

MATHEMATICS

Theme 1: Numbers

The basis of understanding multi digit numbers lies in the understanding of the place value system. Thus, it is important to start with the concept of place value through manipulatives like place value cards, spike abacus, unifix cubes and expanded and short form of numbers in class. International system of numeration is different than the one used in India. Children will understand that the difference lies in the process of grouping the digits called periods. They should be able to relate to various types of numbers learnt earlier i.e. counting numbers, common fractions and decimal fractions. A clear understanding about the relationship among these numbers will help them in further using these for problem solving strategies. Providing opportunities of using these in different contexts (familiar and unfamiliar) are important to develop strategies to deal with them.

Learning Outcomes:

Children will be able to:

- ✓ acquire understanding of 6 digit numbers and their use in daily life;
 - ☛ read and write numbers up to 6 digits (lac) using Indian system of writing large numbers;
 - ☛ use place value to write a number in expanded form and vice versa;
 - ☛ compare numbers using place value and arranges them in ascending and descending order
 - ☛ use the given 6 digits to form the greatest and smallest number;
 - ☛ represent numbers (up to 39) by Roman Numerals:
- ✓ work with fractions:
 - ☛ identify half, one-fourth, three-fourths in a given picture (by paper folding) and also in a collection of objects.
 - ☛ represent fractions as half, one-fourth and three-fourths by using symbols $\frac{1}{2}$, $\frac{1}{3}$, $\frac{3}{4}$ respectively.
 - ☛ show the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$ and other fractions.

Numbers		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ 6 digits numbers (up to lac) using the Indian system of numeration. ➤ Place value and face values. ➤ Ascending and descending order of numbers. ➤ Greatest and smallest numbers from given digits. ➤ Roman Numerals using symbols I, V and X. ➤ Fractions as part of a whole and their representation as 	<ul style="list-style-type: none"> ➤ Providing opportunities to children to collect and discuss real-life context in which numbers up to a lac are used e.g. making large payments, huge crowd. etc. ➤ Building on previous learning by providing opportunities for application of place value learnt in previous classes by expanding it based on patterns. 	<ul style="list-style-type: none"> ➤ 5-6 sets of number cards from 0-9 to make 6 digit numbers. ➤ Cuttings from newspaper/ magazines about large numbers.

Numbers

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>number.</p> <ul style="list-style-type: none"> ➤ Types of fractions: Like, unlike, unit, equivalent. ➤ Visual idea of equivalent fractions like $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \dots$ ➤ Addition of subtraction of like fractions. 	<ul style="list-style-type: none"> ➤ Conducting activities so that children compare numbers using place value based and creating number sequence in ascending and descending order. ➤ Creating games/activities using number cards (0-9) to form 6 digit numbers (e.g. A number which has 8 at thousandth place & so on). ➤ Forming questions on the greatest and smallest numbers should be discussed with the strategy to do so. ➤ Introducing numerals from other Indian languages along with Roman numerals. 	

Theme 2: Number Operations

This theme aims at children gaining a broader and deeper understanding of the standard algorithms by having many and varied opportunities to use concrete materials such as place-value charts, unifix cubes and base ten blocks in problem-solving situations. The use of these tools will greatly enhance children's exploration of addition, subtraction, and multiplication involving regrouping, and multi digit division. Teaching the standard algorithms through problem solving using manipulatives will help children develop their conceptual understanding of the standard algorithms. Once children have a thorough understanding of the standard algorithms, it will enable them to work flexibly with algorithms and determine when their use is appropriate.

Learning Outcomes:

Children will be able to:

- ✎ apply operations of numbers in daily life;
- ✎ add and subtract numbers (up to 4 digits) with or without regrouping;
- ✎ solve problems involving addition and subtraction in different real life contexts presented through visuals and stories;
- ✎ construct and write multiplication table up to 10;
- ✎ multiply two and three digit numbers using standard algorithm and lattice algorithm;
- ✎ divide a given number by another number (single digit) by drawing dots and grouping, using multiplication facts and by repeated subtraction;
- ✎ apply four operations-addition, subtraction, multiplication and division in solving real life situations;
- ✎ frame word problems based on a mathematical statement;
- ✎ estimate sum differences and products of two or more given numbers without using paper/pen;
- ✎ multiply 2 and 3 digit numbers;
- ✎ divide a number by another number using different methods such as:
 - ✎ pictorially (by drawing dots)
 - ✎ equal grouping
 - ✎ repeated subtraction
 - ✎ establishing an inter-relationship between division and multiplication
- ✎ create and solve simple real life situations/ problems related to money, length, mass and capacity by using the four operations.

Number Operations		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Addition and subtraction of numbers (up to 4 digits) with or without regrouping. ➤ Construct of multiplication table up to 10. 	<ul style="list-style-type: none"> ➤ Creating real life contexts involving addition/subtraction of 4 digit numbers Text based stories such may be used to practice solving such problems. ➤ Encouraging and facilitating children to develop multiplication tables 	<ul style="list-style-type: none"> ➤ Wooden sticks to demonstrate multiplication table. ➤ Napier sticks for multiplication. ➤ Geoboard and rubber band. <i>(to demonstrate</i>

Number Operations

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Multiplication of two and three digit numbers using standard algorithm and lattice algorithm. ➤ Division in single digit another numbers. ➤ Application of four operations-in solving real life situations. ➤ Word problems based on a mathematical statement. ➤ Estimation of sum, differences and products of two or more given numbers and mental verification. 	<p>rather than learning by rote.</p> <ul style="list-style-type: none"> ➤ Introducing standard algorithm initially with one number in expanded form so that better understanding of standard algorithm is developed e.g. $23 \times 3 = (20+3) \times 3 = 20 \times 3 + 3 \times 3$. ➤ Using repeated subtraction to create intuitive understanding of the division algorithm. ➤ Encouraging children to create real life contextual problems based on mathematical operations (not more than two at a time) and solving them. ➤ Involving children in estimating sum/differences of two numbers to do calculation mentally. ➤ Demonstrating the estimation of sum, difference of two numbers by using the Geoboard and rubber band. 	<p><i>estimation of sum, difference of two numbers.)</i></p>





Life Skills: solving daily life problems

Theme 3: Playing with Numbers

The theme will promote children's exploration with various facts and properties of counting numbers which lead to many important aspects of the use of mathematics in daily life activities. It will encourage children to work with numbers, identify the patterns and make general rules. The concepts like factors, multiples, common factors and multiples lead to classification of numbers into various interesting groups. Children will be encouraged to work in groups to generalize their explorations about number properties and enjoy working with numbers.

Learning Outcomes:

Children will be able to:

-  find out factors, prime factors and multiple of numbers;
-  understand prime and composite numbers;
-  understand divisibility by numbers;
-  calculate HCF & LCM of numbers.

Playing with Numbers		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Factors. ➤ Multiples. ➤ Prime and composite numbers. ➤ Test for divisibility by 2, 3, 4, 5, 9, 10. ➤ Prime factors- By Factor tree method and Prime Factorization Method. ➤ Highest common factor-listing method and Common Division. ➤ Lowest Common Multiples- Listing Method, Common Division. 	<ul style="list-style-type: none"> ➤ Encouraging children to understand factors of given number. ➤ Conducting activities in the class so that children use multiplication table for understanding multiplication facts. ➤ Encouraging children to first calculate common factors and then to find the highest common factor. ➤ Guiding children to calculate common multiples and then naming the smallest of them as lowest common multiples. 	<ul style="list-style-type: none"> ➤ Wooden sticks. ➤ Match sticks. ➤ Broom sticks.

Theme 4: Geometry

In the primary grades, learning of mathematics encourages children to focus on geometric features of two-dimensional shapes and three-dimensional figures. Instructional activities provide opportunities for children to manipulate, compare, sort, classify, compose, and decompose these geometric forms. These types of activities help children to identify and to informally describe some attributes and geometrical properties of two-dimensional shapes and three-dimensional figures. In the teaching learning process children continue to learn about the properties of two-dimensional shapes and three-dimensional figures through hands-on explorations and investigations.

Learning Outcomes:

Children will be able to:

- ✎ acquire an understanding about shapes around them;
- ✎ identify the centre, radius and diameter of a circle;
- ✎ find shapes that can be used for tiling;
- ✎ draw cube/ cuboids using the given nets;
- ✎ show through paper folding/ paper cutting, ink blots, etc., the concept of symmetry by reflection;
- ✎ draw top view, front view and side view of simple objects;
- ✎ observe, identify and extend geometrical patterns based on symmetry;
- ✎ represent the collected information in tables and bar graphs and draws inferences from these;
- ✎ use tangrams to create different shapes;
- ✎ tile a given region using one and more than one shape;
- ✎ draw a circle-free hand, using a round object or a compass and identify centre, radius, diameter;
- ✎ explore reflective symmetry through ink blots paper cutting and paper folding;
- ✎ explore the area and perimeter of simple shapes;
- ✎ intuitively draw the plan, elevation and side view of different objects based on observation.

Geometry		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Tangram shapes ➤ Tessellation: Tiling using one and more shapes ➤ Circle: Centre, radius, diameter. ➤ Relation between diameter and radius of a circle ➤ Reflection symmetry ➤ Area and perimeter of simple shapes. 	<ul style="list-style-type: none"> ➤ Using tangrams to create intuitional understanding of physical attributes of different 2D shapes. ➤ Providing concrete shapes (created or procured) to children in groups to cover a surface with no gaps and overlapping using one or two shapes. Discussion on which shapes tile and why or vice versa may be done. ➤ Conducting paper folding activities 	<ul style="list-style-type: none"> ➤ Tangrams of 7 pieces. ➤ Cardboards, tape cutters, glue sticks (for <i>creating tiles of different shapes</i>) ➤ Colour paper, ink markers, scissors. ➤ Circular geoboard and rubber band.

Geometry

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Perspectives of shapes: Plan, elevation and side view. ➤ Introduction of terminology: Plane, point, line, line segment, ray, parallel. ➤ Lines, intersecting and perpendicular lines. 	<p>will go a long way to create a deeper understanding of a circle and various vocabulary related to it.</p> <ul style="list-style-type: none"> ➤ Discussing symmetry in daily life context before introducing reflection symmetry. ➤ Conducting individual activities so that child has experiential learning about symmetry and line of symmetry. ➤ Creating activities for drawing the plan, elevation and side view of 3 D objects. ➤ Conducting quizzes to create an understanding of the different views of objects, houses, places etc. For example, showing top view of a chair or table and asking to guess what this object is. 	

Integration: Arts Education

Theme 5: Measurement

In this theme children will not only learn direct measurement but also develop the understanding of indirect measurements of time and temperature. These cannot be measured directly they require instruments that indirectly translate evidence of their presence into a measurable form. Children will be made aware about this. Previous learning had initiated children the learning of direct measurement i.e., by applying a unit directly to the object being measured. For example, to measure length, area or volume a specific unit is required. Selecting a unit is an arbitrary act and the units used are only conventions accepted by all to bring in uniformity for measurement.

Learning Outcomes:

Children will be able to:

- ✘ convert meters into centimeters & vice versa;
- ✘ solve problems involving lengths & distances in daily life contexts;
- ✘ use estimation and verification to find out the distance between two locations;
- ✘ use a balance to weigh different objects using standard weight like grams, kilograms etc. to different objects;
- ✘ estimate and verifies the weights of different objects using a balance;
- ✘ measure volume of different containers using containers marked with standard units of multi-litre and litre;
- ✘ correlate different units of standard measurement like millilitre and litre with different objects;
- ✘ estimate & verifies capacities of different containers by measurement;
- ✘ explore the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit like the number of books that can completely fill the top of a table;
- ✘ convert metre into centimetre and vice-versa;
- ✘ estimate the length of an object/distance between two locations, weight of various objects, volume of liquid, etc., and verifies them by actual measurement;
- ✘ solve problem involving daily life situations related to length, distance, weight, volume and time involving four basic arithmetic operations;
- ✘ read clock time in hour and minutes and expresses the time in a.m. and p.m.;
- ✘ relate 24 hr clock with respect to 12 hr clock;
- ✘ calculate time intervals/ duration of familiar daily life events by using forward or backward counting/addition and subtraction.

Measurement		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Conversion of units: meters into centimeters grams into kilograms, litre into millilitre & vice versa. ➤ Solve problems involving lengths/distances, weight/ mass, volume/capacity in daily life contexts using four operations. ➤ Estimation and verification of length, weight, volume ➤ Conversion of days, hrs and minutes (Bigger to smaller units and vice versa). ➤ Approximate time elapsed through word problems. 	<ul style="list-style-type: none"> ➤ Organising activities for children to use appropriate units with lengths like smaller lengths using cm and metre/Km for large distances. ➤ Creating real life contexts for solving problems involving various units of lengths. ➤ Emphasizing on estimation skills and its development through activities. ➤ Creating contexts in which children use standard weights to find out the weights of different objects. ➤ Asking children to have collection of containers/pouches so as to discuss different things which are measured in milliliters and liters. Some of these containers may be used in conjunction with standard measures. ➤ Using of toy clocks/ prepared by children or other clocks in the classroom or at home to read time in hours, minutes and seconds. 	<ul style="list-style-type: none"> ➤ Measuring flasks with different markings for measurement. ➤ Shapes of cube, cuboid. ➤ Toy clock prepared by children (<i>to read time in hours, minutes, seconds</i>).

Integration: Science (Measurement)

Life Skills: solving daily life problems

Theme 6: Data Handling

This theme will enable children to discover and learn varied mathematical ways of collecting and using information. In this class, the emphasis is given to more efficient ways of representing data by pictures and graphs. The reading and interpretation of graphs is further enhanced to inculcate the data handling skills. Children will also be encouraged to draw their own graphs and pictures for the data collected by them as they will be in a better position to do so.

Learning Outcomes:

Children will be able to:

- represent collected data in pictographs using stickers, pictures etc.;
- read bar graphs and make observations based on more or less.

Data Handling		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none">Pictorial representation of the raw data.Interpretation of bar graph.	<ul style="list-style-type: none">Taking up data handling activities (slightly more complex) for representation in different graphical forms.Asking children to do simple graphical data representation from newspapers/magazines and interpreted in the class along with discussions on it.Organising group projects involving children in focusing on collecting data, interpreting it and then pictorially representing the same in terms of a bar graph.	<ul style="list-style-type: none">Coloured papers, glue sticks, markers, stickers of different objects.Cuttings of pictographs, bar charts, etc. from newspapers, magazines.Videos and PPTs (of simple data, findings that are presented in graphs).

Integration: Arts Education

Life Skills: Interpretation and analysis

Theme 7: Patterns

The aim of this theme will be to make children aware of and practice how to find patterns, extend them and express in various ways thereby enabling them to initiate the process of thinking towards generalizations which is termed as algebra in upper primary classes. The decimal system (base 10 place value system) has its base on patterns and their further extension from one to tens to hundreds to thousands Similarly, characteristics of shapes and figures are generalized on the basis of patterns.

Learning Outcomes:

Children will be able to:

- observe and identify patterns with more than one characteristic, like growing and reducing patterns;
- create a rule based on observations for extending the pattern in shapes and numbers.

Patterns		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none">▶ Growing and reducing patterns.▶ Rule to extend a growing/reducing pattern in shapes and numbers.	<ul style="list-style-type: none">▶ Planning activities around patterns in which children are able to formulate a rule and verify it for the extension of pattern.	<ul style="list-style-type: none">▶ Shapes, coloured papers, stamping tools, stamp pads, ink, water colours, vegetables etc.

Integration: Arts Education

Life Skills: Logical thinking

Science

1. Adaptations In Plants

I. Land Plants

II. Water Plants

III. Food For Plants

2. How Plants Make Food

I. How Do Plants Make Food ?

3. Adaptation In Animals

I. Animals Living On Land

II. Animals Living In Water

III. Animals Living On Both Land And Water

IV. Animals Living On Trees

V. Animals That Fly

VI. Adaptation For Food

VII. Adaptation For Protection

4. Reproduction In Animals

I. Animals That Give Birth To Babies

II. Animals That Lay Eggs

III. Insects

IV. Other Egg Laying Animals

5. Food

I. Proteins To Grow

II. Carbohydrates For Quick Energy

III. Fats For Energy And Warmth

IV. Vitamins And Minerals For Good Health

V. Water Is Necessary For Your Body

VI. Balanced Diet

VII. Cooking Food

VIII. Preserving Food

6. Digestion

I. Why Is Digestion Of Food Necessary ?

II. Digestion Starts In The Mouth

III. Digestion In The Stomach

IV. Digestion Is Completed In The Small Intestine

V. Undigested Food Is Thrown Out

VI. Good Eating Habits

7. Teeth And Microbes

I. You Have Different Kinds Of Teeth

II. Structure Of A Tooth

III. Taking Care Of Your Teeth

IV. Microbes

8. Safety And First Aid

I. Safety At Home

II. Safety At School

III. Safety On The Play Ground

IV. Safety On The Road

V. First Aid

9. Our Clothes

I. What Are Clothes Made Of ?

II. Clothes For Work

III. Care Of Clothes

10. Air, Water And Weather

I. What Causes The Wind To Blow ?

II. What Causes Land And Sea Breezes ?

III. Evaporation And Condensation

IV. What Causes Clouds And Rain ?

V. The Earth's Water

11. Our Universe

I. The Stars And The Sun

II. The Planets And The Solar System

III. Some Facts About Planets

IV. The Earth

V. How The Earth Moves

VI. Revolution Of The Earth Causes The Seasons

12. Matter

I. The States Of Matter

II. Change Of State

III. Solutions

13. Force, Work And Energy

I. Force

II. Kinds Of Forces

III. Work

IV. Energy

V. Sources Of Energy

14. Our Environment

I. What Does Our Environment Give Us ?

II. How We Damage Our Environment

III. Biodegradable And Non-Biodegradable Waste

IV. How Can We Help ?

*SOCIAL
STUDIES*

Theme 1: The Story of the Past

"Story of the Past and Evidences in History" enables children understand the impact of past events in today's context. They learn to appreciate the rich heritage and traditions based on historical facts and evidences. Interesting pedagogies can be employed to familiarize them with the work of both historians and archaeologists.

Learning Outcomes:

Children will be able to:

- ☑ discuss the role and significance of historical events in today's context;
- ☑ reflect orally and in writing on historical events;
- ☑ differentiate between ancient, medieval and modern periods of history;
- ☑ differentiate between archaeological and literary sources;
- ☑ discuss the importance of preservation of sources to know history;
- ☑ differentiate between the job of a historian and an archaeologist.

The Story of the Past and Evidences in History

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<p>➤ Story of the Past – History</p> <ul style="list-style-type: none"> ➤ The need to study History ➤ Need to compartmentalise History into Ancient, Medieval and Modern periods. <p>➤ Evidences in History – Sources of history</p> <ul style="list-style-type: none"> ➤ Archaeological sources. ➤ Literary sources: Books and paper records. ➤ Need to preserve sources, job of a historian and of an archaeologist. 	<ul style="list-style-type: none"> ➤ Explaining what history is and asking children to relate their own past experiences and reflect on how it has influenced them today. ➤ Organising a discussion on the significance of learning history. ➤ Asking children to have interactive sessions with their grandparents to share their past experiences. Then, encouraging children to talk about their family history. ➤ Discussing the needs and various ways of compartmentalising history by historians to facilitate the learning of the topics. ➤ Showing videos of manuscripts and archaeological sources. ➤ Discussing the importance of maintaining records in terms of their notebooks, the class attendance registers and school display boards. ➤ Encouraging children to talk to their elders about carefully preserving family records and important documents. ➤ Organising trips to local monuments, historical places or a museum. ➤ Showing a video about how an 	<ul style="list-style-type: none"> ➤ Pictures and documentaries of early man. ➤ Clay Tablets and stick to write with ➤ Videos on archaeological sites and remains of past ➤ Old newspaper for paper-machine. ➤ Flashcards, pictures and charts depicting buildings and monuments. ➤ Collection of old coins. ➤ Collection of stamps. ➤ <i>Amar Chitra</i> Katha.

The Story of the Past and Evidences in History

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
	<p>archaeologist gathers information through archaeological sites and remains.</p> <ul style="list-style-type: none"> ➤ Facilitating role play to differentiate between what a historian and an archaeologist does. ➤ Displaying and studying of old coins. ➤ Displaying and studying of old and new stamps. <p><i>Organising and Providing opportunities for:</i></p> <ul style="list-style-type: none"> ☛ Writing on a clay tablet/ mud ☛ Making handmade paper through paper machine, and preparing a manuscript ☛ Matching game of pictures and names of monuments ☛ Coin rubbing and taking impressions of it on the paper 	

Integration: Languages

Life Skills: Care and appreciation of Cultural Heritage



Theme 2: Almanac

'Almanac' highlights the importance, significance and types of calendars. Sequencing of events and marking important dates on the time line will further enrich children with an understanding of the past.

Learning Outcomes:

Children will be able to:

- ☑ differentiate between the Gregorian and Saka calendars;
- ☑ draw a timeline and mark AD (CE) and BC (BCE) on it;
- ☑ design a calendar on the basis of their understanding of the rules;
- ☑ sequence events and mark them on a timeline;
- ☑ identify and mark important dates on the school calendar.

Almanac		
Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Gregorian calendar. ➤ Saka calendar. ➤ Time-line (A.D. and B.C.). ➤ Use of C.E. and B.C.E. 	<ul style="list-style-type: none"> ➤ Showing a calendar and asking children to mark specific events / important days on it. ➤ Helping children to mark the birthdays of class mates with the help of a collage / poster. ➤ Providing a brief and basic introduction to the Gregorian and Saka calendars. ➤ Discussing and highlighting the differences between the Gregorian and Saka calendars. ➤ Explaining the use of the terms AD and BC and the newer terminology CE and BCE on calendars and presenting it through a timeline. Creating futuristic calendar ➤ Drawing pictures / writing articles / poems etc. ➤ Writing narratives. <p><u>Providing opportunities for:</u></p> <ul style="list-style-type: none"> ☛ Enabling children to design, use their knowledge and innovation and create a futuristic calendar. ☛ Giving them a situation to observe a day without a calendar or clock and writing their own narratives. ☛ Designing a board game: Observing one day for causes such as Respect, Honesty, Praise, Compassion ☛ Designing a calendar and marking days and events of their choice on them. ☛ Drawing pictures or writing articles, poems about important national days or events in that months 	<ul style="list-style-type: none"> ➤ Calendars –present day calendars, Saka calendar, school calendar. ➤ Charts. ➤ Flash Cards. ➤ Board games.

Integration: Mathematics (Measurement)

Theme 3: Responsibilities of a Good Citizen

'Responsibilities of a good citizen' is crucial as it aims to make children understand the importance of civic sense and their responsibilities as a citizen of India. In an urban society that also reflects a sense of alienation, children must be taught how to develop a sense of unity and belongingness in a community. Varied interesting pedagogies enable them to observe and understand how these concepts play out in the world around us.

Learning Outcomes:

Children will be able to:

- ☑ discuss the term civic sense, and appreciate its significance;
- ☑ describe and reflect on the term citizen;
- ☑ demonstrate respect towards public and private property;
- ☑ suggest measures for proper upkeep of public property;
- ☑ initiate responsibilities for solving issues in school and in neighbourhood.

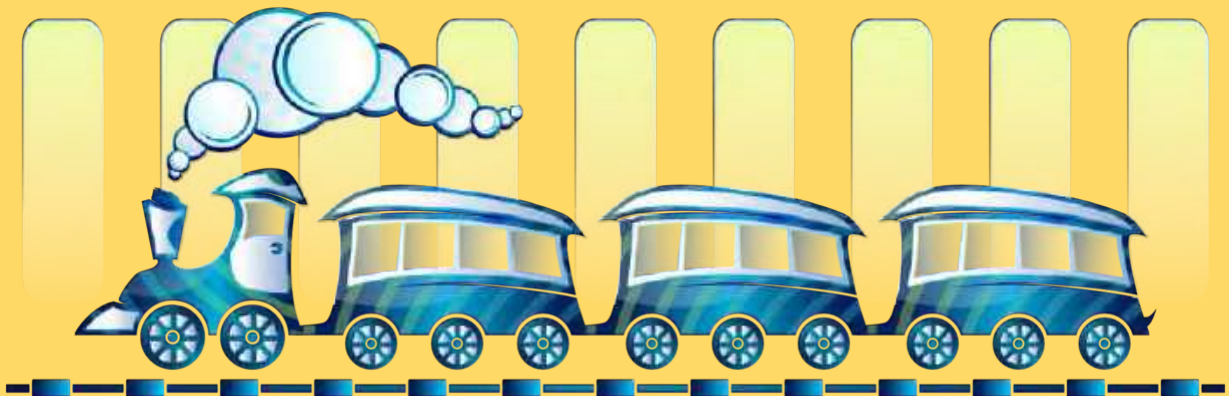
Responsibilities of a Good Citizen

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▷ Introduction to Civics <ul style="list-style-type: none"> ☛ Definition of: Civics, Civic sense, Citizen. ☛ Importance of being a good neighbour and a good citizen. ▷ Responsibilities of a good citizen: <ul style="list-style-type: none"> ☛ Participation in elections. ☛ Caring for public and private place for example – schools, hospitals. Public transport, historical monuments, places of worship, parks, etc. 	<ul style="list-style-type: none"> ▷ Encouraging the sharing of experiences by children on studying together and helping one another. ▷ Facilitating classroom discussions on the meaning and maintaining of civic sense. ▷ Motivating children to adopt good civic habits in their daily lives. ▷ Analysing the need for caring for public property through classroom participation. ▷ Motivating children to create community awareness on cleanliness/road safety/value for work/ care for public property. ▷ Conducting group discussions in the classroom on the qualities of and expectations from a class representative or a prefect to make children understand their responsibility. ▷ Conducting class elections to choose a class monitor or a prefect. ▷ Report writing on the class elections. ▷ Encouraging children to research and gather information on the recent elections in their state, through newspapers and digital media. 	<ul style="list-style-type: none"> ▷ Community awareness programs. ▷ Print (newspapers, books...) and digital media. ▷ Flash cards. ▷ Coloured sheets for activities. ▷ Slogan writing. ▷ Role play.

Responsibilities of a Good Citizen

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
	<p><u><i>Providing opportunities for Activity</i></u></p> <ul style="list-style-type: none"> • Dividing the class into groups and giving them situations related to civic sense and good citizenship and having a discussion on what is civic sense and good citizenship. • Facilitating the preparation and presentation through street play/ slogan writing / skit / puppet show, etc. • Slogan making and designing a logo with mission and campaigning for the class election 	

Life Skills: *Developing good citizenship skills*



Theme 4: The Earth – Its Movements & Forms

'The Earth- Its Movement and Forms' enables children to understand the concept of movements of the earth. It aims to generate awareness about the four realms of the earth i.e. lithosphere, hydrosphere, atmosphere and biosphere. It will also enable them to identify and mark the major land forms of the Earth on an outline map of the world. Scale and cardinal directions will be introduced which will enhance their mapping skill.

Learning Outcomes:

Children will be able to:

- identify axis, rotation and revolution of the earth;
- explain causes of day and night and seasons;
- differentiate the four domains of the earth;
- identify major landforms and water bodies;
- locate oceans and continents on the map;
- differentiate between physical and political maps;
- use signs and symbols on the map;
- identify the purpose of using different colour schemes on the map;
- use scale and directions in mapping.

The Earth – Its Movements & Forms		
Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▷ Motions of the Earth: <ul style="list-style-type: none"> ☛ Concept of Axis ☛ Rotation – Day and night ☛ Revolution - Seasons ▷ The Four Domains of the Earth: <ul style="list-style-type: none"> ☛ Lithosphere ☛ Hydrosphere ☛ Atmosphere ☛ Biosphere ▷ Major Land Forms: <ul style="list-style-type: none"> ☛ Mountains, Plateaus and Plains, deserts ☛ Continents and oceans ☛ Water bodies: oceans, seas, lakes and rivers ▷ Types and elements of Maps: <ul style="list-style-type: none"> ☛ Types of maps (physical, political) ☛ Scale ☛ Sign and symbols; Use of colours. 	<ul style="list-style-type: none"> ▷ Using a globe and torch to explain the rotation of the earth, day and night. ▷ Showing a video or diagrams to explain revolution. ▷ Discussing the four domains of earth using globe/model or PPTs with children. ▷ Explaining the difference between physical and political maps. ▷ Providing children maps to undertake mapping of landforms and water bodies. ▷ Marking and identifying continents and oceans on an outline map of the world. ▷ Discussing the utility and use of the scale on the map. ▷ Showing the use of different colours on a physical map of the world and explaining the purpose of their use. ▷ Taking children to an open area in the morning and helping them understand the directions facing the rising sun. ▷ Conducting class quizzes and providing worksheets to children to complete. <p><u>Providing opportunities for:</u></p> <ul style="list-style-type: none"> ☛ Making of models or charts to be made to depict the four domains ☛ Writing poems and organising activities on right and left and east, west, north and south directions. 	<ul style="list-style-type: none"> ▷ Globe ▷ Torch ▷ Videos/PPTs ▷ Maps ▷ Poems ▷ Hands -on activities ▷ Class quizzes

Integration: Science (Air, Light), Arts Education

Theme 5: Our State

'Our State' familiarizes children with the geographical features and climate of the state in which they live. It helps them identify the agricultural practices and major crops of the state. Children may be able relate to their own area with other parts of the state.

Learning outcomes:

Children will be able to:

- ☑ locate the state they live in on the map of India;
- ☑ locate the capital, important cities, landforms and rivers on the state map;
- ☑ learn about the climate (seasons), vegetation and agricultural crops;
- ☑ appreciate the cultural heritage of the state they live in.

Our State		
Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Location of States on the map of India. ➤ Neighbouring States/water bodies. ➤ State and its capital. ➤ Important cities. ➤ Land forms and rivers. ➤ Climate ➤ Vegetation ➤ Agriculture- Types of crops. 	<ul style="list-style-type: none"> ➤ Mapping the different states on the Map of India. ➤ Facilitating class discussions, showing videos or organising class trips to learn about the state capital. ➤ Identifying and naming the major landforms and rivers. ➤ Conducting quizzes on important features of the State. ➤ Showing videos and PPTs on the seasons, vegetation and crops-to be followed by a class discussion. ➤ Children discussing with elders and peer group on the important state festivals and in particular related to crops. ➤ Marking important rivers, mountains, hills, cities and the capital of the state on an outline map of the state by children individually. ➤ Assigning project work too small groups on the state (Writing a few simple lines about the state and attaching pictures). <p><u>Organising Activities</u></p> <ul style="list-style-type: none"> ➤ Local vegetables and samples of crops can be brought by the school or bought by children. Children can design name cards for them. ➤ Children can bring picture posts cards about the state and display these on the class bulletin board. ➤ Children can learn a traditional folk song or a folk dance and perform it in class. They can compose and set music to a song describing the state 	<ul style="list-style-type: none"> ➤ Map of India and the state (Physical and Political) ➤ Relevant videos and PPTs. ➤ Samples of crops and vegetables grown in the state. ➤ Videos /Audios on Folk songs and dances of the state. ➤ Information Brochures, cards and posters.

Integration: Languages, Science (Human Body-Food we eat, Adaptations in Animals/Plants)

Life Skills: Appreciate the Cultural Heritage

Theme 6: India – Unity in Diversity

India - Unity in Diversity familiarizes children with the diverse geographical features of the Indian subcontinent. They will be able to relate the geographical and socio-cultural features of the place in which they live with those of other parts of the country. Children would also understand and appreciate the similarities and differences in the lives of people living in different parts of the country.

Learning Outcomes:

Children will be able to:

- ☑ identify the major physical divisions of India;
- ☑ locate major mountains, hills, rivers, plateaus on the map of India;
- ☑ identify similarities and differences in the lives of people in India;
- ☑ appreciate unity despite diversities in their country.

India – Unity in Diversity		
Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ India – Physical Divisions <ul style="list-style-type: none"> ☛ The Himalayas ☛ Northern Plains ☛ Peninsular plateau ➤ Major Rivers of India <ul style="list-style-type: none"> ☛ Perennial and non-perennial (Krishna, Kaveri, Mahanadi, Narmada, Indus, Ganges, Yamuna, Brahmaputra) ➤ People <ul style="list-style-type: none"> ☛ Population ☛ Language ☛ Festivals ☛ Food Habits ➤ Unity in Diversity 	<ul style="list-style-type: none"> ➤ Locating and marking major mountains, hills, rivers and plateaus on the map of India. ➤ Encouraging the sharing of experiences of children on their visits to mountains, plains, water bodies, deserts etc. ➤ Discussion on the life of people living in mountains, deserts, plains etc. ➤ Discussion on effects of physical features of a place on density of population. ➤ Organising group work/projects on: <ul style="list-style-type: none"> ☛ Preparing a chart on different festivals and food habits of people living at different places in India. ☛ Searching and enlisting different languages spoken at different places in India. ➤ Discussing with children the factors that unite us despite diversities. ➤ Organising games, quizzes and puzzles on different rivers, languages, festivals and food habits of people. ➤ Preparing a menu card of important food items of the different states in India. ➤ Encouraging children to develop collages, poems etc. on the festivals of India. ➤ Celebrating different festivals in the school. 	<ul style="list-style-type: none"> ➤ Map, Wall map and Globe) ➤ Games and puzzles ➤ Pictures and Videos of Different Festivals in India. ➤ Collection of Menus /Food items from different parts in India and food habits. ➤ Pictures of People from different states - their dress, and accessories etc. ➤ List of Important Mountains, Rivers, Languages spoken etc.

Integration: Languages, Arts Education

Life skills- respect, empathy, sensitivity, compassion

Theme 7: Pollution – Its Impact on the Environment

This theme aims at generating awareness and an understanding amongst children about the effect and impact of pollution on the environment. It will also emphasize the importance of potable water and its scarcity in different parts of the world and children will be made aware and sensitized to take initiatives to save water in their home and neighbourhood.

Learning Outcomes:

Children will be able to:

- ☑ discuss various causes of pollution in the surrounding/environment;
- ☑ enlist kinds of pollution (their causes and effects).
- ☑ identify the causes of pollution.
- ☑ enumerate the effects of pollution.
- ☑ sensitize the children about the importance of preventing pollution.
- ☑ suggest ways to reduce various kind of pollution.
- ☑ demonstrate sensitivity towards right methods of waste disposal.

Pollution – Its Impact on the Environment

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Pollution – meaning ➤ Causes, effects and prevention of pollution. ➤ Waste disposal (Conserving the environment, Reduce, Recycle and Reuse) ➤ Case studies of air, water and noise pollution. 	<ul style="list-style-type: none"> ➤ Organising group discussions on children’s own experiences on pollution. ➤ Showing videos about pollution followed by children sharing their views on the videos. ➤ Providing information on causes and effects of pollution. ➤ Encouraging children to discuss and analyse the information provided about causes of pollution and suggest methods to prevent pollution. ➤ Creating situations to discuss various methods for disposal of waste necessary for conservation of environment (Reduce, Recycle and Reuse) ➤ Assigning project work (groups/individually)to children on causes of pollution and action required on their part and that of others to improve the environment. ➤ Creating situations for children to creatively express their ideas about pollution and its effect by writing slogans, poems, stories and/or drawings/paintings etc. 	<ul style="list-style-type: none"> ➤ Classroom discussions. ➤ Narratives – experiences of teachers and children. ➤ Videos/PPTs ➤ Charts ➤ Project work ➤ Dustbins – for biodegradable and degradable waste ➤ Case studies

Pollution – Its Impact on the Environment

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
	<ul style="list-style-type: none"> ➤ Collecting news /information on the theme and analysing/discussing them. ➤ Motivating and organising a case study on air, water and noise pollution. <p><i>Providing opportunities for activities:</i></p> <ul style="list-style-type: none"> ➤ Making of a group chart on the causes, effects and prevention of pollution ➤ Case study-water pollution in neighbourhood 	

Integration: Science (Air), Languages

Life Skills: Concern for the environment, care and concern for the resources

