p> <p>Interpersonal</p> <p>Naturalistic</p> <p>Logical</p> <p>Bodily Kinesthetic</p>	<p>Video clip - change in state of matter.</p> <p>Bindi pasting to show arrangement of particles in three states.</p> <p>Role play - change in states of matter.</p>	<p>Art and drawing</p> <p>Bindi pasting activity.</p>	<p>At the end of the lesson students will be able to understand</p> <p>Matter and its three states, properties of matter.</p> <p>Change of state of matter on heating and cooling.</p> <p>Process of sublimation, Evaporation.</p>	<p>Notebook Assessment, Class test</p> <p>Quiz</p> <p>Term 1</p>
6	<p><b>Chapter 6</b></p> <p><b>Safety and First Aid</b></p>	<p>To enable the students to</p> <p>1 Recall the need for safety - carelessness leads to accidents.</p>	<p>Recollection</p>	<p>Group discussion</p>	<p>Group discussion on the basis of prior knowledge.</p>		<p>The students will be able to</p>	<p>Notebook Assessment,</p>

	2 Apply knowledge to understand the key to safety in common sense and alertness.	Listening / Speaking / Reading	Linguistic			Recall the need for safety	Project - First aid box
	3 Apply the basic safety rules in daily life.	Analytical	Writing emergency contact nos. - Police / Hospital / Fire / Woman help line / Doctor / Highway emergency no. / Forest department			Understand that common sense and alertness are needed to prevent accidents Understand and apply the road safety rules	Class Test
	4 Analyse the various accidents that happen at home and the preventive measures.		Logical, intrapersonal, interpersonal	Discussion on the basis of prior knowledge		Learn and apply safety rules in daily life	Quiz
	5 Evaluate the need to be extra careful and alert on the road and learn some ways to be safe on the road.	Evaluation	Visual - showing various first aids	Draw some road signs, learn some common traffic rules	Art - diagnosis	Analyse the accidents that happen at home along with their preventive measures	Term 1
	6 Define first aid and some terms related to it (ice pack, sling, splint, tourniquet).		Poster showing road signs and first aid box	Make a first aid kit to be kept at home and used in case of emergencies	Physical education - use of first aid box	Comprehend terms related to first aid	
	7 Apply knowledge to find out first aid given during common emergencies (treating burns, cuts and scratches, animal bites, sprains, fractures, heat strokes, fire).	Expression, Content Organisation	Intrapersonal bodily kinesthetic  Inter and Intrapersonal	Discussing, answering questions both verbally and in writing  Dadi ma ki potli and home remedies		Apply the knowledge about first aid given during common emergencies  Make and use the first aid box both at home and in school	

**TERM 2**

S.No.	Content	Objectives	Skills	Learning style	Activity	Subject Integration	Outcome	Assessment
1	Chapter 1	To enable the students to					The students will be able to list out various nutrients and name their sources.	PPT 2

	<p><b>Food Our Basic Need</b></p> <p>1 Recall the different types of food ie energy giving, protective etc and their importance.</p> <p>2 Comprehend what are nutrients and their types as well as their functions.</p> <p>3 Application of importance of water and roughage in their diet daily.</p> <p>4 Analyse the ill effects of junk food (packed food).</p> <p>5 Compare and contrast cooked food vs raw food.</p> <p><b>Chapter 2</b></p> <p><b>Digestion of food</b></p> <p>1 Illustrate the various parts of digestive system along with their functions.</p> <p>2 Evaluate that our Indian meal is a balanced diet.</p> <p>3 Analyse that steaming and roasting is better than frying.</p> <p>4 Evaluate the importance of home cooked, covered food also avoid open unhygienic street food.</p>	<p>Expression</p> <p>Content organization</p> <p>Application</p> <p>Creative</p> <p>Evaluation</p>	<p>Interpersonal</p> <p>Naturalistic</p> <p>Logical</p> <p>Visual</p> <p>Bodily kinesthetic</p> <p>Intrapersonal</p>	<p>Discussion on types of food and nutrients present in them.</p> <p>Student will make sprouts and fruit salad for lunch break.</p> <p>Debate on junk food vs healthy food.</p> <p>Charts of digestive system.</p> <p>Making digestive system using clay and pasting on a sheet and labelling.</p> <p>HOTS questions and book exercise.</p>	<p>S.Sc. : Food of different states.</p> <p>Work education (salad making)</p> <p>English : Debate</p> <p>Art and Craft</p> <p>Clay activity and diagram.</p>	<p>Understand the process of digestion, its importance and how the energy from food reaches all body parts.</p> <p>Get an insight on the importances of healthy food.</p>	<p>Clay activity</p> <p>Notebook Assessment</p> <p>Class Test</p> <p>Debate</p> <p>Term 2</p>
2	<p><b>Chapter 3</b></p> <p><b>Teeth and Microbes</b></p>	<p>To enable students to</p> <p>1 Recall the importance of teeth and types (milk teeth and permanent teeth).</p> <p>2 Differentiate between milk teeth and permanent teeth.</p> <p>3 Understand the functions of teeth.</p> <p>4 Comprehend the 4 kinds of teeth with their diagram and functions.</p> <p>5 Create the structure of teeth.</p> <p>6 Create the model of types of teeth with clay.</p> <p>7 Comprehend the structure of a tooth.</p> <p>8 Evaluate the importance of brushing the teeth properly twice a day.</p>	<p>Speaking, Listening</p> <p>Comprehension</p> <p>Create skill</p> <p>Evaluation skill</p>	<p>Linguistic and Interpersonal</p> <p>Interpersonal, Visual</p> <p>Bodily kinesthetic</p> <p>Logical</p>	<p>Discusion on the teeth students students have, milk teeth and how they help them.</p> <p>To show the model of eat and chart to explain</p> <p>Use of brushing properly.</p> <p>Types of teeth to make using clay.</p> <p>HOTS, creating a table of number of various types of teeth.</p>	<p>English: Imagine your life without teeth and clothes.</p> <p>The students will be able to</p> <p>Name the types of teeth and draw diagram of each.</p> <p>Understand the structure of teeth and list out the types of harmful and useful microbe.</p>	<p>Notebook Assessment, Class quiz</p> <p>Clay activity of teeth model.</p> <p>UT 2</p> <p>Term 2</p>

		9 Apply proper brushing methods in their daily life.			Paste pictures of items good for teeth.		
		10 Apply how teeth help us to speak properly and eating fibres are helpful for healthy teeth.					
		11 Analyse the harmful and helpful microbes.	Analysis	Visual, Naturalistic	Show slides of few microbes in lab / class.		
<b>3</b>	<b>Chapter 11 Weather, Water and Air</b>	To enable the students to	The skills which will be developed are				
		1 Understand what is atmosphere.	Comprehension	Interpersonal		Social science	The students will be able to
		2 Understand the composition of air.					Understand what is atmosphere, composition of air.
		3 Analyse the importance of atmosphere.	Critical thinking	Analysing skill			Analyse how atmosphere makes our life safe on the earth.
		4 Understand sea breeze and land breeze.	Analysing skill	Visual	Video clips to show land breeze and sea breeze.		Understand sea breeze, land breeze and classification of wind as breeze, gale, storm, hurricane.
		5 Classify types of winds on the basis of wind speed.			Video clips of Hurricane and Tornadoes.		
		6 Understand the terms evaporation and condensation.	Comprehension	Linguistic		Social science - climate and seasons.	The students will be able to
		7 Analyse factors affecting rate of evaporation.	Observational	Visual			Evaporation and condensation.
		8 Analyse factors affecting rate of condensation.	Analysing	Interpersonal	Class quiz and discussion.		Factors affecting evaporation and condensation.
		9 Understand the process of water cycle.	Experimental	Intrapersonal	Quiz		Different forms of precipitation.
		10 Discover some forms of precipitation found in nature.		Bodily Kinesthetic	Experiment -Factors affecting rate of evaporation.		Water cycle.
		11 Differentiate between frost and snow.		Visual	Making a wall hanging showing different forms of precipitation.		
		12 Create a neat labelled diagram of water cycle.			Video clips on hail, frost and snow and water cycle.		

Notebook Assessment, UT 2

Class Test

Spell Bee Contest.

Subject enrichment activities.

4	<b>Chapter 12</b>  <b>Solar System</b>	To enable students to					The students will be able to understand names of heavenly bodies and what do imply at. They will be familiar with terms like planets, orbit, solar system, constellation, axis etc.	Notebook Assessment, Class Quiz
		1 Define terms like heavenly bodies, planets, stars, constellations, orbit, axis satellite.		Linguistic	Students will do verbal presentation in group of 2. They will use a chart or model to explain on any one Heavenly Body. (They will read books from library to collect information on topics given).	S.Sc: Study of volcanos and their types.	Students will also get an idea about what lies inside the earth (layers of earth)	Group (of 2) presentations with charts/ models
		2 Comprehend - What are stars, planets, volcano.		Bodily kinesthetic		English: Verbal presentations.		Term 2
		3 List out all the components of our solar system.		Visual	Stuents will make a constellation on a black orgami sheet with silver colour stars.	Maths: Number system while writing the distance of planets and moon and sun in kms.		
		4 Understand the difference between natural and artificial satellite.		Interpersonal (Speaking skill)	Layers of earth will be explained by creating model with clay (play dough). This will be done by each student individually.			
		5 Analyse why Earth is called the blue planet.		Visual (Comprehending skill)	As H.W. the students will observe the night sky and try to identify Ursa Major and few other constellations.			
		6 Distinguish between rotation and revolution.		Bodily kinesthetic				
		7 Evaluate why places near equator are always hot and why seasons change.		Visual				
		8 Analyse the occurrence of volcanoes on earth.		Intrapersonal (Creative skill)				
		9 Illustrate layers of earth by diagram and a model using plastcine.		Naturalistic (Application skill)				
5	<b>Chapter 13</b>  <b>Force, Work and Energy</b>	To enable students to	To anlyase	Visual and Bodily	Students will do simple activities 1 Push a desk, pull a chair, roll a ball, move on smooth and rough surface etc to understand force.	Physical Education	The students will be able to:	Notebook Assessment, Class Quiz
		1 Define the term Force, Work, Energy and Simple Machine.						

	2 Analyse what all force can do.	To comprehend	Visual	2 Showing some simple machines in class.	Use of Frictional and muscular force while playing.	Define force, work, energy and simple machine giving their subtypes with examples of their use / application.	Term 2
	3 Understand the scientific meaning of Force, Work and Energy.	Critical Thinking	Bodily and Intrapersonal	3 Students will make their own simple machines.			Class activity of creating a model.
	4 List out different types of forces, forms of energy and group of simple machines.	Application	Linguistic	4 Spellog, learning new types of Forces and Energy (using BB and text book).			Diagonistic Test.
	5 Identify the different forces and energies present around them and how to use it.	To Evaluate	Interpersonal	5 Class discussion and quiz.			
	6 Apply their knowledge of force, simple machine and energy in their daily life in identifying its type.	Creative	Naturalistic	6 Frictional Force + Gravitational Force used while playing in the ground.			
	7 Evaluate how the sun is the ultimate source of energy directly or indirectly.			7 Show solar cooker and explain its use.			
	8 Analyse the difference between simple and complex machines.			8 Show simple machines.			
	9 Create small models of simple machines in the class.			9 Show model of wind mill.			
	10 Evaluate how gravitational and frictional forces help us in our daily life.						