

**Bhartiya Vidya Mandir Sen. Sec. School, Sector 39, Chandigarh Road, Ludhiana**

**SYLLABUS CLASS V - SESSION 2025-26 MATHEMATICS**

**BOOKS:** Maths Beyond

Month	Unit/Chapter/Topic	Learning Objective	Pedagogy Tools Used	E- Content	Learning Outcomes	Skills Learnt by Students
APRIL	Chapter - 1 Large Numbers	The learners will be able to * Read and write 7- digit and 8- digit numbers and their number names in both Indian and International Number System. * Write the place value and face value of digits in 7-digit and 8-digit numbers. * Compare Numbers and arrange them in ascending and descending orders. * Round off numbers to the nearest 10, 100 and 1000 * Compare the Indian Number System and International Number System. * Form 7-digit and 8-digit numbers using the given digits. * Learn to write Hindu Arabic Numerals in Roman Numerals.	* Brainstorming * Pose purposeful Question. * Demonstration Approach * Memorization of facts/ Rules.	ACTIVITY : Write about things (paste pictures of objects) which are connected to 7-, 8- and 9-digit numbers in some way or the other . Support your sentence by pictures, drawings , sketches , etc .Colour/illustrate the pictures .  <a href="https://www.maths-salamanders.com/images/files/roman-number-worksheet-match-the-roman-numbers-1-to-100.pdf">https://www.maths-salamanders.com/images/files/roman-number-worksheet-match-the-roman-numbers-1-to-100.pdf</a>	After completing this chapter the students will be able to : * Read and write large numbers upto crores using Indian numeration System. * Read and write numbers using International Numeration System. * Use place value to write a number in expanded form and vice-versa. * Find the successor and predecessor of a given number. * Use place value to form greatest and smallest numbers from the given digits . * Compare and order large numbers using place value. * Read and write Roman Numerals.	* Initiative and Self-Direction * Logical Reasoning * Critical Thinking * Art integration * IMT Skills
	Chapter - 2 Number Operations	The learners will be able to * Add and subtract large numbers . * Multiply and Divide large numbers. * Solve word problems based on Addition , Subtraction , Multiplication and Division. * Simplify Problems of Addition and Subtraction.	* Explicit Instruction * Cooperative learning * Visual strategies * Hands-on learning * Strategic questioning	Activity: The world map is divided into seven continents: 1) Research and find the largest and the smallest continent in terms of area . 2) What is the difference in the areas between the largest and the smallest continents ?	After completing this chapter the students will be able to * Compute the sum and difference of 7- digit and 8-digit numbers without and with regrouping. * Apply the properties of addition and subtraction. * Apply the concept of addition , subtraction , Multiplication and Division in solving real life problems. * Multiply and Divide large numbers.	* Initiative and Self-Direction * Critical Thinking * Creativity and Innovation * Experiential Learning
MAY	Chapter - 3 Factors and Multiples	The learners will be able to * Check divisibility of number by 2,3,4,5,6,8,9 and 10. * Find Factors and Multiples of given number. * Find the HCF and LCM of given numbers. * Understand properties of factors and Multiples. * Solve word problems on HCF and LCM .	* Accessing Prior Knowledge and Skills * Application of facts * Introduce and reinforce the concepts by using problem-solving contexts. * Discussion Method * Content - focussed method.	<a href="https://www.mathsisfun.com/greatest-common-factor.html">https://www.mathsisfun.com/greatest-common-factor.html</a>  LETS PLAY A QUIZ <a href="https://www.softschools.com/quizzes/math/finding_the_lcm/quiz3262.html">https://www.softschools.com/quizzes/math/finding_the_lcm/quiz3262.html</a>	After completing this chapter the students will be able to * Write factors and Multiples of a number . * Test divisibility of numbers . Differentiate between Prime and Composite numbers. * Compute the Highest Common Factor (HCF) using prime factorisation method and long division method. * Compute Lowest common multiple (LCM) using prime factorisation method. * Establish the relation between HCF and LCM.	* Experiential Learning * Creativity and Innovation * Art Integration * Logical Reasoning * Critical Thinking
JUNE	<b>SUMMER BREAK</b>					
JULY	Chapter- 4 Fractions	The learners will be able to * Learn about fractions and it's types. Find equivalent fractions for a given fraction. * Compare fractions and arrange them. * Reduce a fraction to its lowest term. * Add and Subtract fractions. * Solve word problems.	* Use of physical and visual models that are flexible, doable, and clearly connect fraction concepts * Recognize connections between fraction concepts and whole number concepts . * Learn how fraction concepts are interrelated * Experience challenging problems with fractions that extend and assess student understanding.	<a href="https://workshestdigital.com/wp-content/uploads/2021/11/Reducing-Fractions-W3.jpg">https://workshestdigital.com/wp-content/uploads/2021/11/Reducing-Fractions-W3.jpg</a>  <a href="https://workshestdigital.com/wp-content/uploads/2024/03/Mixed-Numbers-to-Improper-Fractions-2.png">https://workshestdigital.com/wp-content/uploads/2024/03/Mixed-Numbers-to-Improper-Fractions-2.png</a>	After completing this chapter the students will be able to * Classify fractions as like , unlike , proper , improper , mixed and unit fractions. * Define equivalent fractions and find equivalent fractions of a given fraction. * Reduce a fraction to its lowest terms. * Compare and order two or more fractions. * Add and subtract two or more fractions. * Find the product of two or more fractions. * Find the reciprocal of a fraction. * Divide one fraction by another fraction.	* Initiative and Self-Direction * Experiential Learning * Creativity and Innovation * IMT Skills
AUGUST	Chapter - 6 Symmetry Pattern and Nets	The learners will be able to * Understand symmetry in plane and solid shapes. Identify nets of 3D shapes. * Learn about Line of symmetry. * Learn about rotational symmetry in shapes and centre of rotation. * Learn about Patterns	* Activity based learning * Experiential Learning * Discussion Method * Application of Facts	<a href="https://mathmooooks.com/wp-content/uploads/2020/11/Lines-of-Symmetry-in-Polygon.jpg">https://mathmooooks.com/wp-content/uploads/2020/11/Lines-of-Symmetry-in-Polygon.jpg</a>  <a href="https://www.maths-salamanders.com/images/files/geometric-nets-information-sheet-1.pdf">https://www.maths-salamanders.com/images/files/geometric-nets-information-sheet-1.pdf</a>	After completing this chapter the students will be able to * Observe symmetrical figures and draw their lines of symmetry. * Draw figures after giving turns . * Define rotational symmetry. * Observe patterns . * Identify nets of 3D shapes.	* Initiative and Self-Direction * Experiential Learning * Art Integration * IMT Skills

SEPTEMBER	TERM - I EXAMS					
OCTOBER	Chapter - 5 Decimals	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Convert Decimal numbers into fractions and vice-versa.</li> <li>* Compare decimal numbers.</li> <li>* Add and subtract decimal numbers.</li> <li>* Multiply and divide decimal numbers.</li> <li>* Solve word problems involving decimal numbers.</li> </ul>	<ul style="list-style-type: none"> <li>* Inductive Method</li> <li>* Direct Instruction</li> <li>* Memorization of facts</li> <li>* Drill and Practice Activities</li> </ul>	<p><a href="https://www.math-salamanders.com/image-files/5th-grade-place-value-to-3dp-1a.pdf">https://www.math-salamanders.com/image-files/5th-grade-place-value-to-3dp-1a.pdf</a></p> <p><a href="https://d8-sha.gov.in/play/collection/da-3122916141919928321137eferrer-utm_source%3Ddnabnl%26utm_ca-mpaiaq%3Ddhare_content%26contentId-do_31278258766661683221276">https://d8-sha.gov.in/play/collection/da-3122916141919928321137eferrer-utm_source%3Ddnabnl%26utm_ca-mpaiaq%3Ddhare_content%26contentId-do_31278258766661683221276</a></p>	<p>After completing this chapter the students will be able to</p> <ul style="list-style-type: none"> <li>* Relate fractions with denominator 10, 100, 1000 as decimal numbers.</li> <li>* Find place value of decimal fractions as tenths, hundredths and thousandths.</li> <li>* Compute the sum and difference of two or more decimal numbers.</li> <li>* Multiply and divide decimal numbers.</li> <li>* Apply the concept of operations on decimal numbers in solving real life problems.</li> </ul>	<ul style="list-style-type: none"> <li>* Critical Thinking</li> <li>* Problem Solving</li> <li>* Creativity and Innovation</li> <li>* Experiential Learning</li> </ul>
	Chapter - 10 Geometry	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Learn about different types of angles and lines</li> <li>* Measure angles using protractor.</li> <li>* Identify intersecting, perpendicular and parallel lines</li> <li>* Learn about circle and its parts.</li> <li>* Understand the relation between diameter and circumference of a circle.</li> </ul>	<ul style="list-style-type: none"> <li>* Demonstration Method</li> <li>* Inquiry Based Learning</li> <li>* Application of Concepts</li> <li>* Pose purposeful Questions</li> <li>* Discussion Method</li> </ul>	<p><a href="https://teachmint-storage.googleapis.com/public/707669663/Assignment/fsd-ca1ff-5e26-4e18-8bc1-47d53345a68.jpg">https://teachmint-storage.googleapis.com/public/707669663/Assignment/fsd-ca1ff-5e26-4e18-8bc1-47d53345a68.jpg</a></p> <p><a href="https://mathworksheets.com/wp-content/uploads/2020/12/Triangle-Worksheet.jpg">https://mathworksheets.com/wp-content/uploads/2020/12/Triangle-Worksheet.jpg</a></p>	<p>After completing this chapter students will be able to</p> <ul style="list-style-type: none"> <li>* Identify basic geometrical terms like a point, a plane, a line, a line segment and a ray.</li> <li>* Identify an angle</li> <li>* Measure and draw an angle using a protractor.</li> <li>* Define triangle and identify the vertices, sides and angles of triangle.</li> <li>* Classify triangles based on the length of their sides and measures of angles.</li> <li>* Define and identify various types of quadrilateral.</li> <li>* Define a circle and identify parts of circle.</li> </ul>	<ul style="list-style-type: none"> <li>* Initiative and Self-Direction</li> <li>* Experiential Learning</li> <li>* Art Integration</li> <li>* IMT Skills</li> </ul>
NOVEMBER	Chapter - 9 Area and Volume	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Determine the perimeter of simple geometrical shapes using formulae.</li> <li>* Determine the area of simple geometrical shapes using square grid and formulae.</li> <li>* Determine the volume of cuboid and cube.</li> <li>* Solve word problems involving the use of perimeter, area and volume.</li> </ul>	<ul style="list-style-type: none"> <li>* Inquiry Based Learning</li> <li>* Heuristic Approach</li> <li>* Demonstration Method</li> <li>* Lecture Method</li> <li>* Activity Based Learning</li> <li>* Use of Audio Visual Aids</li> </ul>	<p><a href="https://www.liveworksheets.com/sites/default/files/styles/worksheet/public/default_files/2022/10/26/210260426122526996210260426122526996001.jpg?itok=QDNPNbnk">https://www.liveworksheets.com/sites/default/files/styles/worksheet/public/default_files/2022/10/26/210260426122526996210260426122526996001.jpg?itok=QDNPNbnk</a></p>	<p>After completing this chapter students will be able to</p> <ul style="list-style-type: none"> <li>* Define perimeter of a plane figure understand the unit of perimeter and express the perimeter with appropriate unit.</li> <li>* Compute perimeter of triangle, rectangle and square.</li> <li>* Compute area of rectangle and a square.</li> <li>* Define volume of solid shape, understand the unit of volume and express the volume with appropriate unit.</li> <li>* Compute Volume of a cuboid and a Cube.</li> <li>* Apply the concept of perimeter, area and volume in real life situations.</li> </ul>	<ul style="list-style-type: none"> <li>* Critical Thinking</li> <li>* Flexibility and Adaptability</li> <li>* Creativity and Innovation</li> <li>* Art Integration</li> <li>* IMT Skills</li> </ul>
DECEMBER	Chapter - 12 Money	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Understand the terms Cost price (CP), Selling Price (S.P), Profit and Loss.</li> <li>* Understand and Apply unitary Method.</li> <li>* Solve Word problems based on Profit, loss and unitary Method.</li> </ul>	<ul style="list-style-type: none"> <li>* Use of prior knowledge of students</li> <li>* Demonstration Method</li> <li>* Activity Based Learning</li> <li>* Role Play</li> <li>* Implement tasks that promote reasoning and problem solving.</li> <li>* Timed Testing</li> </ul>	<p><a href="https://www.liveworksheets.com/sites/default/files/styles/worksheet/public/default_files/2021/12/23/112230939553242455/112230939553242455001.jpg?itok=nR296MUW">https://www.liveworksheets.com/sites/default/files/styles/worksheet/public/default_files/2021/12/23/112230939553242455/112230939553242455001.jpg?itok=nR296MUW</a></p> <p>Prepare a Bill of stationery items that you purchase for your exams.</p>	<p>After completing this chapter students will be able to</p> <ul style="list-style-type: none"> <li>* Apply the concept of four operations to solve problems based on money.</li> <li>* Comprehend and analyse the information given in the bill.</li> <li>* Prepare the bill.</li> <li>* Explain the unitary method.</li> <li>* Apply the concept of unitary method in solving real life problems.</li> </ul>	<ul style="list-style-type: none"> <li>* Initiative and Self-Direction</li> <li>* Critical Thinking</li> <li>* Problem Solving</li> <li>* Experiential Learning</li> <li>* Art Integration</li> <li>* IMT Skills</li> </ul>
JANUARY	Chapter - 13 Data Handling	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Represent raw data in a tabular form.</li> <li>* Use a pictograph to visualise data.</li> <li>* Create and analyse bar graphs.</li> <li>* Analyse and create pie charts and line graphs.</li> </ul>	<ul style="list-style-type: none"> <li>* Direct Instruction</li> <li>* Reflective Teaching</li> <li>* Mentoring</li> <li>* Heuristic Approach</li> <li>* Adaptive Teaching</li> <li>* Inquiry Based Learning</li> </ul>	<p><a href="https://www.k12learning.com/workbooks/math/data-graphing/grade-3-circle-graphs.pdf">https://www.k12learning.com/workbooks/math/data-graphing/grade-3-circle-graphs.pdf</a></p>	<p>After completing this chapter students will be able to</p> <ul style="list-style-type: none"> <li>* Collect data and represent it in tabular form using tally marks.</li> <li>* Interpret and represent data pictorially in pictograph.</li> <li>* Interpret and create bar graph based on the given information.</li> <li>* Interpret pie chart and line graph.</li> </ul>	<ul style="list-style-type: none"> <li>* Initiative and Self-Direction</li> <li>* Experiential Learning</li> <li>* Art Integration</li> <li>* Creativity and Innovation</li> <li>* IMT Skills</li> </ul>
	Chapter - 14 Mapping Skills	<p>The learners will be able to</p> <ul style="list-style-type: none"> <li>* Explain the purpose of maps.</li> <li>* List and identify the features of a map including the title, directions, map key, map scale.</li> </ul>	<ul style="list-style-type: none"> <li>* Group Discussion</li> <li>* Activity Based Learning</li> <li>* Visualization</li> <li>* Incidental Learning</li> <li>* Pose purposeful Questions</li> </ul>	<p><a href="https://ecdh.teacherspayteachers.com/edu-image/Item=astlquality-70/wid-th=53&amp;height=53&amp;owner=redfox11/humbitem/Map-of-Classroom-2530940-1500873560/750f2530940-1.jpg">https://ecdh.teacherspayteachers.com/edu-image/Item=astlquality-70/wid-th=53&amp;height=53&amp;owner=redfox11/humbitem/Map-of-Classroom-2530940-1500873560/750f2530940-1.jpg</a></p>	<p>After completing this chapter students will be able to</p> <ul style="list-style-type: none"> <li>* Develop a mental map of the real world information by processing the symbolised information on the map.</li> </ul>	<ul style="list-style-type: none"> <li>* Initiative and Self-Direction</li> <li>* Critical Thinking</li> <li>* Experiential Learning</li> <li>* Art Integration</li> <li>* IMT Skills</li> </ul>
FEBRUARY	FINAL EXAMS					
Note:	<p>Chapter-1 Large Numbers Chapter-2 Number Operations Chapter-6 Symmetry, Patterns and Nets will repeat in Term-II.</p>					