

Annual Syllabus
Class-VII (2023-24)
Subject: Mathematics

Chapter Name	Content and its mapping with previous classes	Learning Outcomes	Suggested Activities
Chapter-1 Integers	<p>CLASS V: Comparing numbers, big number in practice, outcome in number situation. (Use Worksheet No. 4,7,9)</p> <p>CLASS VI: Representation of integers on number line, Addition and subtraction of integers (Use Worksheet No. 1,3,4,5,9,10)</p> <p>CLASS VII: Introduction, Multiplication of integers, division of integers (Use Worksheet No. 1,5,7)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Multiplies and divides two integers. Solves basic problem involving the Multiplication and Division of integers. 	<ul style="list-style-type: none"> To locate & multiply the integers on number line. To fill the right integers in the given figure. (Pragati) To find the right key of the doors. (Pragati) To write the appropriate integers in given square. (Pragati)
Chapter-2 Fraction and Decimals	<p>CLASS-V: Equivalent fractions, mixed fractions without using terms, Tenths, Hundredths. (Use Worksheet No. 130,135,141,143)</p> <p>CLASS-VI: Proper and improper fractions, Representation of fractions on number line. Addition and Subtraction of fractions, Addition and Subtraction of decimals, comparing decimals (Use Worksheet No.18,19,20,21)</p> <p>CLASS-VII: Introduction, Multiplication of fractions, Division of fractions, Multiplication of decimal numbers, division of decimal numbers. (Use Worksheet No.10,11,12,13)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Interprets the division and multiplication of fractions. Uses algorithms to multiply and divide fractions and decimals. Can solve the problems related to fractions and decimals in daily life. 	<ul style="list-style-type: none"> Introduction using daily life examples. Colouring/shading equal parts
Chapter-5 Lines and Angles	<p>CLASS V: Meaning of line and angle, Angles less than 90°, More than 90°, Straight angles, Types of Polygons (Use Worksheet No.96,100,106)</p> <p>CLASS VI: Type of lines parallel and perpendicular, Types of angles - Acute angle. Obtuse angle, straight angle and Reflex angle. (Use Worksheet No.24,27,28,29)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Classifies pairs of angles based on their properties as linear, supplementary, complementary, adjacent and vertically opposite 	<p>Searching examples of angles around us.</p> <ul style="list-style-type: none"> Role play on recognition of angles and names of angles.

	CLASS VII: Introduction, related angles, pair of lines, checking for parallel lines.(Use Worksheet No. 4,14,15)	<ul style="list-style-type: none"> Finds the value of the one angle when the other angle is given. 	
<p>➤ Mental Maths and Maths Lab Activities</p> <p>➤ The above content must be completed by 30th September 2023.</p> <p>➤ Revision of syllabus for Mid Term Examination</p>			
MID-TERM EXAMINATION – 2023			
Chapter-3 Data Handling	<p>CLASS V: Tally Marks, Reading of Bar graph, Line Graph (Worksheet No. 14,16)</p> <p>CLASS VII: Introduction, collecting data, organization of data, representative values, use of bar graphs with a different purpose. (Use Worksheet No. 23, 24, 25, 26)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Interprets data using bar graph such as consumption of electricity is more in winter or summer. Runs scored by team in first 10 over etc. 	<ul style="list-style-type: none"> Activity based on the conveyance used by the students. Role play
Chapter-6 The triangle and its properties	<p>CLASS V: Triangle shape and Area, perimeter.</p> <p>CLASS VI: Triangle shape in polygon. (Use Worksheet No.110)</p> <p>CLASS VII: Introduction, Medians of a triangle, altitudes of a triangle, Exterior angle of a triangle, two special triangle - equilateral and isosceles triangle and their properties, angle sum property of a triangle (Use Worksheet No. 27, 28, 29)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Labels different parts of a triangle – altitude, median Classify triangles on the basis of its properties. Finds unknown angles of a triangle when its two angles are known. 	<ul style="list-style-type: none"> Colouring activity for visualization of interior and exterior parts of a triangle. Role play to understand triangle and its parts Drawing different types of triangles on dot paper. Making triangles from sticks & Paper folding
Chapter-8 Comparing Quantities	<p>CLASS V: How Big How heavy, comparing lengths and weights.</p> <p>CLASS VII: Introduction, Equivalent ratios, percentage-another way of comparing quantities, use of percentages, prices related to an item or buying and selling, charge given on borrowed money or simple interest. (Use Worksheet No. 31,32,33,34,35)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Solves problems related to conversion of percentage to fraction and decimal and vice versa. Calculates profit/loss %, rate % and simple interest. 	<ul style="list-style-type: none"> Conversation between friends (Role play) to understand profit /loss % and interest.

Chapter-10 Practical Geometry	<p>CLASS V: Line segment.</p> <p>*CLASS VI: Same as in chapter 5. (Use Worksheet No.24,27,28,29)</p> <p>CLASS VII: Introduction, construction of a line parallel to a given line through a point not on the line, construction of triangles, constructing a triangle when the lengths of its three sides are known (SSS Criterion), constructing a triangle when the lengths of two sides and the measure of the angle between them are known (SAS criterion) (Use Worksheet No. 36, 38, 39)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Using ruler and a pair of compasses, constructs a line parallel to a given line from a point outside it Construct different type of triangles. 	<ul style="list-style-type: none"> Pictures made by Aman - cycle, house and car. (Pragati) In the given grid make triangles of different sizes Draw different triangles by cutting and pasting of paper
Chapter-13 Exponents and Powers	<p>CLASS V: Multiples and Factors.</p> <p>CLASS VII: Introduction, exponents, laws of exponents, miscellaneous examples using the laws of exponents, decimal number system, expressing large numbers in the standard form. (Use Worksheet No. 16,17,18)</p>	<p>The learner:</p> <ul style="list-style-type: none"> Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers. 	<ul style="list-style-type: none"> Conversation between Yogesh and Kavita(Pragati) Is your secret intact? (Pragati)
Chapter-15 Visualizing Solid Shapes	<p>CLASS V: Basic geometrical Shapes</p> <p>CLASS VI: 2D and 3D shapes</p> <p>CLASS VII: Net for 3D shapes & Visualizing solid shapes (Use Worksheet No. 20,21)</p> <p>Note: The content of this chapter should be taught for learning enhancement only and not to be assessed.</p>	<p>The learner:</p> <ul style="list-style-type: none"> Views solid objects and differentiate between its different views - front, side and top Makes the net of a 3D shape 	<ul style="list-style-type: none"> Making net of different 3D shapes Look out for any solid object in your surroundings like a glass, table etc. and observe its front, side and top view.
<ul style="list-style-type: none"> > The whole syllabus must be completed by 31st January, 2024. > Mental Maths & Maths Lab Activities > Revision of syllabus for Annual Examination > Annual Examination will be based on complete syllabus. 			
<p>Note: The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.</p>			