

# TERM-WISE SYLLABUS-(2019-20)

**Class- IV**

**Subject- Mathematics**

| TERM-I (Upto September 2019)  |   |  |  |
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| Textbook Chapters   | Learning Outcomes   | Activity   | Worksheet  |
| <b>Revision: Number sense and word problems</b>   | <ul style="list-style-type: none"> <li>Applies operations of numbers in daily life</li> </ul>   | <ul style="list-style-type: none"> <li>(Before WS 10) Free play with balance in groups, followed by each group writing on the board combinations of items which have been balanced, using '=' sign.</li> </ul>   | 1, 4, 5, 6, 8, 9, 10, 11, 22, 24, 26, 27, 31, 35, 36, 37, 38, 39, 41, 42, 43, 45, 48, 49, 50 |
| <b>Revision: Geometry</b>   | <ul style="list-style-type: none"> <li>Acquires understanding about shapes around her/him</li> </ul>  | <ul style="list-style-type: none"> <li>(Before WS 2, 3) Making straight lines by stretching a sutli. Drawing lines in different directions and extending them.</li> <li>(Before WS 28) Activities for comparing angles using jhaadu ki tilli and making bigger or smaller angles</li> <li>(Before WS 28) Children make a figure of their choice using jhaadu ki tilli or drinking straws and count the number of closed figures and the number of sides of each figure. They see that the number of sides is the same as number of angles inside the figure. They name figures based on the number of sides – triangle, quadrangle etc.</li> <li>(Before 30) Children identify the biggest and smallest angles given inside figures made with straws or jhaadu ki tilli, later drawn on the board.</li> <li>Group activity - Making many different triangles using straws. They identify which triangles are different by super-positioning them.</li> </ul> | 2,3,28,29, 30  |
| <b>Unit 1 Building with Bricks</b><br>Floor patterns, different patterns, solving problem based on brick cost, numbers etc. | <ul style="list-style-type: none"> <li>Acquires understanding about shapes around her/him</li> <li>Finds out shapes that can be used for tiling.</li> </ul> | <ul style="list-style-type: none"> <li>Make patterns with different shapes made in your house, around your house or historical places</li> <li>Make any wall pattern seen in your neighborhood or school</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p>   | 98,99,100, 101   |

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| <p><b>Unit 10 Play with Patterns</b><br/>Block patterns and designs, pattern with letters and numbers, completion of pattern of series, magic patterns, magic triangle, building of number patterns, patterns with addition of different numbers, decoding of different numbers and letters, floor patterns</p> | <ul style="list-style-type: none"> <li>• Observes, identifies and extends geometrical patterns based on symmetry</li> <li>• Shows through paper folding/ paper cutting, ink blots, etc. the concept of symmetry by reflection</li> </ul>     | <ul style="list-style-type: none"> <li>• Make your own designer blocks and draw a series of patterns on a cloth/ paper</li> <li>• Complete and fill the magic patterns</li> <li>• To complete the magic patterns of number series with addition</li> <li>• Use different geometrical shapes and make your floor patterns</li> <li>• Make a magic triangle with number using 1,2,3,4,5,6 and the sum of the numbers in each line is 10</li> </ul> <p><b>Mental Maths</b></p>  | <p>119,120, 121</p>             |
| <p><b>Unit 2 Long and Short</b><br/>Distance between two points, concept of long and short, guessing the distance, comparison of length, unit of measuring length- cm, m, km</p>  | <ul style="list-style-type: none"> <li>• Estimates the length of an object/distance between two locations, weight of various objects, volume of liquid, etc., and verifies them by actual measurement.</li> </ul>                            | <ul style="list-style-type: none"> <li>• Estimate the length of an object and measure to find the length in centimetres. For e.g. Children measure their foot length in centimetres</li> <li>• Estimate the distance and measure in metres and later in metres and centimetres according to the distance</li> <li>• Estimating and drawing a 1 metre line on the board, finding its actual measure and difference from the estimate.</li> <li>• Comparing heights of students in groups of 10, making a list of all the students in the class with their heights in increasing order. Relationship between cm, m, km etc.</li> <li>• Addition/subtraction of different lengths</li> <li>• Making metre scale using cardboard</li> </ul> <p><b>Mental Maths</b></p> | <p>14(pg16), 15, 16, 18, 53</p> |
| <p><b>Unit 3 A Trip to Bhopal</b><br/>The buses, estimation of buses, beginning of the journey (estimation of time), to Bhimbetka(estimation of length, distance),lunch time estimation of time, boating problems of cost and time</p>  | <ul style="list-style-type: none"> <li>• Applies operations of numbers in daily life</li> <li>• Creates and solves simple real life situations, problems including money, length, mass and capacity by using the four operations.</li> </ul> | <ul style="list-style-type: none"> <li>• To solve puzzles orally based on addition, subtraction, multiplication and division like cost, money or time etc</li> <li>• Simple examples from daily life for estimation without calculations</li> <li>• Estimation of daily purchases and the weekly budget of your home</li> <li>• Estimation of simple calculations at your home</li> <li>• Collect different types of tickets and make a collage</li> </ul> <p><b>Mental Maths</b></p>  | <p>19,20,21,7 7</p>             |

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| <p><b>Unit 4 Tick-Tick-Tick</b><br/>Understanding the clock and time reading, different hands of clock, making a clock and reading time, relation between different hands of clock second, minute and hour hand, drawing a timeline to show different events, conversion of seconds into minutes and hours into vice versa, reading, writing up dates-format comparison of time, manufacturing, expiry dates of products, time format (12 hour, 24 hour clock, Railway clock)</p> | <ul style="list-style-type: none"> <li>• Reads clock time in hour and minutes and expresses the time in a.m. and p.m.</li> <li>• Relates 24 hour clock with respect to 12 hour clock.</li> <li>• Calculates time intervals, duration of familiar daily life events by using forward or backward counting, addition and subtraction.</li> </ul> | <ul style="list-style-type: none"> <li>• Make a clock with movable hands to show time</li> <li>• Make a clock to show 24 hours</li> <li>• Draw clock to show different time of a day</li> <li>• Problems on conversion of minutes into seconds and so on</li> <li>• Enlist the manufacturing/expiry date of any 10 products used at home</li> <li>• Problems to convert time - 12 hour clock to 24 hour (railway time) and vice versa</li> <li>• Make a list of activities that take about an hour</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p> | <p>32,33,34,65,110,111</p>                                   |
| <p><b>Unit 6 The Junk Seller</b><br/>Calculation of cost and value of things by multiplication, concept of loan, finding cost by verbal or mental calculation, different ways of multiplication, counting of currency coins and notes</p>   | <ul style="list-style-type: none"> <li>• Applies operations of numbers in daily life</li> <li>• Multiplies 2 and 3 digit numbers</li> <li>• Creates and solves simple real life situations, problems including money, length, mass and capacity by using the four operations.</li> </ul>   | <ul style="list-style-type: none"> <li>• Revisiting idea of ‘times’ through a story context and giving meaning to the symbol for multiplication ‘X’.</li> <li>• Role play of buyer and seller</li> <li>• Calculate the cost of groceries at your home for a week and month</li> <li>• To make a list of currencies used in different countries</li> <li>• Make a collage of different currencies used in different countries</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p>   | <p>12,13,17,23,25,40,44,46,47,58</p>                         |
| <b>REVISION AND MID TERM EXAMINATION</b>  |  |  |  |
| <b>TERM-II (OCTOBER 2019 TO MARCH 2020)</b>   |  |  |  |
| <p>Revisit – Number sense and word problems</p>   | <ul style="list-style-type: none"> <li>• Applies operations of numbers in daily life</li> <li>• Multiplies 2 and 3 digit numbers</li> </ul>  | <ul style="list-style-type: none"> <li>• Activities done in previous class for revision based on the concept and their extension.</li> </ul>   | <p>60,61,63,64,72,74,102,132,133,134,135,136,137,138,140</p> |
| <p>Revisit – Measurement</p>  | <ul style="list-style-type: none"> <li>• Converts metre into centimetre and vice-versa</li> <li>• Estimates the length of an object/distance between two locations, weight of various objects, volume of liquid, etc., and verifies them by actual measurement.</li> </ul>   | <ul style="list-style-type: none"> <li>• Activities done in previous class for revision based on the concept and their extension.</li> </ul>   | <p>59,62,73,80, 81</p>                                       |

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| <p><b>Unit 5 The Way The World Looks</b><br/>View of different objects from different directions, spacial understanding of direction and space, mapping your way, formation of dice by paper folding</p>  | <ul style="list-style-type: none"> <li>• Draws top view, front view and side view of simple objects</li> <li>• Draws cube/ cuboids using the given nets</li> </ul>  | <ul style="list-style-type: none"> <li>• Drawing pictures of the different views of small objects like books, box etc. – from the front, side or the top</li> <li>• Make a map of the way from your home to your school, a map of your school and a map of your classroom</li> <li>• Making a net for a dice</li> </ul> <p><b>Mental Maths</b></p>  | 7,51,52  |
| <p><b>Unit 7 Jugs and Mugs</b><br/>Measurement of liquids in l, ml, kl etc., conversion of ml into litre and vice versa, estimation of quantity according to size of different liquids used at home</p>   | <ul style="list-style-type: none"> <li>• Estimates the length of an object/distance between two locations, weight of various objects, volume of liquid etc. and verifies them by actual measurement.</li> </ul> | <ul style="list-style-type: none"> <li>• Collect pouches/bottles of different liquids used at home and note their measurements</li> <li>• Write different ways of making 1 litre by adding/multiplying different quantities of millilitre.</li> <li>• Collect a bottle/ Jar and mark millilitre/ litres etc. on it</li> <li>• Find the amount of water used for the different activities at our home in one day</li> <li>• Find out how much milk is used in a week</li> <li>• Is there any tap leaking in your school? If yes, find out how much water gets wasted in one day.</li> </ul> <p><b>Mental Maths</b></p>   | 75,76,79,89, 96                                  |
| <p><b>Unit 8 Carts and Wheels</b><br/>Circular shapes around us- wheel and bangles etc, drawing circle with different circular shapes, radius and diameter of circle, comparison of sizes of circles on the basis of radius, drawing circle using compass, center of the circle</p> | <ul style="list-style-type: none"> <li>• Acquires understanding about shapes around her/him</li> <li>• Identifies the centre, radius and diameter of the circle.</li> </ul>                                     | <ul style="list-style-type: none"> <li>• Enlist any five objects from your daily life which have circular shapes</li> <li>• Name some games in which we draw circles to play</li> <li>• Make three circles of different sizes using objects like the cap of a bottle</li> <li>• Draw different designs made of circles using a compass</li> <li>• (BeforeWS54) The right angle is introduced as a special angle and children are asked to mark the angles according to whether they are more than or less than a right angle. After these experiences, the terms acute and obtuse angles can be introduced.</li> <li>• Explain rectangles as quadrilaterals having equal angles which are right angle and squares as special rectangles</li> </ul> <p><b>Mental Maths</b></p> | 54,55,56,57,66,67,68,78,82,83,84,103,107,108,109 |

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| <p><b>Unit 9 Halves and Quarters</b><br/>Half and quarter parts(whole to part),dividing different shapes into halves and quarters, simple word and money problems on fractions, completion of whole part with given fraction (part of whole) 1/2, 1/4, 3/4parts of metre, litre and kilogram and 1 Rupee</p> | <ul style="list-style-type: none"> <li>• Works with fractions</li> <li>• Identifies half, one-fourth, three-fourths in a given picture (by paper folding) and also in a collection of objects.</li> <li>• Represents the fractions as half, one-fourth and three-fourths by using symbols respectively.</li> </ul>  | <ul style="list-style-type: none"> <li>• Introducing half and one-fourth and their symbols with the idea of equal sharing – through a story context</li> <li>• Identifying half, one-fourth in area based contexts</li> <li>• Cut rectangle sheets of paper into half and one-fourth in different ways</li> <li>• Make and cut different shapes on a piece of paper and divide them into 1/2 and ¼ by paper folding</li> <li>• Draw different geometrical shapes and show 1/2 and 1/4 parts with different colours</li> <li>• To complete the object when a fraction/ part of the object is given</li> <li>• To find 1/2,1/4, 3/4 of 1 m, 1 litre and 1 kilogram</li> <li>• To convert metre into centimetre, litre into millilitres</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p> | <p>14(pg17), 85, 86, 87, 88, 91, 92, 93, 94, 95, 104, 105, 106, 116, 123, 124, 125, 126, 127</p> |
| <p><b>Unit 11 Tables and Shares</b><br/>Tables, formation of tables, making table of higher number adding tables of 2 numbers, how many cats finding the number of legs, Gangu’s sweets: Finding number of boxes, cost etc. with division and multiplication</p>   | <ul style="list-style-type: none"> <li>• Identifies the pattern in multiplication and division (up to multiple of 10).</li> <li>• Divides a number by another number using different methods like equal grouping, repeated subtraction, by using inter-relationship between division and multiplication.</li> </ul> | <ul style="list-style-type: none"> <li>• Make the multiplication table of 15 or of any other number using the multiplication table of two different numbers</li> <li>• Simple multiplication problems</li> <li>• Role play of seller and purchasers</li> <li>• Multiplication and division exercises based on the Textbook chapter (Jumping animals and seashells)Simple word problems of multiplication and division</li> <li>• Different ways of division</li> <li>• Make any five word problems for division</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p>  | <p>69,90,97,131</p>  |
| <p><b>Unit 12 How Heavy? How Light?</b><br/>Compare weight of different things, unit of measurement of weight, weighing Balance, weight of elephant-comparative understanding, broken stones, post office-postage stamps, sending parcel according to weight</p>   | <ul style="list-style-type: none"> <li>• Estimates the length of an object/distance between two locations, weight of various objects, volume of liquid, etc., and verifies them by actual measurement.</li> </ul>   | <ul style="list-style-type: none"> <li>• Make a balance</li> <li>• Comparison of weights of objects like cotton, stones etc.</li> <li>• Collecting postage stamps of different countries</li> <li>• Make a table with the height and weight of your friends.</li> <li>• Role play based on textbook contexts - post office and weight of an elephant</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p>   | <p>122,130</p>   |
| <p><b>Unit 13 Field and Fences</b><br/>Concept of perimeter, how to find perimeter of given figure, simple</p>   | <ul style="list-style-type: none"> <li>• Explores the area and perimeter of simple geometrical shapes (triangle, rectangle,</li> </ul>  | <ul style="list-style-type: none"> <li>• Children can be asked to make different designs using Rangometry pieces and they can be asked to calculate the length needed to make</li> </ul>   | <p>70,71,112, 113,114,115,117,118</p>  |

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| <p>word problems of perimeter, puzzles and squares</p>   | <p>square) in terms of given shape as a unit like the number of books that can completely fill the top of a table.</p>                             | <p>a piping around it. Later children can be asked to make different triangles and to find out their perimeter</p> <ul style="list-style-type: none"> <li>• Find out the perimeter of given figures</li> <li>• Find the perimeter of your house, your classroom, playground, school garden etc.</li> <li>• Draw squares and rectangles of different sizes and compare their perimeters.</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p> |                        |
| <p><b>Unit 14 Smart Charts</b><br/>Concept of data handling, making frequency tables for time used in different activities, favourite food: Filling the tables</p> <p><b>Unit 6 The Junk Seller</b><br/>This chapter of SA-1 will be repeated and evaluated in SA-2 as per departmental Guidelines</p> | <ul style="list-style-type: none"> <li>• Represents the collected information in tables and bar graphs and draws inferences from these.</li> </ul> | <ul style="list-style-type: none"> <li>• Make a frequency table of the favourite subjects of your classmates</li> <li>• Chapati chart(pie chart) activities based on the contexts given in the textbook</li> <li>• Make a smart chart to show how many children of your class like tea, coffee, milk, cold drinks etc and draw inferences from it</li> </ul> <p style="text-align: center;"><b>Mental Maths</b></p>                                       | <p>128,129,139,141</p> |
| <p><b>REVISION AND ANNUAL EXAMINATION</b></p>  |  |   |                        |