

**Cambridge International School Mohal, Kullu**  
**Class-X**  
**Subject- Mathematics**  
**First term Curriculum**  
**Session- 2020-21**

Month	February	March	April	May/June
<b>Contents</b>	<ul style="list-style-type: none"> <li>● Surface Area and Volumes</li> <li>● Polynomials</li> <li>● Pair of Linear equations in two variables</li> </ul>	<ul style="list-style-type: none"> <li>● Quadratic Equations</li> <li>● Arithmetic Progressions</li> </ul>	<ul style="list-style-type: none"> <li>● Introduction of Trigonometry</li> <li>● Applications of Trigonometry</li> </ul>	<ul style="list-style-type: none"> <li>● Triangles</li> <li>● Statistics</li> </ul>
<b>Learning Outcomes</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Identify the 3-D shapes combined to form an object</li> <li>● Determine Surface area of combination of different solids</li> <li>● Determine Volume of a combination of solids</li> <li>● Convert one solid form to another</li> <li>● Frustum of Cone</li> </ul> <p>➤ Find Zeroes of Polynomials</p> <ul style="list-style-type: none"> <li>● Understand Geometrical meaning of zeroes and coefficients of Linear, Quadratic</li> <li>● Understand Division algorithm for polynomials</li> </ul> <p>➤ Understand to represent the algebraic situations algebraically and graphically</p> <ul style="list-style-type: none"> <li>● Understand Graphical, substitution, elimination, cross multiplication methods of solving linear equations</li> </ul>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Recognise a quadratic equations</li> <li>● Differentiate between a quadratic polynomial and a quadratic equation</li> <li>● Understand the methods to solve a quadratic equation</li> </ul> <p>➤ Recognise an Arithmetic Progression</p> <ul style="list-style-type: none"> <li>● Find the given terms and sum of the given Arithmetic Progression</li> <li>● Methods to solve a given application based question through real life situations</li> </ul> <p><b>Activity: Based on the Arithmetic Progression and its sums</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Use of Pythagoras theorem in right angled triangle</li> <li>● Identify Trigonometry ratios and apply them</li> <li>● Use different identities to prove the given results</li> </ul> <p>➤ Apply Trigonometry to find angle of elevation and angle of depression</p> <ul style="list-style-type: none"> <li>● Apply Trigonometry ratios in various situations of daily life</li> <li>● Apply Trigonometry in various fields such as Physics, Engineering, Navigation, Seismology and Art</li> </ul> <p><b>Activity: Based on trigonometry</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Understand the difference between Congruency and Similarities of triangles</li> <li>● Understand basic Proportionality theorem and its converse</li> <li>● Similarity of triangles and its various criteria</li> <li>● Understand relation between Similarity and area of two triangles</li> <li>● Similarity and Pythagoras theorem</li> </ul> <p>➤ Understand various types of measures of Central tendency</p> <ul style="list-style-type: none"> <li>● Understand different methods to calculate the central tendency</li> <li>● Identify and apply suitable method for easy calculations</li> </ul> <p><b>Activity: Based on Proportionality theorem and Pythagoras theorem</b></p>

**Cambridge International School Mohal, Kullu**  
**Class-X**  
**Subject- Mathematics**  
**Final term Curriculum**  
**Session- 2020-21**

Month	July	August	September/October	November-February
<b>Contents</b>	<ul style="list-style-type: none"> <li>● Circles</li> <li>● Areas related to Circles</li> </ul>	<ul style="list-style-type: none"> <li>● Probability</li> <li>● Coordinate Geometry</li> </ul>	<ul style="list-style-type: none"> <li>● Real Numbers</li> <li>● Constructions</li> </ul>	<ul style="list-style-type: none"> <li>● Revision/P re Boards</li> </ul>
<b>Learning Outcomes</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Understand the difference between Secant and Tangents to the circle</li> <li>● Learn that only one tangent can pass through a point lie on the circle</li> <li>● Learn that tangent to any point of a circle is perpendicular to the radius through the point of contact and apply it</li> </ul> <p>➤ Calculate the areas and perimeter of the Circle</p> <ul style="list-style-type: none"> <li>● Calculate the area of a given segment or sector of the circle</li> <li>● Calculate the length of major and minor arc</li> <li>● Calculate the area of combination of plane figures</li> </ul> <p><b>Activity: Area of sector formed at the vertices of triangle</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Differentiate between experimental and Theoretical Probability</li> <li>● Differentiate between equally likely and not equally likely outcome</li> <li>● Understand Sure and impossible event</li> <li>● Negation and Complement of an event</li> <li>● Solve the problems based on single events</li> </ul> <p>➤ Understand the development of Coordinate geometry as an algebraic tool for studying geometry of figures</p> <ul style="list-style-type: none"> <li>● Find the distance between two points using their coordinates</li> <li>● Use of section and mid point formula</li> <li>● Application of coordinate geometry in various fields such Seismology, Physics, Engineering, Navigation and Art</li> </ul> <p><b>Activity: Based on Probability</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Understand Euclid's Division Algorithm</li> <li>● Fundamental theorem of arithmetic</li> <li>● Rational numbers and their decimal expansion</li> </ul> <p>➤ Construct the division a line segment into a given ratio</p> <ul style="list-style-type: none"> <li>● Construct a tangent at a point on a given circle</li> </ul> <p><b>Activity: Length of tangent drawn from an external point to a circle</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>● Recapitulate all the concepts</li> </ul>

**Assessment:**

Pen-paper test/Quiz/Questionnaire

Online Assignments/Activities

HW Updates

- Subject Enrichment: Art Integrated Project (Ch: Surface Area and Volumes)

Resource: DIKSHA App