

Environmental Studies (EVS)

Classes III - V

Introduction:

In keeping with the *National Curriculum Framework of 2005*; the Environmental Studies (EVS) syllabi for Classes III - V was developed along the following recommendations:

1. Integration of Subjects
2. Moving away from 'Contents' and 'Units' to 'Key Questions' and 'Themes'
3. Curriculum Transaction based on Multiple Intelligences and Human Aptitude
4. Continuous and Comprehensive Evaluation

Objectives:

The main objectives are to make EVS at the primary level:

- Child-centered, interactive in approach and based on the learner's daily life experiences
- Activity-based and appropriate for the age, mental level, aptitude, interest and abilities of the particular age-group
- To develop in children positive attitudes & qualities (self-confidence, spirit of enquiry, initiative & the courage to ask questions)
- To develop problem solving skills, logical thinking, open-mindedness & perseverance
- To develop values & actions for environmental protection

For Classes I- II

The EVS syllabi for these classes will be transacted through:

1. Language
2. Mathematics and
3. The Art of Healthy and Productive Living (AHPL).

Role of the Teacher

1. The teacher will initiate and facilitate learning through instructional activities inside & outside the classroom.
2. Teachers may innovate and design activities suitable to their own surroundings and the level and interest of children.

EVS Themes, Curriculum Transaction and Instructional Activities**Themes**

1. My Family and Friends:
 - Relationships,
 - Work and Play,
 - Animals and Plants
2. Food
3. Shelter
4. Water
5. Travel
6. Things we make and do

Curriculum Transaction

- Discovery Approach
- Enquiry Learning
- Integrated Approach
- Art & Craft
- Multi-disciplinary /
EVS Approach

Instructional Activities

- Group Activities
- Outdoor Activities
- Puppets & Stories
- Puzzles
- Games

- Songs etc.

Evaluation

Classes – III - V:

Continuous & Comprehensive Evaluation:

- Oral testing
- Observation Check-list
- Paper and pencil tests
- Behaviour Tally-chart
- Rating Scale

Suggestions:

- Textbooks for Classes III - V will have to be developed with local themes to make the topics more relevant for learners from the region.
- All Elementary Teachers will require intensive training in different areas like- planning for instruction, activity based methods of teaching, evaluation tools and techniques, preparation of relevant TLM, etc.
- For flexibility, it is recommended that teachers be allowed to pace their own teaching through Lesson, Unit and Course plans, instead of dividing the syllabus into terms.
- Handbooks for teachers will have to be developed.

ENVIRONMENTAL STUDIES

CLASS III

Competencies	Content	Learning Activities	Evaluation
1. FAMILY AND FRIENDS <ul style="list-style-type: none"> To develop the concept of attachment to one's family ties To develop awareness and sensitivity towards the immediate social environment 	<p><u>Relationships</u></p> <p>My family Concept of a family; diversity in family types; Family as a support system; Ideas about relationships; Simple family tree(three generations).</p> <p>My family and I Family influences physical characteristics; values and habits; appreciating qualities and skills of family Members; family as a support system.</p> <p>Whom do I look like? External body parts Hereditary features; similarity between relations</p>	<p>Observation, conversation, enquiry and discussion on family relations.</p> <p>Observation, conversation, enquiry and discussion on extended family. Songs, story-telling, drawing, writing</p> <p>Discussion, stories, films, jokes about twins</p>	<p>Continuous & Comprehensive Evaluation Oral testing, daily observations & paper and pencil tests grading</p>
2. Things Around Us <ul style="list-style-type: none"> To develop awareness and sensitivity towards the physical and 	<p>Exploring children ideas of things around, Names of things – Plants, animals, stone, wood, glass, sand, water etc Differentiate through</p>	<ul style="list-style-type: none"> Encouraging collection of different types of objects from the surrounding and then presentation Conducting nature walks 	

Competencies	Content	Learning Activities	Evaluation
biological environment ○ To develop the spirit of appreciation and the concept of preservation of the various things present in the environment	observation, estimation of sizes, weight, shapes, colour etc Concept of living and Non-living things Differentiate between living & non-living things		
3. Living Things ○ To identify the environmental vegetation and to experience their physical structure ○ To develop the ideas and differentiating the different types of animals and birds	3.1 Plants Plants around us exploring children's ideas about plants; Plant diversity; size, where they grow, shape, colour, aroma etc. plants / crops and changes observed over time; Plants and the climate, environment. Leaves around us Leaf diversity –colour, shape, texture, aroma, etc. Seasonal shedding of leaves; compost from leaves; Leaf designs/motifs	Observation, conversation, enquiry and discussion on different plants, things made of plants etc. Songs, story-telling, drawing, writing, making prints of barks, leaves etc. Observation, conversation, enquiry and discussion on different leaves, Constructing compost pit, making leaf designs and decorating the classroom with leaf motifs.	

Competencies	Content	Learning Activities	Evaluation
	<p>3.2 Animals Animals big and Small Exploring children's ideas of an 'animal'.</p> <p>Creepy crawlies and flyers Exploring children's ideas of crawling animals, and flying insects.</p> <p>Birds Exploring children's ideas of birds, their living places, eating habits, feathers and sounds produced by them. Similarity and dissimilarities between human beings & animals</p>	<p>Observation of diversity of animals around us, listing, Discussion about what they eat, where they live etc. drawing animals they have know/ seen</p> <p>Observation of insects like ants, flies, spiders, crickets, cockroaches, earthworms, bees, lizards etc. Drawing and colouring them.</p> <p>Matching games, drawing and colouring birds, mimicking different bird sounds. Collecting different bird feathers</p>	
<p>4. Work and Play To develop physical, mental, social and emotional well being through games and sport</p>	<p>Games we play Leisure; games in school and outside, past and present; for some Play is work</p>	<p>Listing, classifying indoor and outdoor games</p>	

Competencies	Content	Learning Activities	Evaluation
5. Food <ul style="list-style-type: none"> o Appreciating Nature's gift, providing us with our various needs o To appreciate the cultural diversity of food o To acquaint students of the common ways of cooking food o To familiarize the students about the different eating practices 	<p>Foods from plants and animals Appreciation of cultural diversity in food; basic ideas about various plants used as food; food from animals. Need for clean food. Different types of food for body building; Energy providing and protection</p> <p>Cooking Food that may be eaten raw or cooked steamed, boiled, baked, fried etc; Different fuels, types of stoves; Types of vessels used in cooking; different shapes regional/ traditional; materials etc.</p> <p>Eating and the family Different eating practices in the family; Amount of food varying with gender, age, physical activity; Cooking and gender/caste roles; Food for the baby, significance of milk.;</p>	<p>Listing and discussing food we eat or do not eat; tabulating the food we eat from different plants and animals. Observing and drawing different parts of plants eaten.</p> <p>Listing of raw and cooked food; discussion on cooking methods/ materials, etc; survey to find out the types of fuels/vessels used; drawing various utensils; historical time line tracing what in the kitchen has changed and roughly when.</p> <p>Conversation, observation and discussion. Listing of food items bought from the market and grown at home</p>	

Competencies	Content	Learning Activities	Evaluation
	<ul style="list-style-type: none"> - Multi storey building <p>Mapping my neighbourhood Neighbourhood; mapping; representation in two dimensions; Directions.</p> <p>Physical features of any locality</p> <ul style="list-style-type: none"> - Where do I live – Town/City/Village - What are the things (Road, Building, vegetation, markets, rivers, streams etc) - Is my locality cold or hot – Temperature, climate 	<p>Estimating distances, marking locations of places and drawing/ mapping from different perspectives, like from the top, from the front etc, Draw a map of the route from your house to the nearest the post office, bus stand or shop.</p>	
<p>7. Water</p> <ul style="list-style-type: none"> o To enable the students to be able to identify the various sources of water and to experience by 	<p>Water for my family Local sources of water; uses of water; gender roles; distance estimates; clean water for drinking</p>	<p>Listing the sources of water, Exploring by asking questions from elders or people around, discussion.</p>	

Competencies	Content	Learning Activities	Evaluation
<p>themselves the differences between pure and polluted water.</p> <ul style="list-style-type: none"> ○ To develop an awareness and sensitivity towards water – scarcity for both drinking and harvesting ○ To acquaint children with the idea of conservation of water ○ To develop awareness and sensitivity towards water scarcity for both drinking and harvesting ○ To develop the concept of conservation of water 	<p>Water shortage Water scarcity, wastage and recycling, water harvesting</p> <p>Storing water Measurement of volume in terms of non-standard units such as buckets, pots, etc. Estimates of quantities used for different domestic activities; safe handling of water. Containers made of different shapes and materials to store water for different purposes; Conceptual development of conservation of volume</p>	<p>Newspaper clippings about water shortage/ water being wasted Poster making/writing activity in groups with a message on saving water.</p> <p>Drawings of different containers, Measurement activities, demonstration to enable learners to Understand 'conservation of volume'. Different containers and different materials observing and classifying</p>	
<p>8. Travel</p> <ul style="list-style-type: none"> ○ To know and understand the functions of different means of transport & communication 	<p>Going Places Need for travel, travel within the locality and beyond; different social spaces – forest, village, city, etc.;</p>	<p>Reading and Discussion, Drawing a village/ sea/forest/mountain scene. Story of a journey along a river, mountain etc.</p>	

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> ○ To acquaint the students of the common accidents and what are the steps to be taken for immediate relief ○ To help 	<p>migration, sightseeing, family occasions</p> <p>Ways to Travel Different modes of transport; short distance, long distance, newer ways of travelling. Different kinds of workers associated with railways/ station.</p> <p>Communication and Mail Communication without speaking, Use of sign language, dance</p> <p>Mailing a letter Letter as a means of communication, work and people associated with the post office; different means of communication, changes with time.</p>	<p>Collect pictures of different modes of transport; classify them into different types; enact a train/plane journey; observations of activities at the railway etc. like loading, weighing, signaling, selling of food items etc.</p> <p>Playing dumb charades, enacting situations without speaking, learning sign language, practicing mudras.</p> <p>Trip to the local post office; Observing, sorting, stamping, weighing etc. Discussion with Workers at the post office.</p>	
<p>9. Things We Make and Do</p> <ul style="list-style-type: none"> ○ To understand the usefulness of 	<p>Textiles The different types of clothing we wear; traditional unstitched clothing;</p>	<p>Activities like wearing/draping traditional garments and shawls from different states/ tribes;</p>	

Competencies	Content	Learning Activities	Evaluation
clothes	<p>Different styles of dressing; traditional shawls and other unstitched clothing items and styles of draping them.</p> <p>Colours and designs in textiles; vegetable dyes used</p>	<p>Mixing colours and painting; Preparing vegetable dyes and blocks (potato/ladies-finger) for printing on paper.</p>	
10. Our Universe <ul style="list-style-type: none"> To develop scientific attitudes towards the Earth we live and its neighbour objects around us 	<p>- The Earth and its Neighbours</p> <ul style="list-style-type: none"> Earth – shape, land, water & air Sun – a star provides us light, we get day and night Moon – shape, satellite Star 	<ul style="list-style-type: none"> The activities like matching game(word to picture matching) Drawing of sun, earth & moon Identification through observations, pictures Drawing the shape of the earth, moon, stars 	

ENVIRONMENTAL STUDIES

CLASS IV

Competencies	Content	Learning Activities	Evaluation
1. FAMILY AND FRIENDS <ul style="list-style-type: none"> To develop the positive human values towards the family To develop awareness towards the physical and Biological environment To develop awareness and sensitivity towards social environment 	<p>Relationships Your mother as a child Change with time in people residing together. Family tree today.</p> <p>Where do babies come from From the mother's body; mother-child relationship; Foster parents and adoption;</p> <p>With Eyes Closed Sensitivity to people who are Different/disabled; Sense of smell and touch; emotional response to a caress/slap; 'good' and 'bad' touch</p>	<p>Asking questions from mother about her childhood.</p> <p>Story telling and discussion.</p> <p>Guessing game: Group activity where children touch different things with their eyes shut.</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>
2. Work and Play <ul style="list-style-type: none"> To develop physical, mental, social and emotional well being through games & sports 	<p>Games at home and School Different games at home and school.</p> <p>Play as a way of social negotiation; rules of each</p>	<p>Discussing and planning rules for writing them down local games and playing together in groups;</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> To enable children to make proper and fruitful use of this leisure time 	<p>game; fights and the need to negotiate - ideas of fair play.</p> <p>Restrictions on play; playmates from children of different gender or class/caste backgrounds.</p> <p>Fun at the Mela/Circus Ways of recreation. Kite flying Tops</p>	<p>Writing a paragraph about an experience in a Mela/fair/ circus. Kite-making and kite-flying activity in groups, making tops, a poem on Mela.</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>
<p>3. Animals</p> <ul style="list-style-type: none"> To identify the different types of animals and their interaction with human 	<p>Animals and their friends Herds; group behaviour; animal human interaction</p> <p>Who is attracted to flowers? Honey from flowers; bee hive and basic idea of honey collection</p>	<p>Story on animals moving in groups,</p> <p>Observation of flowers and the Insects that visit them, drawing the flowers, insects; discussion on colour, fragrances. Discussion with beekeepers on the process of honey collection.</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> ○ To identify the different environmental vegetation and to know their usefulness 	<p>Long ears or short? Animals that have external ears. Animals that also have hair on their body.</p> <p>Plants Roots of plants Plants need water; roots absorb water and hold it to the ground.</p> <p>Roots eaten normally, roots eaten by people like carrots, radish, sweet potato, during famine Aerial roots of some plants</p> <p>Flowers Flowering plants; seasons; observation of buds blossoming into flowers; different shapes, colours, petals, aroma, etc.</p> <p>Flowers used in everyday life, festivals etc. Floral motifs and designs on clothes, animals, pots, walls, etc.</p>	<p>Listing and classification of with and without ears; with and without hair ; drawing them; feeling them;</p> <p>Observation, collection, drawing of roots of different types,</p> <p>Observing trees/plants whose are affected by activities like construction/ paving/ plastering. Pictures/specimens of roots</p> <p>Drawing flower motifs for clothes, animals, pots, etc. Making floral decorations; stories/ poems about flowers, a visit to a garden.</p> <p>Observing the flowers and buds, noting similarities and differences; observing/smelling and feeling different flowers.</p>	

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> To develop the ideas of appreciation and preservation of things present in the environment 	<p>Knowing the local flower seller; some idea of the local unit of measurement (by cubit, fixed garland, each stem, etc) and cost</p> <p>Whom do trees belong to? Neighbourhood and its plants; wild and domestic plants; Fruits eaten by people living in forests. Cutting trees.</p>	<p>Listing of some common trees in the neighbourhood; discussion about ownership of trees; fruits that are not eaten by us</p>	
<p>4. FOOD</p> <ul style="list-style-type: none"> To appreciate Nature's gift, providing us with various needs To acquaint students of various importance of spices occasion 	<p>How we get our food From field to mandi - from market to house; grown by farmers; fruit trees, vegetables, cereals, pulses, oil seeds;</p> <p>Spices</p> <p>Special occasions Community eating; Mid day meal in schools</p> <p>How does food reach us? Who grows it? How</p>	<p>Discussion with a vegetable seller/ retailer in the mandi/ truck driver who transports food items. Listing plants children know that provide them food; bringing samples; common spices, observing and drawing samples, recognizing them by smell and taste.</p> <p>Visit a school kitchen; discussion on occasions at which there is community eating; Listing of the different foods eaten at different occasions ; drawing and descriptions of the large utensil used on such occasions. Narratives about hostel food/ pantry car of train</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> To familiarize the students about the different food items with the idea of preservation them 	<p>Boarding school</p> <p>Tongue and teeth Taste, tongue; teeth - types, milk teeth, permanent teeth Tongue and speech</p> <p>Teeth, beaks and claws Teeth in some common animals; beaks and claws of birds - relationship with food they eat.</p>	<p>Observations and drawings of beaks, claws and teeth of different animals, birds etc.</p>	
<p>5. Shelter</p> <ul style="list-style-type: none"> To develop awareness about the importance of shelter and good habits in maintaining a clean environment To envisage the students with the idea of houses changes with different place like rural, urban, cities etc 	<p>Houses then and now Houses change over time; rural and urban differences, multi-storeyed houses along with slums in cities. Types of houses in relation to different climates</p> <p>Materials used keep changing.</p> <p>Garbage Waste materials, waste in our houses and in our school, urban/rural waste.</p> <p>Effect of waste on</p>	<p>Making models of houses; collection of materials used to make houses. Visit to any old building in the area</p> <p>Drawing pictures of old and new buildings.</p> <p>Listing things thrown away as garbage, waste. Discussion on reduction of waste. Drawing pictures of different waste disposal.</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> To identify the various shelters of animals 	<p>surroundings – littering, flies, mosquitoes, rodents, foul smell. Proper ways of waste disposal at home, school and in the neighborhood</p> <p>Where animals live Diversity in animal habitat and shelters. (Nests, caves, burrows, water bodies etc)</p> <p>Some structures like webs have other purposes.</p> <p>When birds make nests Birds make nests for laying eggs. Nesting habits of different birds vary. Different materials are used for nests.</p> <p>Quality of a good Shelter When People Make Houses People make houses for safe and healthy living. They consider ventilation, sanitation and sunlight</p>	<p>Discussion, listing of animals with respect to their habitat and shelter; making birds nests with scrap materials, making caves, rat holes etc in mud/sand pits. Pictures of habitats and shelters animals use or make</p> <p>Observation of a bird's nest and drawing pictures. Songs and poems; dance and movement to simulate bird flight.</p>	
<ul style="list-style-type: none"> Concept of 	<p>Mapping our</p>		

Competencies	Content	Learning Activities	Evaluation
mapping and enable them to the knowledge in their everyday life	<p>neighbourhood Introduction to the concept of giving directions with respect to any landmark; also a preliminary mapping process, further use of symbols, use of a scale.</p> <p>Physical features of the locality – Natural and man – made changes like roads, buildings, dams, canals, drains, markets, factories, boats, railways</p>	<p>Discussion, enquiry from friends and neighbours; counting number of steps and estimation of distance for making a preliminary map.</p> <p>Photographs of dams, canals, drains, markets, factories, railways, boats etc</p>	
<p>6. WATER</p> <ul style="list-style-type: none"> ○ To develop awareness and sensitivity towards judicious use of drinking water as well how to handle and preserved for the coming generation 	<p>Water fit for drinking Natural sources; inland water and sea water; potable water; diarrhea and other common water borne diseases, safe handling of water, purification of water.</p> <p>Reservoirs, canals, dams etc.; Different public activities at water bodies; protection of water bodies.</p> <p>Water as a scarce resource and the struggle for acquiring</p>	<p>Discussion with the elders/health personnel about pollution of natural sources of water and its effects; demonstration/ group activity of simple methods of water purification; Separation of salt from saline water.</p> <p>Visit to the natural sources of water in the local area and observing what uses the water is put to. Discussion, and writing letters/making posters highlighting the misuse of the water body like dumping of wastes from workshops, idols, etc. Narrative</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
<ul style="list-style-type: none"> To know the importance of rivers & seas and effects towards living things 	<p>it (those who can exploit and deeper wells).</p> <p>Our rivers and seas Rivers and seas; seasonal change in water flow; animals in the sea/river. Water pollution and harmful effects on animals</p>	<p>on any local river, eg. Wah Umkhras 'then and now'. Songs-'Wah Umkhras' by J.K. Marbaniang, Goodbye To A River by Don Henley etc.</p> <p>Drawing/Painting/Make a model of a water body in the neighbourhood (using scrap materials) as well as the animals found in the river/sea.</p>	
<p>7. TRAVEL</p> <ul style="list-style-type: none"> To enable children to familiarize with different ways of transports and their different cost for traveling To acquaint children with knowledge about other social and 	<p>Animals for transport Use of animals for transport; sensitivity towards animals</p> <p>Paying for travel Familiarity with currency notes and coins, national symbols, recognizing some language scripts; Introduction Mahatma Gandhi, old coins, change.</p> <p>Travel to another place Different land forms, languages, clothing, food habits, some idea of another</p>	<p>Enacting instances of animals used for transport and people riding them. songs about travel by tonga etc</p> <p>Enactment of a bus journey. (bus tickets or railway tickets) Comparison of coins and currency notes; Tracing of coins. Designing a school emblem/logo. Visit a museum.</p> <p>Reading and listening, discussion, writing about a traveling experience of oneself or visiting relatives.</p>	<p>Continuous & Comprehensive Evaluation</p> <p>Oral testing, daily observations & paper and pencil tests</p>

Competencies	Content	Learning Activities	Evaluation
physical environment and to develop a feeling of appreciation, respect towards their culture.	country (only through a story/ imaginary narrative).	Describing experiences while visiting Food festival, Cultural programme etc	Continuous & Comprehensive Evaluation Oral testing, daily observations & paper and pencil tests
8. THINGS WE MAKE AND DO <ul style="list-style-type: none"> To develop awareness and sensitivity towards the immediate environment and understand Interdependence between human and the environment 	Building materials and tools Process of making involves raw materials, tools, labour, energy; changes over time in these; has changed Environment too. Materials and tools used for construction; Different skills of people at engaged in construction activity. Paper Making Processes involved in making 'hand made paper'; raw materials; preserving trees. Sight seeing , field trips and picnic.	Making bricks; drawing and talking about different tools. Observing, drawing and describing different bridges and how people make their own local bridges from ropes, bamboo and logs of wood. Making toy bridges in school. Sorting out different coloured/textures of paper, hands-on do-it-yourself activities. The children may be asked to maintain a list of natural objects and write about their experiences on returning from school trips	
9. OUR UNIVERSE <ul style="list-style-type: none"> To enable the 	<ul style="list-style-type: none"> The Solar System 	Model of the Solar System	

Competencies	Content	Learning Activities	Evaluation
<p>pupils to distinguish between a star and a planet</p> <ul style="list-style-type: none"> To know what the earth is made up of and how day and night and seasons are caused 	<ul style="list-style-type: none"> Day and Night Thunder and lightning Rainbow 	Trip to a planetarium	

Class V: Environmental Studies

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
<p>1. FAMILY AND FRIENDS</p> <p>1.1. Relationships</p> <p>Family tree</p> <p>Can you make a family tree with as many of your relatives you can get information about?</p> <p>Who are the relatives whom you have never seen? Where do they live?</p>	<p>Family in transitions-Impact of larger socio-economic forces are changing family structure and quality of life in families; Idea about sever generations; how some people move away, some continue to live together, and how households get formed/reformed at several places.</p>	<p>A story woven around a family tree with old family photographs.</p>	<p>Activity - Write the names of all your family members along with their ages. How many generations have you been able to get details about?</p>	<p>Continuous and comprehensive evaluation</p>

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
	How these are affecting roles, relationships, value systems, aspirations within a family.			
Shifting from place to place Have you always lived at the place that you now live in? If not, where does your family come from?	Shifts in habitation-migration/transfers/demolition/displacement Associated difficulties	Story of a migrating family or a family displaced by the construction of a dam or demolition of an urban slum.	Discussion or letter writing; drawing;	
Who laughs the loudest? Who is the tallest in the family? The shortest? Who has the longest hair? How long? Who has the loudest voice/laugh in the house? From how far	Basic ideas of measurement - of height; Observing and appreciating qualities and skills of relatives;	Cartoons; narratives;	Mimicking people in the family — laugh and voices; drawing people in the family. Writing exercises about an	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
away can you hear it? Who speaks the softest? When does a child cry the loudest? When she is hungry-or angry? Who is the best cook in the family	observing infants	infant they have observed		
Our likes and dislikes Which is your favourite colour? Your friend's? Which is your favourite food? What about your friends? Do you know your friends' likes and dislikes? Are there any smells you don't like (fish. mustard oils, garlic, eggs etc)? Do you eat fish?	Our bodies, our senses, our likes! dislikes vary e.g. our concept of foul/fragrant smell <i>Cultural influences of taste, smell etc(1o be discussed without stereotyping).</i>	Narratives about preferences in taste, smells, colours in different cultural context.	Observation, discussion, describing and writing about a friend's likes/dislikes; a class survey about childrens favourite colour/food etc.	
Feeling to read Do you know how people read with their hands? Do you know someone who finds it difficult to walk/speak/see	Awareness and sensitisation towards the problems of physically challenged;	Autobiography of Helen Keller; excerpt from her teacher's account of how she learnt;	Activity with Braille paper (or simulated Braille paper)	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
etc.? How do you think they learn to overcome the problem?		Braille sheet		
<p>1.2 Work and play</p> <p>Team games — your heroes</p> <p>Do you play any games in teams? Have you ever been captain of the team? Do boys and girls play together? Have you heard of any Indian team playing in another country? Which is your favourite team sport? Do you know any National level player?</p> <p>Local festivals and associated games</p> <p>Local games/martial arts</p> <p>What are local games associated with local festivals? Do you know someone who is good at them? Have you seen them</p>	<p>Types of games/sports, importance of spirit in games, gender stereotyping.</p> <p>Some idea of other countries and national teams.</p> <p>Gender, class stereotyping in play.</p>	<p>Library resources- Indian cricket team; narrative about some national and international players.</p> <p>Description or photographs of traditional martial arts, 'Nat', acrobat, boat race, etc.</p>	<p>Collecting information, making picture albums ; posters of sports persons</p> <p>Reading, discussion, collecting information and writing about local/martial games.</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
practicing?				
<p>Who taught them? For how long have they learnt the art/game? What are the new games in your area that were not played earlier?</p> <p>What do you do in the evenings for leisure? What if there no TV? Who decides what programmes to watch?</p>	<p>Local and traditional festivals and associated games. Typical practice routines; teachers/gurus; changing patterns of local games.</p> <p>Changing nature of leisure.</p>			
<p>Blow hot blow cold</p> <p>How many times do you breathe in a minute — on sitting still, just after a run? How much can you expand your chest by breathing deeply? Can you make a glass cloudy by blowing on it? How do you blow to make something cold? Do you also blow to keep a fire going?</p>	<p>Our breathing — estimates of different rates; chest expansion and contraction in the child's body while exhaling and inhaling; My breath — hot and humid; tacit understanding of cooling by blowing and helping a fire to burn.</p>	<p>Stories, articles and any other information</p>	<p>Observation, ,activity of breathing in and out and observing the difference (mirror/glass/on palm); measuring chest counting heart beat and breathing rate, making and using a</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
			stethoscope	
Clean work — dirty work? Can you list ten different types of work that people do for you. In this list what work is seen as dirty and what is seen as clean? What would happen if there were no one to - clean our streets/our home/clear the garbage?	Dignity of Labour Dependence of society on such essential services. Choice of work as a societal value.	Extract from Gandhi's autobiography; narrative from another country - sweepers treated with dignity; story of a Valmiki boy discriminated in school because of parents' occupation.	Reading and discussion based on suggested resources	
1.3 Animals How animals find their food? If you leave some food outside your house do some animals take it away? How do they find it Do these animals also hear/speak! see/smell/eat/	Sense organs; Comparison with humans — activities such as eating sleeping etc	Information about animals senses and other functions. Narratives about animals such as ants, bees, dogs, birds, snakes etc giving ideas about their senses.	Observation of animals to study their response sound, food, light and other stimuli.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
sleep?				
What we take from animals? What animal products do we use for clothing, shelter, etc.?	Animal products used by us.	Child's daily life experience, information about products we obtain from animals.	Listing and drawing of items made from animal products.	
Why is the tiger in danger? Why do people kill wild animals? Which are the animals that are poached?	Protection of wild life; selling of animal parts	Excerpt from 'Man eaters of Kumaon' by Corbet.	Discussion, reading, poster making activity with a message to save wild life.	
People who depend on animals Do you know people who catch/trap/hunt/entertain	Communities dependent upon animals; hunters restricted to smaller spaces; changing patterns of wild and	Library resources; illustrations of pre-historic hunting scenes	Discussion on people whose livelihood depend on animals;	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
<p>using animals? Have you seen how snake charmers/gujjars depend on animals?</p> <p>What do you understand by cruelty to animals? Do you think a snake charmer is cruel to the snake?</p> <p>Have you seen scenes of hunting in rock paintings or on ancient seals?</p>	<p>domestic animals.</p> <p>To be sensitive about cruelty to animals; realize that people who depend on animals for their livelihood are not necessarily cruel to them.</p> <p>Basic idea of pre-historic hunters and the wild animals seen at that time.</p>	<p>(Bhimbetka);</p> <p>Narrative of gujjars' or snake charmers' relationships with animals.</p> <p>Child's observation; an story/narrative about an animal and its caretaker. e.g, mahouth/tonga wala</p> <p>Films/pictures of shooting. skins (tiger) of animals.</p>	<p>drawing;</p> <p>Discussion on people teasing/troubling animals at the zoo! other places.</p>	
<p>1.4 Plants</p> <p>Growing plants</p> <p>How does a plant grow from a seed?</p> <p>Can you grow a plant without</p>	<p>Seed germination, root and shoot axis, baby plant, storage of food in the seed; seed dispersal</p>	<p>Seeds, germinated seeds.</p>	<p>Study germination of some seeds, experiment to determine conditions suitable for</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
<p>seeds? How do you grow mangoes/potatoes?</p> <p>Where does the seed come from?</p>			germination (air and water)	
<p>Have you seen seeds that fly/stick to your clothes/drift in the water?</p> <p>Forests and forest people</p> <p>Have you seen or heard about a forest? How do people live in forests? How is their life threatened by forests being cut? What kinds of foods do they collect from the plants there? What leaves are used for eating on?</p> <p>Do your parents remember places with trees/forests where there are none today? Why were the trees cut and what is there today?</p>	<p>Tribal life; effects of deforestation; communities dependent on forest producee.g. 'pattals', bamboo products, etc.</p>	<p>Information about tribal life, communities dependent on forest produce, effects of deforestation.</p>	<p>Exploringfrom parents, reading, and discussion.; tracing tree trunks;</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
Protected trees Have you heard of a park/sanctuary? Who looks after it? Does anybody own it? Have you seen a place where trees are worshipped or protected by the villagers?	Public/private ownership of trees/forests. Sacred groves; people's movements to protect their forests.	Story of the Chipko movement and the women's role in protecting trees.	Enactment of chipko andolan; poster — 'save trees'; survey and identify any 'green belt' in your neighbourhood	
Plants that have come from far Does tea come from a plant? Where did people first grow tea and what does the plant look like? Does it grow only in some places/climates? What did people drink when there was no tea in India?	Plants from different countries.	Song/poem from Chakmak: "Alu, mirchi, chaiji; Kaun kahan se aye ji" Story about the Chinara tree coming to Kashmir	Local knowledge, reading, and discussion, reciting the poem together; making tea	
2. FOOD When food gets spoilt How does food spoil? How do we know that food is spoilt? Which food spoils sooner than others? What	Spoilage and wastage of food. Preservation of food, drying and pickling;	Sharing family experiences Interaction with a person involved with food production/	Keep some bread, other food for a few days — see how they spoil.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
<p>can we to prevent food from getting spoilt?</p> <p>What do we do to keep it fresh during travel? Why do we need to preserve food? Do you leave food in your plate?</p>		preservation;		
<p>Who produces the food we eat?</p> <p>Do you know of different kinds of farmers? Do all farmers own their land?</p> <p>How do farmers get the seeds they plant every year? What else besides seeds is required for a crop to grow?</p>	<p>On different types of farmers.. Hardships faced by subsistence farming, including seasonal migration. Need for irrigation, fertilizers.</p>	<p>Farmers' narratives - Could take one example from Punjab and the other from AP. Story of a child missing school because of his/her family's seasonal migration. Family members. Visit to a farm.</p>	<p>Study germination of seeds, experiment to determine conditions suitable for germination; Observations in any farm</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
<p>What did people grow earlier?</p> <p>Did your grandparents or any elderly person eat the same food you eat today? Do all of us eat the same kind of food? Why do we eat different kinds of food?</p>	<p>Changing food habits, changing crops grown in some areas.</p> <p>Different food habits in different places/cultures</p>	<p>Information on food from different places.</p>	<p>Collection of samples or pictures of food from different places/cultures</p>	
<p>When people do not get food</p> <p>Do you know of times when many people do not get enough food to eat? Have you seen where extra grain is stored?</p> <p>How do you know when you are hungry?</p> <p>Do you know of people who get ill because they do not have enough to eat?</p>	<p>Hunger, famine (as both a natural and man-made phenomenon); grain being spoilt in storage; nutrition deficiency diseases.</p>	<p>Print material on different calamities; Narrative of the Bengal famine as a man made calamity; TV news bulletins etc.</p>	<p>Collection of pictures related to natural calamities; discussion on affects.</p>	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
Our mouth — tastes and even digests food! How do we taste food? What happens in the mouth to the food we eat? Why do we give glucose to	Tasting food; chappati/rice becomes sweeter on chewing; digestion begins in the mouth;	Child's experience; some samples of food items; story of someone on a	Tasting activity, action of saliva on rice/chapati	
patients? What is glucose? Food for plants? What do plants need for food? Do you know of any plants that eat insects? What do animals eat? Do all animals eat the same food? Do animals eat other animals?	glucose is a sugar Water, manure, air for plants; Insectivorous plants e.g. pitcher plant, Venus fly trap; basic idea of food chain/web.	glucose drip Pictures/visuals of insectivorous plants	Observations and discussion on food for plants; making a model of a food chain/web	
3. SHELTER				
Why different houses Why do you have different kind of houses in different places? Different houses in the same place?	Variation in shelter: regional difference, difference due to climate and materials available, economic status etc.	Different houses in different climates and regions	Making models of houses; collection of materials used to make houses in different places	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
A shelter for everyone? Does everyone have a shelter to live in? Why do people live together in villages, hamlets, colonies, neighborhoods?	Need for living close to others, the idea of neighbourhoods. Need for sharing resources and spaces, division of spaces.	Pictures of villages, colonies etc.	Write and draw the area you live in, find out about people who work for everybody	
Ants live in colonies? Do you know how bees/ants live together in colonies?	Ant or bee colony, social behaviour in insects	A case study of social or in bees/ants.	Observations and drawings of ant colonies, different types of ants	
Times of emergency Have you heard of houses being damaged by floods/earthquakes/cyclones/fires/storms/ lightening ? What would it have felt like? Who are the people who come to help? What can you do to help others before the doctor comes? Where can we look for help at such	Disaster and trauma of losing one's home; community help; Hospitals, police stations, ambulance, shelters, fire station, first aid	Newspaper clippings, stories, photographs.	Discussion, finding out about the hospital, police station, fire station, etc.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
times? Who runs such institutions?				
4. WATER				
Water from where in earlier times? From where and how far did your grandparents get water? How far do you have to go for water? Do you know what a spring is? Have you ever seen one? Have you seen man – made structures for collecting water near springs? Where do you see them today? Where do you get water from?	Estimates of distance measurement; changes in sources and water availability over time; community service especially for long-distance travellers.	Illustrations, stories, pictures	Enquiry from grand parents/ other elders; drawing, model making of a well.	
Water flow From where do farmers get water to grow crops? Do all crops need the same amount of water? Have you seen water flowing upwards? What are the different ways in which you	Sources for irrigation; different quantities of water for different crops: Different methods of lifting water; the use of a hand pump, water-wheel	Farmer/ any local person who works in fields, a plant/ crop.	Interaction with a farmer, visit to a field, making water wheel, activity with water wheel.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
have seen water being lifted? How is flowing water used to grind grain?				
Plants and animals in water What kinds of animals and plants live in water? Are there weeds that are covering your pond/ lake/ river? Can you classify all the animals you see around you to show which ones live in water and which live on land?	Animals and plant life in water; classification in terms of similarities and differences	Weeds of different kinds; pictures of plants and animals living in different habitats.	Listing and classification; drawing of water body.	
What floats, sinks or mixes? Have you ever seen anything floating in water? Can you classify as many things around you to see which float, which sink and which mix with water? Does oil mix with water? What are the similarities and differences in water, oil, milk, cold drink, etc.?	Basic observations and classification related to floatation and solubility in water; oil and water are liquids that do not mix; basic concepts about liquids; litre as unit of measurement of volume.	Various materials to experiment with, such as, sugar, stone, oil, salt, sand etc. Story of the donkey and the salt/cotton bag.	Hands-on activity to observe solubility in water, floatation; discussion, interpretation.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
How do we measure these?				
Mosquitoes and malaria Is there any stagnant water in your locality? Can you find more mosquitoes in stagnant water? Is there any way to reduce the mosquitoes in water? Have you heard of malaria? In what season do you find more people getting ill with malaria?	Stagnant and flowing water; mosquitoes and malaria.	Health worker or a doctor. Newspaper articles on malaria etc.	Interaction with a community doctor; observation of site of stagnant/flowing water.	
5. TRAVEL				
Petrol or diesel Do all vehicles need petrol to run on? What other fuels do you know that are used for vehicles? What do trains run on? In the past what did they run on? What do tractors use as fuel? For what other purposes are petrol and diesel used? Find out the cost of a litre of petrol/diesel in your area? Do all vehicles run on equal	Fuels used in vehicles; Fuel is costly. Non renewable source.	Poems and songs about trains/cars etc.; Enquiry from adults; the story of 'petrol'.	Discussion, finding out different fuels used, comparison of cost of petrol and diesel.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
distance on a litre of fuel?				
Rough and tough Have you seen or been to a mountain? How and why do you think people make such difficult trips? How do you think they train for it?	Mountains, expeditions and the spirit of adventure; some idea of training for high altitude; national flag	Excerpt from the autobiography of Bachendri Pal; Flag of India atop mount Everest; flags of some countries	Act/dance to show climbing on a difficult mountain; Designing a flag for your school; identifying some other flags	
Ride on a spacecraft What all do you see in the sky — at day time? And at night? How many of the things you see in the sky are man-made? Have you heard of people traveling in a space craft?	The sky in the day and night. Basic exposure to the aerial view of the earth and what India looks like from there;	Story of Rakesh Sharma/ Kalpana Chawla;	Observation from a terrace to draw its aerial view. Imagine yourself in a spacecraft giving an interview to the PM about what you see from there!	
Oldest buildings Is there any well-known monument/historical place in your area that people come to visit? What are the oldest	Heritage buildings/movements as a source of knowledge about our p to he able to understand how they 'ere	Oral narratives from people; pictures (Nartiang, Mawsynram,	Drawing pictures of the building or the monument in your neighbourhood	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
buildings around your area? Have you traveled far to see any historical monuments? Have you heard of local legends, personalities who lived/ built these monuments?	built; materials used come from a variety of places, skills of the crafts person; Some historical personalities	Caves, Syndai Bathing Pool, Mawlynnong etc)	or memory or imagination	
6. THINGS WE MAKE AND DO				
Growing Food How do we grow food? What tools do we use for preparing the field? For cutting and harvesting? For cutting and cooking different vegetables/dishes? How do we water the crops? How do we lift water through a pump or waterwheel? Can we make a water wheel, sprinkler, etc.?	After basic needs met, exploration leading to improving and overcoming human limitations; greater expression of creativity; overuse of natural resources needs to be checked. Some idea of the story of a grain from the field to our plate — in terms of processes and the tools used. Different things made from the same grain, say, wheat/rice. Simple observations of water lifting in fields or in homes; making of a water wheel,	Narratives; talking to elders, farmers, those involved in growing and cooking food. Pictures of bamboo used in Meghalaya for irrigation purposes.	Observing and talking about processes of growing food; drawing tools used in different processes; finding out about different dishes made from the same grain, say, wheat/rice Making a simple waterwheel, sprinkler, pump etc.	

Questions	Key Concepts/Issues	Suggested Resources	Suggested Activities	Evaluation
	sprinkler, etc.			

Recommendations:

1. For Disaster Management for Classes I – IV training modules for teachers will have to be developed along with activity books for learners.
2. A Workshop could be organized for the development of a School Plan Disaster Management at the State level. Textbooks (EVS) for the Primary Level will have to be developed to include locally relevant topics, themes etc and activities.