

KIDS WORLD SCHOOL
ANNUAL CURRICULUM PLANNER 2024-25
SUBJECT – MATHEMATICS
CLASS – X

MONTH	NAME OF THE CHAPTER	METHODOLOGY	LEARNING OBJECTIVE		LEARNING OUTCOMES	MODE OF ASSESSMENT + ACTIVITY
			KNOWLEDGE/CONTENT BASED	APPLICATION BASED		
APRIL 01/04/2024 – 08/04/2024	01 Real numbers	*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive	* Fundamental theorem of Arithmetic. *Proof of irrationality $\sqrt{2}, \sqrt{3}, \sqrt{5}$ etc *Proof of irrationality $l \pm m\sqrt{n}$ *LCM and HCF	*Understand to find LCM and HCF. *Able to prove irrationality by contradiction method.	*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically.	Assessment of learning *Worksheets *Assignments * Lab Activity * Case study
APRIL 12/04/2024 – 24/04/2024	02 Polynomials	*Explanation *Demonstration *Problem Solving *Heuristic	*Zeroes of Polynomials. *Relationship between zeroes and coefficient of polynomials.	*To draw a graph for quadratic polynomial.	* Correlate basic concept * Develop arithmetical ability *Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically.	Assessment of Learning *Worksheets *Assignments * Lab Activity
APRIL + JUNE 25/04/2024 – 29/06/2024	03 Pair Of Linear Equations in Two Variables	*Explanation *Demonstration *Problem Solving *Heuristic *Deductive *Analysis	*Graphical Method for consistency/ inconsistency *Substitution Method *Elimination Method *Simple situational problems	*To understand a situation or condition for intersection, coincident and parallel lines and to draw graphs for them.	*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically. *Develop drawing skills	Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study

<p>JULY 01/07/2024 - 16/07/2024</p>	<p>04 Quadratic Equations</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Deductive *Analysis</p>	<p>*Factorisation of Q.E *Quadratic formula *Nature Of Roots</p>	<p>*To verify the roots of quadratic equation by splitting the middle term and quadratic formula.</p>	<p>* Correlate basic concept * Develop arithmetical ability *Consolidate the knowledge and the skill acquired. *Think, analyze and articulate logically.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>JULY 18/07/2024 - 03/08/2024</p>	<p>05 Arithmetic Progression</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic</p>	<p>*Factorisation of Q.E *Quadratic formula *Nature Of Roots</p>	<p>*To identify AP in some given lists. *To find the sum of n natural numbers. *To find the sum of n odd numbers. *To establish a formula for a sum of first n terms of AP.</p>	<p>*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>AUGUST 05/08/2024 - 17/08/2024</p>	<p>06 Triangles</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Deductive</p>	<p>*Thales Theorem *Similarity of Triangles *Criteria For Similarity</p>	<p>*To draw a system of similar triangles. *To verify basic proportionality theorem. To establish criteria for similarity.</p>	<p>*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically. *Develop drawing skills.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study * Interdisciplinary Activity (Maths+IT) September Scaling Unity: Exploring Similarity of Polygons at the Statue of Unity (Ref-Entab)</p>

<p>AUGUST 20/08/2024 - 31/08/2024</p>	<p>07 Coordinate Geometry</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive</p>	<p>*Distance Formula *Section Formula</p>	<p>*To verify the distance formula by graphical method. *To verify the section formula by graphical method.</p>	<p>*Think, analyze and articulate logically. * Develop numerical ability *Consolidate the knowledge and the skill acquired.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>SEP. 02/09/2024 - 21/09/2024</p>	<p>08 Trigonometry</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive</p>	<p>*Trigonometric Ratios *Some Specific Angles *Trigonometric Identities</p>	<p>*To verify (a) $\sin^2 A + \cos^2 A = 1$ (b) $\sec^2 A - \tan^2 A = 1$ (c) $\operatorname{cosec}^2 A - \cot^2 A = 1$</p>	<p>*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity</p>
<p>SEP. 23/09/2024 - 30/09/2024</p>	<p>09 Some Applications Of Trigonometry</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive</p>	<p>*Height And Distance</p>	<p>*To find the height of a building or tower or tree using a clinometer.</p>	<p>*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically. *Develop drawing skills</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>OCT. 01/10/2024 - 08/10/2024</p>	<p>10 Circles</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic</p>	<p>*Tangents Perpendicular To A Circle *Length of Tangents from external point</p>	<p>*To verify experimentally that the tangents at any point to a circle is perpendicular to the radius through that point. *To find the number of tangents from a point to a circle.</p>	<p>*Develop geometrical skills *Develop constructional visualisation. *Develop mastery of basic skills. *Think, analyze and articulate logically.</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>

<p>OCT. 08/10/2024 onwards</p>	<p style="text-align: center;">TERM I Examination 80 Marks</p>					
<p>NOV. 11/11/2024 – 23/11/2024</p>	<p>12 Area Related To Circle</p>	<ul style="list-style-type: none"> *Explanation *Demonstration *Problem Solving *Heuristic *Deductive 	<ul style="list-style-type: none"> *Perimeter And Area. *Areas Of Sector And Segment. 	<ul style="list-style-type: none"> *To obtain formula for areas of a circle experimentally 	<ul style="list-style-type: none"> *Develop sense of visualisation *Develop numerical skills and ability. *Develop critical thinking <ul style="list-style-type: none"> *To connect the knowledge to different subjects. *To learn real life applications of knowledge. 	<p>Assessment of Learning</p> <ul style="list-style-type: none"> *Worksheets *Assignments * Lab Activity <li style="padding-left: 20px;">* Art Integration Activity <li style="padding-left: 20px;">Prepare decorative article using circles and its parts.
<p>NOV. 25/11/2024 – 07/12/2024</p>	<p>13 Surface Areas And Volumes</p>	<ul style="list-style-type: none"> *Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive 	<ul style="list-style-type: none"> *Surface Areas Of A Combination Of Solid. <li style="padding-left: 20px;">*Volumes Of A Combination Of Solid. 	<ul style="list-style-type: none"> *To obtain surface area of a circus tent. *To verify formula for volume of a cylinder. *To compare two cylinders made up from rectangular sheets of same dimension under – (a) Curved surface area (b) Total Surface Area (c) Volumes 	<ul style="list-style-type: none"> *Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically. <ul style="list-style-type: none"> * To develop artistic skill. * To develop application of knowledge in real life situations. 	<p>Assessment of Learning</p> <ul style="list-style-type: none"> *Worksheets *Assignments * Lab Activity * Case study <li style="padding-left: 20px;">* Multidisciplinary Activity <li style="padding-left: 20px;">(Maths+S.St+ Art) <li style="padding-left: 20px;">November <li style="padding-left: 20px;">Pottery of Sikkim; CSA, TSA& volume of pottery.

<p>NOV. 09/12/2024 – 14/12/2024</p>	<p>14 Statistics</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive Representation</p>	<p>* Mean (i) Direct Method (ii) Assume Mean Method (iii) Step Deviation Method *Median *Mode</p>	<p>*To find the means, median and median of ages of classes from V to X. *To find mean by direct, Assume mean and step deviation method of marks obtained by 40 students of class X in Mathematics PT I of 20 marks.</p>	<p>*Consolidate the knowledge and the skill acquired. *Develop mastery of basic skills. *Think, analyze and articulate logically. *Develop drawing skills</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>DEC. 16/12/2024 – 20/12/2024</p>	<p>15 Probability</p>	<p>*Explanation *Demonstration *Problem Solving *Heuristic *Inductive *Deductive</p>	<p>*Probability</p>	<p>*To determine experimentally probability of 1, 2, 3, 4, 5 or 6 throwing a dice 500 times and compare them with their theoretical probabilities. *To determine experimentally probability of a Head (or Tails) by tossing a coin 1000 times and compare them with their theoretical probabilities.</p>	<p>*Daily life application. * Mastery on numerical skill</p>	<p>Assessment of Learning *Worksheets *Assignments * Lab Activity * Case study</p>
<p>JAN. 2025</p>	<p>Revision Pre- boards</p>					