



**Curriculum**  
**Subject: Mathematics (041)**  
**Class: IX**  
**Session: 2024-25**

Month	APRIL	MAY	JUNE	JULY
<b>Concepts</b>	<b>Ch. 1</b> Number Systems <b>Ch.2</b> Polynomials	<b>Ch.3</b> Coordinate Geometry <b>Ch. 4</b> Linear Equations in two variables	<b>Ch. 5</b> Introduction To Euclid's Geometry <b>Ch. 6</b> Lines and Angles	<b>Ch. 7</b> Triangles
<b>Learning Outcomes</b>	<p><b>Students will be able to</b></p> <ul style="list-style-type: none"> <li>Understand the meaning of irrational numbers.</li> <li>Represent irrational numbers on the number line.</li> <li>Construct a square root spiral.</li> <li>Understand decimal expansion of real numbers and their representation in the form <math>p/q</math>.</li> <li>Comprehend the term rationalization of the denominator along with the rationalizing factor.</li> <li>Apply Laws of Exponents for Real Numbers.</li> <li>Understand the polynomials and their types.</li> <li>Solve zeros of polynomials.</li> <li>Understand and apply the Remainder and Factor theorem in polynomials.</li> <li>Understand Factorization of polynomials by using algebraic identities.</li> </ul>	<p><b>Students will be able to</b></p> <ul style="list-style-type: none"> <li>Understand the meaning of Coordinate Geometry and its origin.</li> <li>Locate and analyze the position of an object or a point in a plane.</li> <li>Explore linear equations in two variables.</li> <li>Draw the graph of a Linear Equation in Two Variables related to real life situations.</li> </ul>	<p><b>Students will be able to</b></p> <ul style="list-style-type: none"> <li>Define and understand Euclid's Definitions, Axioms and Postulates.</li> <li>Recognize pairs of angles and classify them.</li> </ul>	<p><b>Students will be able to</b></p> <ul style="list-style-type: none"> <li>Know and demonstrate the ability to find correct criteria for congruence of triangles.</li> </ul>
<b>Skills</b>	Knowledge/ Understanding/ Application/ Critical Thinking	Knowledge/ Understanding/ Critical Thinking/ Problem Solving	Knowledge/ Understanding/ Application/ Evaluation	Knowledge/ Understanding/ Application/ Critical Thinking
<b>Activities</b>	<b>Competency-skill based activity/Experiential Learning:</b> To construct a square root spiral.	<b>Competency-skill based activity/Experiential Learning:</b> To find the values of abscissa and ordinates of various points given in a Cartesian plane.	<b>Competency-skill based activity/Experiential Learning:</b> Hands on activity (lines and angles).	<b>Competency-skill based activity/Experiential Learning:</b> Basic paper folding activity.
<b>Art Integration</b>	English, Art	Art, English, Physics, Chemistry	Art, English, Physics	Art
<b>Assessments</b>	<ul style="list-style-type: none"> <li>Periodic Tests</li> <li>Multiple Assessments</li> <li>Portfolio</li> <li>Student Enrichment Activities - practical work</li> </ul> <p><b>Main Book: NCERT</b></p>			



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Month	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
<b>Concepts</b>	<b>Ch.12</b> Heron's Formula	<b>Ch. 8</b> Quadrilaterals	<b>Ch. 10</b> Circles	<b>Ch.13</b> Surface area and Volume	<b>Ch. 14</b> Statistics
<b>Learning Outcomes</b>	<b>Students will be able to</b> <ul style="list-style-type: none"> <li>Identify and apply heron's formula in finding areas of polygon.</li> <li>Calculate area of a triangle by Heron's Formula.</li> </ul>	<b>Students will be able to</b> <ul style="list-style-type: none"> <li>Recognize the properties of parallelograms.</li> <li>Apply midpoint theorem.</li> </ul>	<b>Students will be able to</b> <ul style="list-style-type: none"> <li>Describe circles and its Related Terms.</li> <li>Demonstrate angles Subtended by a Chord and an Arc and perpendicular from the centre to a Chord.</li> <li>Describe a cyclic Quadrilateral.</li> </ul>	<b>Students will be able to</b> <ul style="list-style-type: none"> <li>Describe surface Area of a right circular cone, sphere and hemisphere.</li> <li>Formulate volume of a right circular cone, sphere and hemisphere.</li> </ul>	<b>Students will be able to</b> <ul style="list-style-type: none"> <li>Represent data graphically.</li> <li>Recapitulate all the concepts.</li> </ul>
<b>Skills</b>	Knowledge/ Understanding/ Application/ Critical Thinking/ Analysis/ Synthesis	Knowledge/ Understanding/ Application/ Critical Thinking/ Problem Solving	Knowledge/Understanding/ Application/Analysis/Synthesis	Knowledge/Understanding/ Application/Analysis/ Synthesis	Knowledge/ Understanding/ Application/Problem Solving
<b>Activities</b>	<b>Competency-skill based activity/Experiential Learning:</b> To find area of a triangle by Heron's Formula.	<b>Competency-skill based activity/Experiential Learning:</b> Midpoint theorem (By paper cutting and pasting).	<b>Competency-skill based activity/Experiential Learning:</b> Angle subtended by an arc of a circle at the center is double the angle subtended by it at any point on the remaining part of the circle using.	<b>Competency-skill based activity/Experiential Learning:</b> To form a cone from a sector of a circle and to find the formula for its curved surface area.	<b>Competency-skill based activity/Experiential Learning:</b> To draw histograms for classes of equal widths by collecting data from day to day life such as heights of students.
<b>Art Integration</b>	Art, English	Art	Art, English, Geography	Art, English, Physics	Art, English, Physics
<b>Assessments</b>	<ul style="list-style-type: none"> <li>Periodic Tests</li> <li>Multiple Assessments</li> <li>Portfolio</li> <li>Student Enrichment Activities - practical work</li> </ul> <b>Main Book: NCERT</b>				