SYLLABUS OUTLINE FOR MATHEMATICS CLASS III

Competencies	Main themes	Activities/Methods	Evaluation	Periods	Term
Understanding shapes and space	Geometrical shapes and Designs of 2-D shapes	• Creates shapes through paper folding and paper cutting • Identifies and names different shapes • Children will make a clapper through paper folding • Children will colour different shapes • Children will draw and count the different shapes • Children will count the sides, vertices and diagonals of 2-D shapes • Children will make shapes on the dot-grid using straight lines and curves • Children will make different shapes from pieces of tangram • Matches the properties of 2-D shapes by observing their sides and vertices • Tiles a given region using a tile of a given shape.	Observation, Oral and Written work	15	I
	Edges and Corner of 3-D objects	• Make Children to identify the edges and corners from the daily life situations • Uses concrete materials which have corners and edges • Names the 3-D shapes and list the number of edges and corners • Draw some 3-D objects.	Oral, Observation and Written work	10	I

NUMBERS: Ability to read, write and use 3 digit number	Number sequence up to 1000	• Reading and writing of numbers up to 1000, using concept of place values • Ordering of numbers using groups • Teachers could use other instances, such as bundles of leaves, school assembly, design on mats etc.. to make them guess and estimate different numbers • Expand a number with respect to place values • Count in different ways starting from any number • Compare numbers • Skip counting or jumping e.g (i). 104, 106, 108, ___, ___, ___ (ii). 105, 108, 111, ___, ___, ___ • Form greatest and smallest numbers using given digits	Oral, Observation and Written work	16	I
Ability to compute addition and subtraction	Addition and subtraction	• Story telling about give and take • Adds and subtracts numbers by writing them vertically in the following cases: - Without regrouping - With regrouping • Uses the place value in standard algorithm of addition and subtraction • Solves addition and subtraction problem in different situations presented through pictures and stories. • Frames problems for addition and subtraction facts • Estimates the sum of, difference between	Oral, Observation and Written work	15	I

		two given numbers. • Solves problems through games and puzzles			
Ability to compute multiplication	Multiplication	• Explain meaning of multiplication as repeated addition • Uses concrete objects e.g *One boy has two hands* *Two boys have four hands* ------- *One spider has 8 legs* *Two spiders have 16 legs* ----- • Identifies the sign multiplication • Jumps with 2 steps, 3 steps, 4 steps and so on (skip counting) • Construct the multiplication tables • Uses multiplication facts in life situations • Multiplies one digit number • Multiplies two digit numbers with one digit number • Multiplies 2-digit numbers using standard algorithm and lattice multiplication algorithm.	Oral, Observation and written work	18	II
Ability to compute division	Division	• Explain the meaning of division from context of equal grouping and sharing • Encourage children to share things equally and allow them to write corresponding division statements • Relates division with multiplication • Completes division facts by grouping and by using multiplication tables	Oral, Observation and written work	16	III

		• Encourage children to explore the use of multiplication facts for division through mental computations			
MENTAL ARITHMETIC Ability to compute mentally	**Mental Arithmetic**	• Adds and subtracts single digit numbers and two digit numbers mentally. • Doubles two digit numbers mentally (result not exceeding two digits)	Oral testing	6	I,II, III
MONEY: Knowing the relation of a rupee with paise Ability to compute	Money Addition and Subtraction amounts.	• Use play-money to develop the idea of rupee and paise. Ask children to pick up coins (play money) to make a rupee • With the help of play money, organize a game with children to enable them to add/subtract the amount in term of Rupee and paise • Teach children the use of money in everyday life situation e.g., bus fare, taxi fare, shopping etc • Show the children the cash memo prepared by shop keepers. • Prepare a cash memo, bills, rate charts.	Oral, Observation and written work Oral, Observation and written work	4 8	III III
MEASUREMENT: **Length:** Ability to know, understand and measure length	Measurement of length using local or non-standard units	• Children should be encouraged to look around and see how lengths of things are measured in different ways using local or non-standard units of length. For example, a rope, a garland or a cloth may be measured by cubit, handspan, fingers etc.. They also need to do activities of measuring lengths (and distances) with their own body parts	Oral and Observation	2	II

	Measurement of length using standard units	• Appreciates the need for a standard unit. • Teach children how to use a ruler in measuring length • Teach children how to use a measuring tape • Bring some concrete materials in the class and encourage children to measure their length in centimeter (cm) • Encourage children to measure parts of body e.g, hand, head, ear, nose, wrist and allow them to compare measurement among themselves. • Children should draw three/ four tracts between two destinations (points) and find the shortest and longest tract. • Ask children to measure their height using a measuring tape in terms of meter and centimeter. • Relates centimetre and metre. • Allow children to estimate how long is a meter • Give an activity for children to make a metre rope. • Using a metre rope allow children to measure length, breadth of chair, table, bench, desk in the class • Ask children to measure and mark 1 metre height on the wall of a room and allow them to compare who is more than 1 metre and is less than 1 metre	Oral, Observation and written work	12	II

		• Ask children to prepare a chart of heights of their friends.			
Weight: Ability to know and understand about weight	Non-standard unit of weight (Who is heavier?)	• Place two bags one heavier than the other and asks children to lift the bags to find out which is heavier. • Involve children into a playway activity by playing a see-saw to find out who is heavier.	Oral, Observation and Written work	3	II
	Standard units of weight.	• Story telling activity about growth and weight and how weight increases with growth • Ask children to list the ages of their family members with their respective weights	Observation and written work	5	II
Volume: Ability to understand about volume	Measuring and comparing the capacity.	• Story telling relating to capacity. • Measure and compares the capacity of different containers • Show the children a 1 litre bottle and a ½ litre bottle • Encourage children to list the containers in terms of litre • Use a litre bottle to fill a bucket/container to get its capacity • Appreciates the conservation of volume	Oral, Observation and Written work	8	III
Time: Ability to measure time	Measurement of time.	• Story telling relating to time. • A teacher will tell a story on how a child spends a day right from the time he/she gets up till the time he goes to bed.	Observation and written work	3	II

<table>
<tr><td></td><td></td><td>• A teacher will help children to read time correct to the hour.</td><td></td><td></td><td></td></tr>
<tr><td>Ability to read a calendar</td><td>Reading a calendar and find a particular day and date</td><td>• Prepare a calendar and ask children to indicate their birth day
• Prepare a chart of the names of children with their birthday and allow them to mark on the calendar
• Prepares a chart of the names, day and date of festivals celebrating during a year.</td><td>Observation and written work</td><td>5</td><td>II</td></tr>
<tr><td rowspan="2">Data Handling:
To enable children to know about data handling</td><td>Data recording using tally marks</td><td>• Give children a picture of flowers. Each group of flowers have different colours. Make children count the number of flowers having the same colour and ask them to record in this manner:
<table><tr><th>Colour of flower</th><th>Number of flower</th></tr><tr><td>Blue</td><td></td></tr><tr><td>Red</td><td></td></tr><tr><td>Orange</td><td></td></tr><tr><td>Purple</td><td></td></tr></table>• Make children to explore recording of data using tally marks from life situations.</td><td>Observation and written work</td><td>9</td><td>III</td></tr>
<tr><td>Pictograph</td><td>• Collect data and represents in terms of pictograph choosing appropriate scale and unit for displaying through pictographs
• Draws conclusion from the data.</td><td>Observation and written work</td><td>3</td><td>III</td></tr>
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Patterns: Ability to identify and understand patterns.	**Patterns**	• Identifies patterns we see in every day life e.g, Barbed wire, Grills of a window, a snake etc.. • Complete the patterns (Practice time) • Children are advised to develop new (growing) patterns on their own. • Make patterns and designs for straight lines and other geometrical shapes • Give children numbers e.g, 21, 41, 61, 81, __, __, __ …. Ask children to write next number(s). • Making of secret messages/codes to help children in pattern recognition. • Help children to understand the rule so that they can develop patterns by themselves. • Identifies patterns in multiplication with and dividing by 10s	Observation and written work	7	III