**ACADEMIC PLANNER 2026-27**
**Subject : Mathematics**
**Class - VII**

| DATE | TOPIC | HW | ACTIVITY/INTERDISCIPLINARY | LEARNING OUTCOMES |
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| **April**<br>**1-15th April**<br>**(11 days)** | **<u>BRIDGE COURSE</u>**<br>**<u>Unit 1 - Large Numbers Around Us</u>**<br>How Large Is One Lakh?<br>Understanding Large Numbers<br>Land of Tens<br>How Large is One Crore?<br>Exact and Approximate Values<br>Populations of Cities<br>Patterns in Products | WS 1 | 1. Explore patterns in multiplication (e.g., 11, 111, 1111).<br>2.Create own pattern puzzles. | Understand large numbers in daily life<br>Read and write numbers in Indian and International systems<br>Compare, estimate and round off large numbers<br>Apply large numbers to real-world situations |
| **16- 30th April**<br>**(13 days)**<br>**May**<br>**(1-15th May)**<br>**(6 days)** | **<u>Unit 2 - Arithmetic Expressions</u>**<br>Simple Expressions<br>Reading and Evaluating Complex Expressions | WS 2 | Fun Zone<br>Make the same value | Understand what arithmetic expressions are<br>Learn how to find the value of an expression<br>Compare two expressions<br>Read and evaluate expressions correctly using brackets<br>Identify terms and simplify expressions<br>Apply arithmetic expressions to real-life situations |
| **July 1- 15th**<br>**(12 days)** | **<u>Unit 8 - Working With Fractions</u>**<br>Types of Fractions<br>Comparing and Ordering Fractions<br>Addition and Subtraction of Fractions<br>Multiplication of Fractions<br>Division of Fractions | WS 8 | Collect and draw old coins and write their values in paise and rupees.<br>Fun Zone | Learn about fraction and its types<br>Compare and order fractions<br>Learn about addition and subtraction of fractions<br>Learn multiplication of fractions<br>Learn division of fractions |

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| **16- 31st July (14 days)** | **<u>Unit 3 - A Peek Beyond the Point</u>**<br>Understanding Decimal Numbers<br>A Tenth Part<br>A Hundredth Part<br>Place Value in the Decimal System<br>Locating and Comparing Decimals<br>Mystery of Extra Zeros<br>Addition and Subtraction of Decimals<br>Multiplication of Decimals<br>Division of Decimals<br>Units of Measurement<br>Decimal Dangers and Mishaps<br>**<u>Unit 4 - Another Peek Beyond the Point(Part II)</u>**<br>A Quick Recap of Decimals<br>Decimal Multiplication<br>Decimal Division<br>Getting the best value | WS 3 | 1. Decimal Grid Shading<br>2. Pencil Measurement Activity. | Understand decimal numbers<br>Identify decimal place values<br>Compare decimal numbers<br>Add decimal numbers<br>Subtract decimal numbers<br>Multiply decimal numbers<br>Divide decimal numbers<br>Apply decimals in real life |
| **August**<br><br>**1-15th Aug.**<br><br>**(11 days)** | **<u>Unit 5- Parallel and Intersecting Lines</u>**<br>Intersecting Lines<br>Perpendicular Lines<br>Parallel Lines<br>Transversals<br>Pairs of Angles Formed by a Transversal<br>Angles Formed by a Transversal with Parallel Lines | WS 5 | 1. Verify angles and their equality by paper cuttings. | Recognise intersecting and parallel lines<br>Identify angles formed by intersecting lines<br>Explore properties of angle pairs<br>Define a transversal line<br>Understand angles formed by transversals<br>Draw parallel and perpendicular lines |
| **16 -31st Aug.**<br><br>**(11 days)** | **<u>Unit 1 - Geometric Twins(Part II)</u>**<br>Geometric Twins<br>Congruence of Triangles<br>Angles of Isosceles and Equilateral Triangles | | Paper Cutting Activity | Define congruence of figures<br>Understand corresponding parts<br>Use the SSS congruence criterion<br>Use the ASA and AAS criteria<br>Use the RHS criterion for right triangles<br>Apply congruence to triangle properties<br>Use the SAS congruence criterion |

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| **16 -31st Aug.**<br><br>**(11 days)** | **<u>Unit 6 - Constructions and Tilings (Part II)</u>**<br>Fundamental Geometric Constructions<br>Tilings | | | Bisect line segments and angles<br>Construct special geometric angles<br>Draw parallel lines accuratelyUnderstand tiling and tessellation<br>Identify polygons that can tile |
| **September 1-15th Sept.**<br><br>**(11 days)** | REVISION FOR HALF YEARLY EXAMS | | | |
| **16-30th Sept. (13 days)** | HALF YEARLY EXAMS | | | |
| **October 1-15th Oct. (11 days)** | **<u>Unit 4 - Expressions Using Letter-Numbers</u>**<br>Algebraic Expressions<br>Degree of an Algebraic Expression<br>Revisiting Arithmetic Expressions<br>Why Do We Omit the Multiplication Symbol? | WS 4 | 1. Pattern Formula Builder | Understand use of letters in maths<br>Form simple algebraic expressions<br>Identify and extend pattern |
| **16 -31st Oct. (9days)** | **<u>Unit 4 - Expressions Using Letter-Numbers</u>**<br>Simplification of Algebraic Expressions<br>Addition and Subtraction of Algebraic Expressions<br>Pick Patterns and Reveal Relationships | | | Simplify expressions step by step<br>Apply expressions to real-life problems |
| **November 1-15th Nov. (9 days)** | **<u>Unit 7 - Finding the Unknown (Part II)</u>**<br>Find the unknowns ,equations | | | Define equations and expressions<br>Formulate algebraic equations<br>Solve equations by balancing<br>Transpose terms effectively<br>Solve real-life word problems |

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| **16-30th Nov. (12 days)** | **<u>Unit 5 - Connecting the Dots(Part II)</u>**<br>Of Questions and Statements<br>Representative Values, Visualising Data<br>Dot Plot | | | Define data and statistics<br>Formulate statistical questions<br>Calculate the Arithmetic Mean<br>Find the Median of a dataset<br>Understand the effect of outliers<br>Read and interpret column graphs<br>Construct double column graphs |
| | **<u>Unit 7 - A Tale of Three Intersecting Lines</u>**<br>Introduction<br>Interior and Exterior of a Triangle<br>Classification of Triangles<br>Median of a Triangle<br>Altitude of a Triangle<br>Exterior Angle of a Triangle | WS 7 | Verification of<br>Angle Sum Property ,<br>Pythagoras theorem ,<br>Exterior Angle Property. | Define and locate key elements of a triangle<br>Understand triangle and its properties |
| **December 1-15th December (12 days)** | **<u>Unit 7 - A Tale of Three Intersecting Lines</u>**<br><br>Angle Sum Property of a Triangle<br>Triangle Inequality<br>Right-Angled Triangle and Pythagoras Theorem<br>Constructing Triangles | | | Learn about Pythagoras Theorem<br>Learn to construct triangles if all three sides of<br>a triangle are given (SSS criterion)<br>Draw triangles under SAS criterion<br>Draw triangles under ASA criterion<br>Draw right-angled triangles construction |
| **16-31st December (13 days)** | **<u>Unit 2 - Operations with Integers(Part II)</u>**<br>A Quick Recap of Integers<br>Using Counters (The Token Model)<br>Multiplication of Integers<br>Division of Integers | | Pick the pattern. | Recall integer operations<br>Multiply integers with signs<br>Divide integers with signs<br>Learn properties of integers<br>Apply integers in daily life |

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| **January 1 -31st January (17 days)** | **<u>Unit 3 - Finding Common Ground(Part II)</u>**<br>The Greatestof All Least,but not LastPatterns, Properties,and a Pretty Procedure | | Fun Zone | Define factors and multiples<br>Understand HCF (Highest Common Factor)<br>Find HCF and LCM by prime factorisation<br>Apply HCF and LCM to word problems<br>Understand LCM (Lowest Common Multiple) |
| **February (1 to 15) (12 days)** | REVISION FOR ANNUAL EXAMS | | | |
| **16-28th Feb (12 days)** | ANNUAL EXAMS | | | |

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| **TERMWISE SYLLABUS** | | GK |
| **UNIT TEST - 1** | **CH -1,2,8** | **CH- 16,17** |
| **HALF YEARLY EXAMINATION** | **CH - 1,3,5,8(Part 1)**<br>**CH-1,4(Part 2)** | **CH- 18,19,20,21** |
| **UNIT TEST - 2** | **CH - 4(Part 1)**<br>**CH - 5,7(Part 2)** | **CH-22,23,24** |
| **ANNUAL EXAMINATION** | **CH - 4,5,7,8(Part 1)**<br>**Ch- 2,3,5,7 (Part 2)** | **CH- 25,50,51,52** |

Note: UNIT 6 (Part1 ) , UNIT 6 (Part2) will be assessed through activity