

# DAV CENTENARY PUBLIC SCHOOL, PASCHIN ENCLAVE, NEW DELHI-87

## ACADEMIC PLAN (SESSION 2016-17)

CLASS - IV

SUBJECT:- MATHEMATICS

| Assessment /month | Content Topic/Subtopic  | Learning outcome/objective  | HW/ Assignment (No.)     | Activities   | Life skills  | Attitudes / Values  |
|-------------------|---|---|--------------------------|--|--|---|
| April (18)        | <p><b><u>Numbers upto 9,99,999</u></b></p> <ul style="list-style-type: none"> <li>Introducing 1 lakhs</li> <li>Writing numerals for number names and vice versa</li> <li>Place values</li> <li>Periods of a 6- digit No.</li> <li>Expanded form</li> <li>Comparing numbers</li> <li>Value based question</li> </ul> | <p>The learner will be able to –</p> <ul style="list-style-type: none"> <li>Real numbers</li> <li>Write number names</li> <li>Verify place values</li> <li>Write expanded forms</li> <li>Compare numbers using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>.</li> <li>Arrange given numbers in ascending and descending order.</li> </ul>        | <p>3</p> <p>Assign 1</p> | <ul style="list-style-type: none"> <li>Number Grid Based on the concept Successor, Predecessor, Place value, Smallest and greatest number up to 6 digit</li> <li>Making numbers using place value cards</li> </ul> | <ul style="list-style-type: none"> <li>Self awareness</li> </ul>   | <ul style="list-style-type: none"> <li>Decision making and awareness</li> </ul> |
|                   | <p><b><u>Addition and Subtraction</u></b></p> <ul style="list-style-type: none"> <li>Introduction of terms of addition</li> </ul>   | <p>The learner will be able to –</p> <ul style="list-style-type: none"> <li>Add and subtract 5 or 6 digit numbers</li> </ul>  |                          |  |  |   |
| May (15)          | <ul style="list-style-type: none"> <li>Properties of addition</li> <li>Adding orally</li> <li>Word Problems</li> <li>Introduction of terms of subtraction</li> <li>Properties of subtraction</li> <li>Word problems</li> <li>Value based question</li> </ul>  | <p>The learner will be able to –</p> <ul style="list-style-type: none"> <li>Subtract numbers upto 6 digit using regrouping</li> <li>Subtract a 6 digit no. from 6 digit no. with regrouping.</li> <li>Solve 1 or 2 step daily life problems involving addition and subtraction</li> <li>Add / subtract mentally the multiples of 10, 100 or 1000</li> </ul> | <p>5</p> <p>Assign 1</p> | <ul style="list-style-type: none"> <li>Consisting of addition tower and Magic square</li> <li>Oral quiz based on addition and subtraction(nos. used in quiz will be multiple of 10, 100or 1000)</li> </ul>         | <ul style="list-style-type: none"> <li>Problem Solving</li> <li>Decision making</li> <li>Self awareness</li> <li>Organizing</li> </ul> | <ul style="list-style-type: none"> <li>Problem Solving</li> </ul>               |

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|-------------------|---|---|---------------------|--|--|-------------------|
| July (19)         | <p><b><u>Multiplication</u></b></p> <ul style="list-style-type: none"> <li>• Introduction to terms Multiplicand and multiplier</li> <li>• Properties of multiplication</li> <li>• Multiplication orally</li> <li>• Word problems</li> <li>• Value based question</li> </ul> | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Multiply a no. up to 4 digit by a 2 or 3 digit with or without regrouping.</li> <li>• Solve 1 or 2 step daily life problem involving multiplication</li> </ul>               | 3                   | <ul style="list-style-type: none"> <li>• Crossword puzzle</li> </ul>   | <ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Critical thinking</li> </ul>     | July (24)         |
|                   | <p><b><u>Circles</u></b></p> <ul style="list-style-type: none"> <li>• Recognise objects</li> <li>• Terms related to circle(Radius, centre, diameter)</li> <li>• Construction of circles</li> </ul> <p><b>Mental maths</b><br/>More about circles</p>                        | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Identify units from different plans&amp; figures</li> <li>• Indicate centre and radius of the circle.</li> <li>• Construct a circle of given radius using compass</li> </ul> | 1                   | <ul style="list-style-type: none"> <li>• To find the centre off a circle by paper folding and verify that length of radius of the circle is same.</li> <li>• Make a design or rangoli pattern using circles</li> </ul> | <ul style="list-style-type: none"> <li>• Creative thinking</li> <li>• Presentation skills</li> </ul> |                   |

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|--------------------|---|--|---------------------------------------|--|--|---|
| August (20)        | <p><b><u>Division</u></b></p> <ul style="list-style-type: none"> <li>• Introduction to terms: Division, divided Quotient and Remainder</li> <li>• Relationship and checking of division</li> <li>• Division(orally)</li> <li>• Word Problems</li> <li>• Value based question</li> </ul> <p><b><u>Fun with patterns</u></b></p> <ul style="list-style-type: none"> <li>• Patterns and sequences</li> </ul> | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Divide a 5 digit no. by 1 or 2 digit no. with regrouping and remainder.</li> <li>• Solve 1 or 2 step daily life problems involving division.</li> </ul> <p>The learner is able to-</p> <ul style="list-style-type: none"> <li>• Identify the patterns around us or patterns with in given numbers.</li> </ul> | <p>4</p> <p>Assign. 1</p> <p>HW 1</p> | <ul style="list-style-type: none"> <li>• Puzzle (Solve a puzzle involving +,-, × and ÷)</li> <li>• Collect the patterns in shapes and numbers</li> </ul> | <ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Decision making</li> <li>• Creative Thinking</li> <li>• Decision making</li> </ul> | <ul style="list-style-type: none"> <li>• Analytical thinking</li> </ul> |
| September (14)     | <p><b><u>Length</u></b></p> <ul style="list-style-type: none"> <li>• Introduce different units of length</li> <li>• Conversions: Km to m, m to Cm</li> <li>• Addition and Subtraction</li> <li>• Word Problems</li> <li>• Value based question</li> </ul>   | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Understand relation between 'cm' and 'm'.</li> <li>• Add/ Subtract lengths in the regrouping.</li> <li>• Solve 1 or 2 step daily life problems.</li> </ul>  | <p>3</p> <p>Assign 1</p>              | <ul style="list-style-type: none"> <li>• Measuring objects using different measuring tools</li> </ul>  | <ul style="list-style-type: none"> <li>• Decision making</li> <li>• Problem solving</li> </ul>   | <ul style="list-style-type: none"> <li>• Self awareness</li> </ul>      |

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|-------------------|---|--|---|---|---|---|
| October (15)      | <p><b>Weight</b></p> <ul style="list-style-type: none"> <li>• Introduce different units of weight and their relation</li> <li>• Conversion ( kg to g and g to kg)</li> <li>• Addition /Subtraction by regrouping</li> <li>• Word problems</li> </ul> <p><b>Capacity</b></p> <ul style="list-style-type: none"> <li>• Introduce different units of capacity and their relation</li> <li>• Conversion ( l to ml and ml to l)</li> <li>• Addition /Subtraction by regrouping</li> <li>• Word Problems</li> <li>• Value based question</li> </ul> | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Converts Kg to g and vice versa</li> <li>• Add/ Subtract weights using regrouping.</li> <li>• Solve simple 1 step daily word problem related to weights.</li> </ul> <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Converts L to ml and vice versa</li> <li>• Add/ Subtract weights using regrouping.</li> </ul> <p>Solve simple 1 or 2 step daily life problem involving capacity.</p> | <p>3</p> <p>Assg-1</p> <p>3</p> <p>Assign 1</p> | <p>Making weighing balance using thermocol cups</p> <p>Paste pictures of different objects and classify them into different units of measurement.</p> <p>Combined worksheet – Length, Weight and Capacity</p> | <ul style="list-style-type: none"> <li>• Decision making</li> <li>• Problem solving</li> </ul> <ul style="list-style-type: none"> <li>• Self awareness</li> </ul> | <ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Decision making</li> </ul>    |
| November (20)     | <p><b>Time and Calendar</b></p> <ul style="list-style-type: none"> <li>• Introduction to calendar</li> <li>• Different units of time and their relation.</li> <li>• Showing time on clock.</li> <li>• AM or PM</li> <li>• Important days</li> <li>• Leap year</li> <li>• Time in minutes and Seconds</li> <li>• Addition and Subtraction</li> <li>• Before and After time</li> <li>• Value</li> </ul>   | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Read a clock in hours and minutes.</li> <li>• Express time in a.m. and p.m.</li> <li>• Calculate and identify Leap year.</li> <li>• Convert hours into minutes and vice versa.</li> <li>• Find Sum/ difference between 2 times.</li> <li>• Solve 1 step daily life problem related to time.</li> </ul>  | <p>2</p> <p>Assign 1</p>                        | <ul style="list-style-type: none"> <li>• To make a calendar and answer few questions based on it.</li> <li>• Close room quiz</li> <li>• Making clock and showing the time</li> </ul>                          | <ul style="list-style-type: none"> <li>• Self awareness</li> <li>• Effective making</li> </ul>  | <ul style="list-style-type: none"> <li>• Creative thinking</li> <li>• Logical Thinking</li> </ul> |

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|-------------------|--|---|----------------------------------|--|---|---|
| December (20)     | <p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>• Introduction of fraction</li> <li>• Equivalent fraction</li> <li>• Types of fraction</li> <li>• fraction as division</li> </ul> <p><b>Mental Maths</b><br/>Equivalent Fractions</p>                                       | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Understand fraction as part of collection of objects.</li> <li>• Understand equivalent fraction.</li> <li>• Understand different types of fractions.</li> <li>• Express fraction as a division sum.</li> <li>• Convert mixed fraction to improper fraction and vice versa.</li> <li>• Add proper fractions with same denominators</li> </ul> | <p>H.W.<br/>2</p> <p>Assig-1</p> | <p>Worksheet based on fraction.</p> <ul style="list-style-type: none"> <li>• Recipe making</li> </ul> <p>Fraction wall/ tower</p>                | <p>Understanding</p> <ul style="list-style-type: none"> <li>• Effective communication</li> <li>• Organizing</li> <li>• Goal setting</li> <li>• Critical thinking</li> </ul> | <ul style="list-style-type: none"> <li>• Critical Thinking</li> </ul> |
|                   | <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>• Recall points Line, Ray and Line segments.</li> <li>• Concept of</li> <li>• Vertex and arms of an angle.</li> <li>• Naming and measurement of angle</li> <li>• Constructing an angle.</li> <li>• Types of angles.</li> </ul> | <p>The learner will be able to-</p> <ul style="list-style-type: none"> <li>• Understand concept of angles and their names.</li> <li>• Measure an angle.</li> <li>• Different types of angles</li> <li>• Construct an angle of given measure.</li> <li>• Unit of measuring an angle.</li> </ul>  | <p>2</p>                         | <ul style="list-style-type: none"> <li>• To find and recognize different types of angles from surroundings and also tell their kinds.</li> </ul> | <ul style="list-style-type: none"> <li>• Creative Thinking</li> <li>• Self awareness</li> </ul>   | <ul style="list-style-type: none"> <li>• Logical thinking</li> </ul>  |

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|--------------------|---|---|---|---|---|--|
| January (14)       | <b>Perimeter</b> <ul style="list-style-type: none"> <li>• Open and Closed figures</li> <li>• Meaning of perimeters</li> <li>• Finding perimeters of rectangles/ squares</li> </ul>  | The learner will be able to- <ul style="list-style-type: none"> <li>• Understand and infer that length of boundary is called Perimeter.</li> <li>• Measure perimeters of different figures.</li> <li>• Calculate perimeters of square, rectangle, triangle with given sides.</li> <li>• Solve simple word problems related to word problems.</li> </ul> | 2   | To measure the sides of objects like a handkerchief, table top, chart paper, chess--- etc., and then find their perimeter | <ul style="list-style-type: none"> <li>• Self awareness</li> <li>• Creative Thinking</li> </ul>       |  |
|                    | <b>Area</b> <ul style="list-style-type: none"> <li>• Introduction to surface</li> <li>• Introduction to Area</li> <li>• Standard unit of area</li> <li>• Area of rectangle and Square</li> <li>• Word problems</li> <li>• Value based question</li> </ul> | The learner will be able to- <ul style="list-style-type: none"> <li>• Understand the meaning of 'area'..</li> <li>• Know units for measuring area.</li> <li>• Calculate area of rectangle .</li> <li>• Solve simple word problems related to area.</li> </ul>   | 2<br><br>Assign<br>1<br>combined<br>perimeter<br>+ Area | <ul style="list-style-type: none"> <li>• Find area of irregular figure using graph paper.</li> </ul>                      | <ul style="list-style-type: none"> <li>• Creative Thinking</li> </ul>                                 | <ul style="list-style-type: none"> <li>• Understanding</li> <li>• Creative Thinking</li> </ul> |
| February (19)      | <b>Volume</b> <ul style="list-style-type: none"> <li>• Introduction to space</li> <li>• Introduction to Volume</li> <li>• Standard unit of volume</li> <li>• Volume of cube and cuboid</li> <li>• Word problems</li> </ul>                                | The learner will be able to- <ul style="list-style-type: none"> <li>• Recognize some standard units of measuring capacity and use them to solve simple problems of daily life</li> </ul>  | 2   | Measure the two objects and find their volume   | <ul style="list-style-type: none"> <li>• Self awareness</li> <li>• Effective Communication</li> </ul> | <ul style="list-style-type: none"> <li>• Logical Thinking</li> </ul>                           |

**DAV CENTENARY PUBLIC SCHOOL, PASCHIM ENCLAVE, NEW DELHI-87**  
**YEARLY PLANNER (SESSION 2016 -17)**  
**SYLLABUS AT A GLANCE**

**CLASS-IV**

**SUBJECT: MATHEMATICS**

| FORMATIVE ASSESSMENT | MONTH/S            | CONTENT  |
|----------------------|--------------------|--|
| I                    | APRIL – MAY        | UNIT-1 NUMBER UP TO 999999<br>UNIT -2 ADDITION & SUBTRACTION   |
| II                   | JULY-AUGUST        | UNIT -2 CONTINUE<br>UNIT-3 MULTIPLICATION<br>UNIT-4 DIVISION<br>UNIT -14 FUN WITH PATTERNS<br>UNIT- 5 LENGTH |
| III                  | SEPTEMBER-DECEMBER | UNIT-6 WEIGHT<br>UNIT-7 CAPACITY<br>UNIT-8 TIME AND CALENDER<br>UNIT-9 FRACTIONS<br>UNIT-11 PERIMETER        |
| IV                   | JANUARY- MARCH     | UNIT-10 ANGLES<br>UNIT-12 AREA<br>UNIT-13 VOLUME   |