

MATHEMATICS

Theme 1: Numbers

Children continue to strengthen their understanding about two digit numbers and extend this up to three digits. The basic properties like comparison of numbers, ordering and forming greatest and smallest three digit numbers are also to be explored in this class. At this stage child should be capable of looking into the pattern that numbers and number names have. This helps children in learning the bigger numbers.

Learning Outcomes:

Children will be able to:

- ✎ work with two digit numbers;
 - ☛ read and write numerals for numbers up to 999;
 - ☛ use place value in writing and comparing two digit numbers;
 - ☛ form the greatest and smallest two digit numbers (with and without repetition of given digits).

Numbers		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Numbers up to 99 and their number names. ➤ Read and write 3 digit numbers up to 999. ➤ Place and face values of digits in a three-digit number. ➤ Comparison of numbers and their arrangement in ascending and descending orders. 	<ul style="list-style-type: none"> ➤ Providing opportunities to write number names based on pattern e.g. twenty-one, twenty-two..... forty-one, forty-two..... & so on. ➤ Conducting activities using place value cards (also known as arrow cards) to construct numbers with three digits along with finding out the place value and face value of digits. ➤ Using number cards from 0-9 in groups by each child to explore & make 3 digit numbers and write their number name. 	<ul style="list-style-type: none"> ➤ Place value cards, can be developed. (For e.g. 27 cards having numbers 1 to 9, 10 to 90, and 100 to 900. These are of different size as shown below: <div style="text-align: center;"> </div> <ul style="list-style-type: none"> ➤ Spike abacus. ➤ Play money notes and coins of ₹ 1, ₹10 and ₹100.

Theme 2: Number Operations

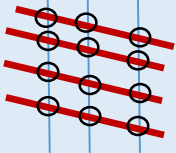
Activities that lay the foundation for work with addition and subtraction begin in children's early schooling. Once begun, work continues throughout the elementary classes. Early work with addition and subtraction with whole numbers must provide opportunities for children at this stage to see the operations used in real life situations and with a variety of manipulative material in order to learn the meanings of the operations and their algorithms. The aim of this theme in this class is that children should observe various properties of addition and subtraction of numbers like commutativity, associativity etc. in an informal way. Multiplication as another short way of repeated addition is seen in more systematic way in this class. The operation of multiplication further strengthens with experiences of skip-counting. At this stage, children must encounter familiar situations in real-life problems and pictorial representations with which they make connection between the new situation and skip counting. The division is introduced as equal sharing/distribution. Thus, before using the symbols for division as an operation on numbers it is important that children have lot of experiences of sharing objects equally. The textbooks and the classroom activities must include this aspect before formally introducing division.

Learning Outcomes:

Children will be able to:

- ✓ use place value (with regrouping) in standard algorithm for addition & subtraction;
- ✓ represent an amount up to ₹100 using 3-4 notes and coins (of same/ different denominations);
- ✓ add on zero to a number and subtract zero from a number;
- ✓ observe and generalize commutative property of addition through pattern;
- ✓ solve daily life problems / activities related to addition and subtraction presented through pictures and stories;
- ✓ construct problems that can be solved by addition & subtraction of two digit numbers;
- ✓ estimate sum and difference of two given numbers;
- ✓ construct multiplication tables of 2, 3, 4, 5 through repeated addition and different other ways like skip counting, use of patterns & broom sticks;
- ✓ use various situations on equal grouping/equal sharing that lead to repeated subtraction;
- ✓ add and subtract two digit numbers mentally.

Number Operations

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Addition and subtraction of two digit numbers with and without regrouping. ➤ Use of place value (with regrouping) in standard algorithm for addition and subtraction. ➤ Addition of zero to a number and subtracting zero from a number. ➤ Commutative property of addition through pattern. ➤ Solving daily life problems related to addition and subtraction presented through pictures and stories. ➤ Construction of problems that can be solved by addition and subtraction of two digit numbers. ➤ Estimation of the sum and difference between two given numbers. ➤ Construction of multiplication tables of 2, 3, 4, 5 through repeated addition and different other ways like skip counting, used of patterns and broom sticks. ➤ Various situations on equal grouping/equal sharing that lead to repeated subtraction ➤ Mental addition and subtraction of two digit numbers. 	<ul style="list-style-type: none"> ➤ Providing a variety of real life contexts either visually and verbally so that children also learn problem solving. ➤ Encouraging children to construct and solve problems related to operations on numbers. ➤ Conducting activities involving estimation of sum and differences of two numbers. Questions like "How did you estimate?" should trigger a detailed discussion about various ways for estimation. ➤ Involving children in development/construction of multiplication tables through various ways. (<i>Through practice multiplication facts will slowly get committed to memory</i>). ➤ Using concrete materials in classrooms to let children understand the basic idea of equal sharing/equal grouping. ➤ Encouraging children to add subtract single digit numbers through various games / activities without pen / pencil. ➤ Using charts showing addition and subtraction of two-digit number. ➤ Conducting games in which children have to do mental mathematics of adding and subtracting two digit numbers. 	<ul style="list-style-type: none"> ➤ Napier strips for multiplication of numbers. ➤ Straws or sticks. (<i>Putting one over the other to construct multiplication tables</i>) <p style="text-align: center;">e.g. 3×4 as</p> <div style="text-align: center;">  </div> <ul style="list-style-type: none"> ➤ Pebbles and other objects. (<i>These can be used for equal sharing and equal grouping</i>). ➤ Charts showing addition and subtraction of two-digit number.







Life Skills: solving daily life problems

Theme 3: Geometry

The aim of this theme is enabling children to describe 3-D objects that they have in their daily life experiences. This description includes the physical characteristics of the object like its shape, size, location and orientation which make it different and/or similar to other objects. They will also be introduced to the informal use of the geometrical vocabulary like naming shapes as rectangles, squares, triangles and circles, classifying edges as straight and curved and surfaces as curved and plane etc..

Learning Outcomes:

Children will be able to:

-  describe basic 3D and 2D shapes with their observable characteristics;
-  identify basic 3D-shapes such as cuboid, cylinder, cone and sphere by their names;
-  trace 2D outlines of 3D objects;
-  identify 2D shapes (rectangle, square, triangle, circle) by their names;
-  distinguish between straight and curved lines;
-  draw/ represent straight lines in various orientations (vertical, horizontal, slant).

Geometry		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▶ Creation of 2D-shapes through paper folding & paper cutting. ▶ Attribute of 2D shapes and their sides and corners. ▶ Straight lines and representing them by paper folding, straightedge objects, stretched strings etc. ▶ Draw horizontal, vertical and straight lines. ▶ Introduction to curved lines. 	<ul style="list-style-type: none"> ▶ Conducting activities on traditional paper folding for a boat, airplane etc. using various shapes like rectangle, square and triangles. ▶ Providing concrete 2D-shapes in multiple sizes colours, objects having 2D-shapes so that through observations & sense of touch, children generalize the attributes like sides, corners etc. ▶ Organizing classroom so that children create straight-edges through paper folding and trace them on a paper. ▶ Encouraging children to draw straight lines in different orientation so that they get the idea of a straight line. ▶ Discussing and giving examples of what is a straight line and what is not a straight line. ▶ Providing intuitive experiences through exploration about the shortest distance between two points. ▶ Providing opportunities to draw free hand straight line, free hand and with the help of ruler. 	<ul style="list-style-type: none"> ▶ Pastel papers sheets, cutters and gum/adhesive. ▶ Card board cut-outs of triangular, rectangular, square regions. ▶ A-4 size papers, sheets, tracing papers/ butter paper, carbon sheets. ▶ Pair of compasses, scale/straight edge and protractor ▶ Geoboard and rubber bands. ▶ Maths kit.





Integration: Arts Education

Theme 4: Measurement

The need for uniform units for measurement of some quantities through daily life experiences forms the basis for learning in class II. Length, capacity (volume) and weight are measured by applying a unit directly to the object being measured. Hence, children should be enabled to construct their own units for direct measurement of length, capacity and weight.

Learning Outcomes:

Children will be able to:

-  estimate and measure length/distances and capacities of containers using uniform nonstandard units like a rod/pencil, cup/spoon/bucket etc.;
-  classify objects as heavier/lighter than, using simple balance;
-  identify the days of the week and months of the year;
-  sequence the events occurring over longer periods in terms of hours/days

Measurement		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Measurement of lengths and distances using uniform (non-standard) units. ➤ Compare two or more objects by their weights as heavier than/lighter than. ➤ Use of the simple balance to compare weights. ➤ Order containers based on the perception of their capacities and verifying them. 	<ul style="list-style-type: none"> ➤ Designing and conducting group/individual activities for measuring different objects, distance using uniform things like paperclips, toothpicks, a stick etc. ➤ Involving children in constructing simple objects using available materials and encouraging them to compare weights and use of vocabulary like heavy/light. ➤ Providing a number of opportunities to children to estimate lengths in their vicinity and then verify through paperclips, tooth picks, chalks et. ➤ Encouraging children (individually and in groups) to estimate capacities and to verify by actual measurement? Questions like "Find how many mugs / spoons can fill this container? And verify it by actual measurement. 	<ul style="list-style-type: none"> ➤ Paper clips, toothpicks, sticks of equal size. ➤ A measuring tape and a 15 cm scale for observation and not for measuring length. ➤ Various containers and empty cans/bottles having their quantity written on them.

Theme 5: Data Handling

Children will be enabled to explore the importance and need for collecting different data and learn to take decisions on: the type of information needed, how it can be gathered organized and ways to display and communicate the information to others. This exploration starts in an informal way in class and children learn to use tables and pictures to organize data in basic problem-solving strategies.

Learning Outcomes:

Children will be able to:

- interpret simple charts and graph;
- present information with pictograph.

Data Handling		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none">Simple graphs related to day to day life. For example, bus time table chart, height chart etc.	<ul style="list-style-type: none">Organizing activities with children individually and in small groups around observing various body parts and collecting information through measurement. This will help children in presenting data and drawing inferences.Conducting group activities for data collection and tabulation. Answers to questions like “which vegetables do you not like? etc.” may be explored in groups.Measuring articles like paper clips, containers to collect data.Pasting stickers of various objects to represent data pictorially by children.	<ul style="list-style-type: none">Paper clips, containers.Stickers of various objects.

Integration: Arts Education

Life Skills: Interpretation and analysis

Theme 6: Patterns

This theme aims to encourage children to develop habits of looking for using patterns as they search for a meaning in Mathematics. It is infused with patterns in numbers, number operations, measurement, geometrical ideas and data. To realize this, the teaching - learning process should allow children to observe and generalize simple patterns that exist in their daily life.

Learning Outcomes:

Children will be able to:

 observe, extend and create patterns using different objects, shapes and numbers.

Patterns		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▶ Observation and identification of unit of repeat in a given pattern ▶ Extension of the pattern to next few terms on the basis of the identified unit of repeat ▶ Create patterns from daily life experiences. 	<ul style="list-style-type: none"> ▶ Involving children in observing patterns created by other children to observe a unit of the repeat. ▶ Asking children to make stencils or stamps, tools by the section of different vegetables, thumb, figures, foot prints etc. and making designs. This will help them in identification of a unit of repeat in the pattern. 	<ul style="list-style-type: none"> ▶ Seasonal vegetables like ladyfinger, potato and knife (<i>to get their section</i>). ▶ Ink or Water colours and Paper. ▶ Sandpit to make patterns using hand, foot prints etc. ▶ Geoboard and rubber bands.

Integration: Arts Education, EVS

*ENVIRONMENTAL
STUDIES*

Theme 1: About Me

The prime focus of this theme 'About Me' is not on focussing on the child's body parts, hobbies, habits, content coverage but on children expressing their own ideas and learning social skills. It also aims at developing the skills of observation, creative and verbal expression and communication. The theme would also develop self-awareness, cooperation and working together.

Learning Outcomes:

Children will be able to:

- ✓ describe personal details verbally as well as in simple written form about their likes and dislikes and respect other's likes/dislikes;
- ✓ describe functions of different body parts including the sense organs;
- ✓ draw and label external parts of the body, sense organs, self-portrait;
- ✓ enlist various activities done by different external organs;
- ✓ share personal hobbies and appreciate other's hobbies;
- ✓ make choices about their toys, dresses and other belongings;
- ✓ engage and take interest in small and large group activities;
- ✓ communicate (orally as well as written) one's point of view about personal things (dresses, toys, etc.);
- ✓ take interest and solve puzzles and problems related to various body parts, dresses, toys;
- ✓ demonstrate the use of extended vocabulary related to the theme;
- ✓ identify one's own and others' feelings and develop control over their emotions;
- ✓ engage and learn to cooperate in small and large group activities;
- ✓ appreciate and respect the differences among their peer group.

About Me

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit the concepts in class I learning. ➤ Describe self: likes/dislikes, hobbies (orally / written form) ➤ Draw pictures of a human body and self-portrait. ➤ Locate body parts in a picture. ➤ Solve shadow puzzles. ➤ Main functions of all parts of body (external), sense organs. ➤ Care of body parts and sense organs. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Providing opportunities to share and discuss personal experiences- likes, dislikes, hobbies, etc. ➤ To observe different parts of the body (self), pictures of body parts. ➤ Creating theme based environment (displaying in the class). ➤ Conducting circle time activities. ➤ Differentiating between functions of different parts of the body (activity work). ➤ Group activity on discussing and sharing amongst groups the differences amongst human beings and appreciating the same. ➤ Involving children in Group activities to identify and locate parts of the body on a Poster/ Chart, cut-out. 	<ul style="list-style-type: none"> ➤ Family/photos/family albums. ➤ Picture books. ➤ Story books. ➤ Charts/cards depicting body parts. ➤ Picture cards of various body parts and sense organs. ➤ Compilation of poems, puzzles including jigsaw. ➤ Children's drawings.

About Me

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
	<ul style="list-style-type: none">➤ Providing opportunities to solve riddles and puzzles, and sing songs based on the related theme.➤ Reflecting expressions through various activities i.e. shadows, puzzles, etc.➤ Preparing their name cards (each child) with logo, doing activities with cards.	

Integration: Health and Physical Education, Languages

Life Skills: Self-awareness, Self Esteem, Cooperation, Working together, Problem solving



Theme 2: Others in my World

The theme 'Others in my world' is continued as an extended learning from Class 1. It is expected to develop an understanding about others in the child's world, which include extended members of the family, neighbours, friends and also i pets. The theme is also expected to focus on issues and concepts related to the neighbourhood, indoor/outdoor games, significance of celebrating national days and other festivals. The prime focus of this theme is to understand the role of parents, friends, family, neighbours in the child's life. The theme would also provide opportunities to develop skills such as- empathy towards animals (pets), appreciate the cooperation and support neighbours and care and concern for the old, sick and differently abled.

Learning Outcomes:

Children will be able to:

- identify and speak about the relationship he/she has with extended family members;
- draw family tree of extended family members;
- discuss and narrate how festivals are celebrated at home/school and in the neighbourhood;
- appreciate the need for celebration of national days and other festivals/other important days;
- take care of pets and show empathy and compassion towards pets;
- show care and concern towards old, sick and differently abled;
- appreciate the cooperation and support of neighbours/ others;
- describe the role of family members and also express one's own role.

Others in my World		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit learning of key concepts of class I. ➤ Family Tree showing distant relations (extended family). ➤ Togetherness through sharing, fun, recreation, festivals with family and relatives. ➤ Celebration of important events/ days/ festivals. ➤ Care and concern for differently challenged/abled/old. ➤ Care of pets. ➤ Indoor and Outdoor Games with peer group. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Providing opportunities to share children experiences. ➤ Developing family tree with support of elders in a photo album/ scrapbook on extended family members. ➤ Opportunities for group discussion on various activities related to festivals/celebrations. ➤ Describing, sharing and various activities related to festivals (clothes, food, importance). ➤ Discussing the need for avoiding crackers/ loud music/ sounds and chemical colours. ➤ Involving children in Group work/ Project Work related to the theme, circle time activities. ➤ Sharing narratives/inspiring stories related to differently challenged group. ➤ Discussing in groups the need for games, listing different indoor and outdoor games, grouping and making and following rules. 	<ul style="list-style-type: none"> ➤ Family tree made by children. ➤ Photos related to various celebrations at home to school. ➤ Collection of dresses according to festivals they celebrate ➤ Drawings of children. ➤ Puzzles ➤ Collection of poems, songs, etc. ➤ Pictures and charts on different festivals, Republic and Independence Days and other local festivals/ events.

Integration: Languages, Arts Education

Life skills: Care and compassion for animals, Care and concern for the old, differently abled.

Theme 3: My Needs: Food

The theme 'Food' in Class II is expected to develop value for care and respect for food. The theme 'food' will also discuss the need of food for living beings and various issues and concerns related to food habits. The theme will also develop the core scientific skills of observation and discussion and life skills of self-awareness, respect for food and diversity in food, amongst children.

Learning Outcomes:

Children will be able to:

- ☑ identify and name various food items;
- ☑ discuss need for food for human body;
- ☑ collect/draw pictures of various kind of food items and name them;
- ☑ cite examples of food items we get from plants and animals;
- ☑ explain the need of various kind of foods required for body building, energy giving and body resistance (immunity of the body to diseases etc.);
- ☑ identify junk food and give reasons why it is not good for health;
- ☑ develop sensitivity and respect for food;
- ☑ develop respect for the diversity of food in the peer group, within families and different age groups.

My Needs: Food		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Food: Importance and need ➤ Major Food items: cereals, dals, fruits, vegetables, milk. ➤ Food items for body building, energy giving, for wear & tear of body, vitamins, water fibres. ➤ Healthy and junk food. ➤ Respect diversity of food habits (veg and non-veg cultures). ➤ Variations in food and reasons- different age group, families. 	<ul style="list-style-type: none"> ➤ Providing opportunities to share/discuss personal experiences of children. ➤ Conducting activities to identify different food items we get from plants and animals. ➤ Doing activities in groups to classify items based on their sources. ➤ Opportunities to draw pictures of various food items and name them in writing (component wise). ➤ Organising group discussions to discuss various issues related to food (junk food, non-vegetarian food, food diversity, etc.) ➤ Involving children in project work (classification of food items, plants, animals as source). ➤ Discussing with the whole class or in groups about ways to take care of food at home. ➤ Making picture book on food items – component wise. ➤ Organizing field trip to a farm, field to observe sources of food. 	<ul style="list-style-type: none"> ➤ Various kind of food items (actual). ➤ Pictures of food items. ➤ Narratives related to food habits. ➤ Poems/stories on food values/care. ➤ Children's drawing's. ➤ Worksheets.

Integration: Languages, Health and Physical Education

Life Skills: Self-awareness, Respect for diversity of food, Care and respect for food

Theme 4: My Needs: Water

The theme is aimed at developing awareness on many issues related to water as a need for living beings. The theme would focus on and discuss sources of water, ways for purification of water in the family/neighbourhood, causes of water pollution and concern about wastage of water. The core skills of observation, discussion and experimentation would be developed through this theme.

Learning Outcomes:

Children will be able to:

- identify and differentiate between natural and man-made water resources;
- discuss the need of water in daily life for plants and animals;
- draw and label pictures of water resources;
- cite examples of natural and man-made sources;
- discuss ways to keep the water sources clean;
- discuss and suggest ways to prevent the misuse of water;
- suggest and share various ways to purify drinking water at home/school;
- explain reasons of water pollution in the surroundings (awareness level only);
- appreciate the judicious use of water in school/at home.

My Needs: Water		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Sources of water: natural and man-made (rain, dam, lake, river, ponds, well, hand pump). ➤ Need for water for plants, animals and human beings. ➤ Clean water for drinking - ways of purification of water at home/colony (awareness level). ➤ Food items contain more quantity of water. ➤ Causes of water pollution (awareness level). ➤ Judicious use of water. ➤ Reuse of water at home/school/ in the surroundings. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Providing opportunities to share children's personal experiences. ➤ Discussing natural and man-made sources of water and citing examples of each. ➤ Doing activities/simple experiments (with the support of teachers) for ways of cleaning drinking water. ➤ Discussing in groups the causes of water pollution in the school/surroundings. ➤ Appreciating and discussing the ways to prevent misuse of water ➤ Discussing precautions to be taken in rainy weather (umbrella, raincoat....) and drinking water. ➤ Involving children in Project work i.e. how to save water- slogan writing drawings, messages. ➤ Organizing visits to places like ponds, lakes, rivers in the neighbourhood to observe the water resources. 	<ul style="list-style-type: none"> ➤ Visit to places to observe water resources (lake, river, pond, pictures/tanks with elders). ➤ Photos of man-made natural resources. ➤ Simple experiments/activities related to water purification. ➤ Project work on this theme. ➤ Children's drawings, pictures and charts made by the teacher on key concepts in the theme. ➤ Flash cards on sources of water.

Integration: Languages, Health and Physical Education

Life Skills: Judicious use of water

Theme 5: My Need- Shelter

The theme 'Shelter' is expected to develop an understanding of the variety seen in shelters /houses and reasons for the diversity as well as need for cleanliness of houses in the surroundings. The theme would also develop the core skills of creative expression, discussion and description..

Learning Outcomes:

Children will be able to:

- identify various types of houses and name them;
- cite examples of type of houses built in different parts of the world;
- respect diversity in houses and discuss reasons for diversity in houses;
- discuss need for cleanliness in houses;
- enlist kind of material used for making different types of houses;
- draw pictures and label parts of houses;
- make models of various kind of houses (under supervision and with support from elders);
- appreciate the need for decorating houses.

My Need- Shelter		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit Concepts of class 1. ➤ Houses in small and large cities. ➤ Reasons in diversity of Houses. ➤ Material used in various kind of houses. ➤ Need and care of house / household things. ➤ Cleanliness of the house (ways). ➤ Need for light and ventilation in the house. ➤ Decoration of Houses. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Showing and discussing visuals/pictures of different kind of houses in the world. ➤ Showing video- films/ documentaries/ sharing narratives related to variation in houses. ➤ Telling the story of the 'Three Little Pigs' and any other related to the theme. ➤ Showing various kind of material used for making houses-group work on this ➤ Asking to draw pictures of different kind of house, discriminating them. ➤ Involving children in model making (Hands-on-activity) exercises. ➤ Discussing ways / methods to keep the surrounding/s clean and to share the same with others. ➤ Involving children to participate in keeping the classroom clean, house decorations, model making; ➤ Involving children in worksheet activities to learn concepts. 	<ul style="list-style-type: none"> ➤ Models of various kind of houses. ➤ Charts prepared by the teacher. ➤ Videos and documentaries. ➤ Picture cards/PPTs/slide shows. ➤ Worksheets. ➤ Children's compilation work. ➤ Concrete material used for making house. ➤ Story/video (three little pigs). ➤ Models of a different houses. ➤ Material required for decorating houses.

Integration: Languages, Arts Education

Theme 6: My Need – Clothing

In Class II the theme 'Clothing' aims to develop an understanding on variation in dress material and their sources for human beings, in children. The theme would focus and discuss the different kinds of dresses, textures that are worn by children. The emphasis would also be on cleanliness and care of clothes. The core skills of observation, discussion will also be developed.

Learning Outcomes:

Children will be able to:

- ☑ discuss the need of clothes for living beings;
- ☑ identify various kind of materials used for making clothes;
- ☑ identify sources of natural and man-made fibres;
- ☑ give examples of natural and man-made fibres;
- ☑ differentiate among various cloth materials and give examples of each kind of material;
- ☑ draw pictures of various kind of dresses worn by males and females, made from these materials;
- ☑ give reasons why cotton clothes should be worn in summer and silk/woollen clothes in winters, rayon/ synthetic in the rainy season;
- ☑ suggest various ways to take care of cotton/silk other materials at home.

My Need – Clothing		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit concepts of class I. ➤ Variety of cloth material- cotton, silk, wool, canvas, rayon etc. and their use in different seasons. ➤ Sources of natural and man-made fibres, sources ➤ Dress material suited to different climatic conditions. ➤ Care of different types of clothes. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Organising group discussion on need for cloths. ➤ Conducting group activities to see various kind of cloth/ materials and identify them. ➤ Providing opportunities to draw pictures and label parts of clothes. ➤ Demonstrating how to use materials to maintain/take care of various kind of clothes. ➤ Assigning a project based on i.e. sources of fibres, kinds of clothes, uses of clothes in different seasons etc. ➤ Engaging in group activities related to various tasks i.e. listing of male, female clothes worn on various occasions/festivals. ➤ Origami activities (paper folding & making dresses). 	<ul style="list-style-type: none"> ➤ Various kinds of cloth/ material. ➤ Different types of clothes worn by males/females ➤ Pictures of various kind of clothes. ➤ Pictures of different materials used at home, made by fibres. ➤ Materials used for care of all kind of clothes. ➤ Visit to a textile industry (<i>if possible</i>) ➤ Children's drawings. ➤ Project Work report. ➤ Origami work.

Integration: Languages, Arts Education

Theme 7: My Need - Air

The theme 'Air' is aims at focusing on and discussing. simple observable properties of air, how to keep the air in the surroundings clean and fresh. Through simple activities the skills of observation, discussion and experimentation would be also be developed.

Learning Outcomes:

Children will be able to:

- observe some properties of air;
- demonstrate (with the support of elders) that air has weight, occupies space, expands
- identify and discuss various causes of air pollution;
- suggest some ways to deal with air pollution from smoke/ fumes;
- name some common diseases, spread through air;
- discuss various ways to prevent these diseases;
- demonstrate simple exercises, *asanas*/ deep breathing for use of air for healthy living.

My Need - Air		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit concepts of Class I. ➤ Simple properties of air: air occupy space, has weight, expands when we heat, feel it, etc. ➤ Causes of air pollution ➤ Ways to reduce air pollutions in the surroundings ➤ Air borne diseases and their prevention (some common diseases) 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Providing opportunities to share children's personal experiences related to air. ➤ Showing experiments, organising group activities to demonstrate properties of air. ➤ Discussing various reasons of air pollution and citing examples of each factor. ➤ Making/designing posters on prevention of air pollution. ➤ Involving children to write slogan s/ messages to prevent air pollution. ➤ Assigning Project Work – information on Air borne diseases and their prevention. ➤ Developing creative expression by engaging them in compilation of songs, poems, writing own songs, sharing with peers. 	<ul style="list-style-type: none"> ➤ Pictures depicting air related activities. ➤ Material for simple experiments for properties of air. ➤ Photographs depicting air borne diseases. ➤ e- material on air borne diseases. ➤ Slogan / Messages on prevention of air borne diseases. ➤ Slogan / Messages to reduce air pollution.

Integration: Languages, Health and Physical Education

Theme 8: Keeping oneself Clean, Safe and Healthy

The theme is expected to provide information and also develop an awareness on the issues and concerns related to cleanliness and health. The theme would focus on and discuss, how to keep oneself healthy, recreational ways at home/neighbourhood, safety at home and public places and cleanliness related to self and of the surroundings.

Learning Outcomes:

Children will be able to:

- ☑ identify various reasons of filth/garbage in the surroundings;
- ☑ suggest some ways how to keep the surroundings clean (use of dustbin and segregation of garbage);
- ☑ discuss various ways of garbage disposal at home/in the surroundings;
- ☑ discuss various benefits of physical activities like yoga, exercises, games;
- ☑ emphasis and importance of outdoor games/activities;
- ☑ enjoy and get involved in recreational activities.

Keeping oneself Clean, Safe and Healthy		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revision of concepts/learning from of class I. ➤ Cleanliness in the surroundings and at the public places. ➤ Use of dustbin at public places. ➤ Ways of garbage disposal at home and in surroundings. ➤ Healthy body and mind: rest, exercises, yoga, play, outdoor/indoor games. ➤ Safety at home/ surroundings. ➤ Care of body. ➤ Good/bad touch. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Organizing brain storming in the class to discuss causes of unclean surroundings. ➤ Inculcating the habit to encourage the use of dustbin (bio-degradable and non-bio-degradable garbage) at home (teaching children to segregate garbage that needs to be disposed off). ➤ Narrating a story on effects of clean/dirty surroundings ➤ Organising discussions for the need of exercise and play (indoor and outdoor games). ➤ Involving children in recreational activities at home/school. ➤ Demonstrating and adopting a variety of motor development activities to help children learn the right posture, flexibility, coordination, etc. ➤ Sharing narratives/ puppet shows/ personal experiences related to good and bad touch, followed by discussions. ➤ Organising group work to discuss various kinds of tools at home and how to keep one-self safe from them. ➤ Providing opportunities for creative expression on the theme – collecting/ writing poems, stories, songs. ➤ Discussing clean and dirty situation, garbage disposal. ➤ Explaining proverb- “Cleanliness is next to Godliness” 	<ul style="list-style-type: none"> ➤ Poems/songs/ jingles of fitness ➤ Games and recreational activities. ➤ Narratives related to good/bad touch. ➤ Collection of songs, poems and stories on healthy living. ➤ Puppets.

Integration: Languages, Health and Physical Education

Theme 9: Places in the Neighbourhood

The theme 'Places in the neighbourhood' is aimed at providing information and discussing various places in the neighbourhood. The theme would also throw light on up-keep of public places in the community. People involved in different professions and the importance of those professions would also be discussed. Children would learn to appreciate and respect the role of different professions in our day to day life.

Learning Outcomes:

Children will be able to:

- ✔ discuss and give reasons for need of the public places in the neighbourhood;
- ✔ identify various places in the neighbourhood and name them;
- ✔ explain various functions of each places in daily life;
- ✔ discuss need for emergency services in the neighbourhood;
- ✔ appreciate the services/help provided by various people who are involved in different professions;
- ✔ appreciate the need of recreational/other important services available in the neighbourhood.

Places in the Neighbourhood

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▷ Revisit previous key concepts of Class I. ▷ Need for public places in the locality. ▷ People who help us: postman, courier service, cooking gas service, mason. ▷ Various emergencies and relief – police station, fire brigade. ▷ Recreational places in the neighbourhood. 	<ul style="list-style-type: none"> ▷ Building on previous learning. ▷ Encouraging children to draw a map of the different places in their locality. ▷ Organizing activity with children where they dress as community helpers and share information of the place where they work and its importance in the local neighbourhood. ▷ Organizing visit to some places to observe the role of various people who involved in different occupation. ▷ Organising role plays. 	<ul style="list-style-type: none"> ▷ Different places that play an important role in daily life. ▷ Visit to local market, hospital/police station etc., if possible or pictures to be shown. ▷ Local market, police station, hospital, fire station, etc. ▷ People from different professions such as- doctor, policeman/woman, conductor, teacher, carpenter, postman etc.

Integration: Languages, Health and Physical Education

Life Skills: Dignity of labour

Note: This theme content needs to be selected as per socio-cultural environment of children, occupations may be included.



Theme 10: Plants

The theme 'Plants' is expected to develop an understanding about different types of plants, variation and uses of plants for human beings. Through this theme the skills of observation, discrimination, appreciation and care and concern for plants will be developed. The theme would also develop sensitivity towards care and protection of plants and the environment.

Learning Outcomes:

Children will be able to:

- identify and name the different parts of the plant and discuss their functions;
- draw main parts of a plant and label them;
- appreciate the uses of various parts of a plant;
- appreciate tree plantation and use of medicinal plants in daily life;
- distinguish between different kind of plants based on their habitat i.e., in water, on land;
- discuss reasons of modification of different parts of some plants.

Plants		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▷ Rebuild on previous learning. (Class I Concepts). ▷ Plants on land, water, climbers. (Examples with pictures and their description) ▷ Parts of plants: root. Stem. Leaf, flower, fruit, seed. (pictures and their description) ▷ Plant products – use at home. ▷ Plant modification: underground, stems, roots. ▷ Care and concern for plants – plantation, friendship with plants. 	<ul style="list-style-type: none"> ▷ Building on previous learning. ▷ Children will be helped to identify and name some of the plants and trees in their surroundings. ▷ Drawing and labelling parts of the plants in activity work. ▷ Brief explanation of photosynthesis. ▷ Providing or asking children to get seeds/ saplings to look after them at home or in school if possible. ▷ Involving children in tree plantation in the school locality, thereby developing a friendship with plants and taking care of them. ▷ Discussing uses of medicinal plants. ▷ Role play of children about grandmother's remedies. ▷ Providing opportunities to observe <i>tulsi</i>, neem leaf, turmeric (<i>haldi</i>), clove, ginger, etc. in natural form and discussing their benefits and uses. 	<ul style="list-style-type: none"> ▷ Photographs of trees and plants. ▷ Video films and pictures. ▷ Animation (movie) on plants and modifications. ▷ Medicinal plants (<i>tulsi</i> leaf, clove, ginger).

Integration: Languages

Life Skills: Care and protection Of plants and environment

Theme 11: Animals

The theme 'Animals' is expected to develop awareness, understanding on concepts related to animals. It is also aimed at developing within children a concern, care and compassion for animals. The theme would also help to develop a number of skills such as observation, classification, care and concern for animals and appreciation of beauty.

Learning Outcomes:

Children will be able to:

- discuss some observable characteristics of animals;
- discuss characteristics/features of animals based on their variations;
- draw pictures of various animals and label their parts;
- differentiate and compare various animal habitats;
- show sensitivity and compassion towards animals;
- narrate the process of the life cycle of a butterfly in their own words.

Animals		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▷ Revision of class 1 concepts. ▷ Body parts of pet animals. ▷ Life cycle of butterfly. ▷ Care and compassion for pets and other animals. ▷ Animal characteristics: move, grow, eat food. ▷ Animal houses/habitats- live underground, in the trees, near water, under water. ▷ Need of shelter for animals. ▷ Relationship of human beings with animals. 	<ul style="list-style-type: none"> ▷ Organising theme based class on environment and conducting activities. ▷ Encouraging children to show compassion towards animals by writing stories, poems, songs. through stories, poems, songs. ▷ Organizing a pet show in school to encourage children to reflect on what they have observed. ▷ Sorting activity in small groups. ▷ Classify animals on the basis of their habits. ▷ Classify on the basis of characteristics of animals. ▷ Classify animals on the basis of food habits. ▷ Organising a visit to poultry farm/bird sanctuary/zoo 	<ul style="list-style-type: none"> ▷ Puzzles (birds/animals). ▷ Visit to ▷ Videos showing compassion to street animals. ▷ Flash cards on animals ▷ Picture cards on life cycle of butterfly.

Integration: Languages

Note: This theme can be continued in a project mode.

Theme 12: Transport

The theme, 'Transport' is aimed to provide information on modes of transport, traffic rules and need for emergency vehicles. It would also generate an awareness on various issues related to transport. A number of skills such as exploration, explanation and clarification skills would be developed from this theme. The theme would also discuss ways to save petrol/diesel.

Learning Outcomes:

Children will be able to:

- ✔ discuss uses of transport in the surroundings;
- ✔ identify various kind of transport;
- ✔ compare traffic seen in cities/villages;
- ✔ give reasons of traffic jam and suggest ways to reduce it;
- ✔ discuss cause of air and noise pollution;
- ✔ stick/draw pictures of various kind of vehicles.

Transport		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revision work of Class 1 concepts ➤ Need for various kind of transport: some examples, visuals. ➤ Vehicles driven by use of petrol, diesel, CNG, electricity. ➤ Various modes of transport used in big cities (metro, local train, cab bus, auto rickshaw) ➤ Causes of traffic jams, pollution (air, noise) ➤ Ways of checking noise pollution and its effect ➤ Ways to save petrol/diesel. 	<ul style="list-style-type: none"> ➤ Providing opportunities to observe and discuss various kinds of transport used in the neighbourhood. ➤ Organising a visit to public places to observe different modes of transport. ➤ Discussing the importance of wheelchairs and ramps in schools and in public places. ➤ Focusing on activities of walking, cycling at home, travelling in the bus or metro and sharing of experiences. ➤ Organising discussions in the class on how to minimize noise pollution. ➤ Assigning projects individually or in groups. ➤ Facilitating Model making on different modes of transport. 	<ul style="list-style-type: none"> ➤ Pictures 2D Model-Paint a city/village ➤ Plastic toy models of transport. ➤ Models of various modes of Transport. ➤ Class discussions. ➤ e- material. ➤ Visit to a Railway Station/ Airport

Integration: Languages, Health and Physical Education

Life Skills: Sensitivity towards judicious use of petrol



Theme 13: Communication

The theme 'Communication' provides information on various means of communication in children's surroundings. The positive and negative aspects are highlighted to make children aware of the various modes of communication in daily life activities.

Learning Outcomes:

Children will be able to:

- ✔ discuss the need and importance of communication in day to day life;
- ✔ identify and list out various modes of communication;
- ✔ discuss the positive and negative use of some modes of communication;
- ✔ identify different ways of communication used in big / metro cities;
- ✔ demonstrate the use of some modes of communication.

Communication		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ✔ Need for communication. ✔ Ways of communication available in cities/public places. ✔ Use of ICT (email, SMS, internet) ✔ Communication for recreation. ✔ Ways to check misuse of communication devices. 	<ul style="list-style-type: none"> ✔ Providing opportunities to listen to children's personal experiences. ✔ Organizing discussions on uses and misuses of different ways of communication. ✔ Providing opportunities to observe and solve modes of communication. ✔ Asking children to explore ways of communication commonly used in big cities. 	<ul style="list-style-type: none"> ✔ Children's own experiences. ✔ Interaction between teacher and children on communication. ✔ Various modes of communication. ✔ Demonstrate use of communication in daily life. ✔ Discussion on letters, computer, laptop, mobiles, e-mails.

Integration: Languages, Computer Studies



Theme 14: The World Around Me: Sun, Moon, Sky and Stars

The theme 'The World Around Me' is aimed at developing an awareness about the sky and the sun, moon, stars amongst children and their own ideas about these heavenly bodies. Simple information on these heavenly bodies would be provided in an interesting manner.

Learning Outcomes:

Children will be able to:

- ☑ identify the different heavenly bodies seen in day and at night;
- ☑ distinguish between different heavenly bodies based on some observable features;
- ☑ describe various heavenly bodies seen in the day/afternoon and at night;
- ☑ draw pictures of the heavenly bodies;
- ☑ create / write/collect poems and songs on this theme;
- ☑ collect pictures/information on this theme;
- ☑ read symbolic maps/route maps.

The World around Me: Sun, Moon, Sky and Stars

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ (Revision of class 1 concepts). ➤ Changes seen in sky in day, afternoon, night. ➤ Sky in rainy days. ➤ Various seasons and sky. ➤ Symbolic and route map. ➤ Solar system and other heavenly bodies. ➤ Day & Night formation (through picture only). 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Exploring children's ideas about the sun, moon, stars, day (morning, afternoon and night). ➤ Facilitating observation of the sky in the day and at night by children and discussing the differences. ➤ Providing opportunities to draw pictures of a rainy/sunny/cloudy day and discussing the same with peers. ➤ Showing films, e-material on heavenly bodies and discussing it with the children. ➤ Planetarium visit. ➤ Providing opportunities to draw pictures of the heavenly bodies. ➤ Assigning project work (group/individual), ➤ Making models of the heavenly bodies. ➤ Collecting pictures of the heavenly bodies. 	<ul style="list-style-type: none"> ➤ Sky observation at night and day time ➤ Pictures/photos of night and day time of the sky. ➤ Visit to the Planetarium. ➤ Visual discrimination cards. ➤ Stories/poems/narratives. ➤ Worksheets/activity sheets. ➤ Children's drawings. ➤ Models made by children. ➤ Film on heavenly bodies.

Integration: Languages, Arts Education, Mathematics (Patterns)

Theme 15: Time, Space, Direction

This theme aims to create an awareness regarding the concept of time, space and direction. This will enable children to talk about time in terms of day and night as well as today, tomorrow etc.

Learning Outcomes:

Children will be able to:

- ☑ distinguish the different times in the one full day (24 hours) - morning, afternoon, evening, night;
- ☑ discuss and list out the activities done in the morning, afternoon, evening and night;
- ☑ talk about activities done today and yesterday and to be done tomorrow;
- ☑ distinguish between left/right, above/below, near/far; up/down, etc.
- ☑ give and follow simple directions
- ☑ discriminate between location of various objects (on, in, below, above);
- ☑ locate objects and places in the surroundings;
- ☑ identify directions with the support of elders.

Time, Space, Direction		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Time: Concept of day, week, month, and year. Yesterday, tomorrow and today. ➤ Direction: Left/right, above/below, four directions, near/far. ➤ Space: Location of places in the surroundings. ➤ Location of objects. (on, in, below, above) 	<ul style="list-style-type: none"> ➤ Asking children to enlist activities done during various points of time in the day/at night. ➤ Facilitating making of puzzles and /or poems on time, direction and discussing the same in the class. ➤ Facilitating making of a scrap book by children individually on the activities done in the morning, afternoon, evening, night. ➤ Involving children in drawing pictures of maps. ➤ Involving children to locate places on the picture map. ➤ Encouraging children to create songs and rhymes on the theme. 	<ul style="list-style-type: none"> ➤ Children's own experiences related to morning, afternoon, evening and night time. ➤ Puzzles and riddles. ➤ Poems and songs. ➤ Time concept cards. ➤ Some visuals depicting places and things (location of place, on, in, etc.) ➤ Picture maps.

Integration: Languages, Arts Education

