

Annual Syllabus
Class-VII (2022-23)
Subject: Mathematics (Level – 1)

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 2022.</p> <p>➤ Revision of syllabus for Mid Term Examination</p>			
MID-TERM EXAMINATION – 2022			
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 conversation 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.

<p>Chapter-10 Practical Geometry</p>	<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
<p>Chapter-13 Exponents and Powers</p>	<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)
<p>Chapter-15 Visualizing Solid Shapes</p>	<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.
<p>➤ The whole syllabus must be completed by 31st January, 2023.</p> <p>➤ Mental Maths & Maths Lab Activities</p> <p>➤ Revision of syllabus for Annual Examination</p> <p>➤ Annual Examination will be based on complete syllabus.</p>			
<p>Note: The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.</p>			
<p>ANNUAL EXAMINATION - 2023</p>			