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

Chapter Name	Content and its mapping with previous classes	Learning Outcomes	Suggested Activities
Chapter-1 Integers	**CLASS V:** Comparing numbers, big number in practice, outcome in number situation. **(Use Worksheet No. 4,7,9)** **CLASS VI:** Representation of integers on number line, Addition and subtraction of integers **(Use Worksheet No. 1,3,4,5,9,10)** **CLASS VII:** Introduction, Multiplication of integers, division of integers **(Use Worksheet No. 1,5,7)**	The learner: • Multiplies and divides two integers. • Solves basic problem involving the Multiplication and Division of integers.	• 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	**CLASS-V**: Equivalent fractions, mixed fractions without using terms, Tenths, Hundredths. **(Use Worksheet No. 130,135,141,143)** **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)** **CLASS-VII**: Introduction, Multiplication of fractions, Division of fractions, Multiplication of decimal numbers, division of decimal numbers. **(Use Worksheet No.10,11,12,13)**	The learner: • 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.	• Introduction using daily life examples. • Colouring/shading equal parts
Chapter–5 Lines and Angles	**CLASS V:** Meaning of line and angle, Angles less than 90^0, More than 90^0, Straight angles, Types of Polygons **(Use Worksheet No.96,100,106)** **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)**	The learner: • Classifies pairs of angles based on their properties as linear, supplementary, complementary, adjacent and vertically opposite	Searching examples of angles around us. • 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)	● Finds the value of the one angle when the other angle is given.	

> ➢ **Mental Maths and Maths Lab Activities**
> ➢ **The above content must be completed by 30ᵗʰ September 2023.**
> ➢ **Revision of syllabus for Mid Term Examination**

MID-TERM EXAMINATION – 2023

Chapter-3 Data Handling	**CLASS V**: Tally Marks, Reading of Bar graph, Line Graph **(Worksheet No. 14,16)** **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)**	The learner: ● 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.	● Activity based on the conveyance used by the students. ● Role play
Chapter-6 The triangle and its properties	**CLASS V:** Triangle shape and Area, perimeter. **CLASS VI:** Triangle shape in polygon. **(Use Worksheet No.110)** **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)**	The learner: ● 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.	● 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	**CLASS V:** How Big How heavy, comparing lengths and weights. **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)**	The learner: ● Solves problems related to conversation of percentage to fraction and decimal and vice versa. ● Calculates profit/loss %, rate % and simple interest.	● Conversation between friends (Role play) to understand profit /loss % and interest.

		The learner:	
Chapter-10 Practical Geometry	**CLASS V:** Line segment. ***CLASS VI:** Same as in chapter 5. **(Use Worksheet No.24,27,28,29)** **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)**	The learner: ● 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.	● 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	**CLASS V**: Multiples and Factors. **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)**	The learner: ● Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers.	● Conversation between Yogesh and Kavita(Pragati) ● Is your secret intact? (Pragati)
Chapter-15 Visualizing Solid Shapes	**CLASS V**: Basic geometrical Shapes **CLASS VI:** 2D and 3D shapes **CLASS VII:** Net for 3D shapes & Visualizing solid shapes **(Use Worksheet No. 20,21)** **Note: The content of this chapter should be taught for learning enhancement only and not to be assessed.**	The learner: ● Views solid objects and differentiate between its different views - front, side and top ● Makes the net of a 3D shape	● 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.

➢ **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.**

Note: The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.