

Annual Syllabus

Class -VII (2025-26)

Subject: Mathematics

Chapter Name	Content	Learning Outcomes	Suggested Activities
Chapter-1 Integers	Properties of addition and subtraction of integers, Multiplication of integers, Properties of multiplication of integers, division of integers, properties of division of integers. (Use Worksheet No. 5,6,7,8 dated 02/08/21 to 13/08/21)	The learner: <ul style="list-style-type: none"> Multiplies and divides two integers. 	<ul style="list-style-type: none"> Locate integers on number line To multiply integers on number line Fill the right integers in the given figure Find the right key of the doors Write appropriate integers in the figure of square Arrows matching
Chapter-3 Data Handling	Representative values, arithmetic mean, mode, median, use of bar graphs with a different purpose. (Use Worksheet No. 23,24,25,26 dated 11/10/21 to 25/10/21)	The learner: <ul style="list-style-type: none"> Calculates different representative values like arithmetic mean, mode, median for simple data from daily life situations 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 Runs scored by team in first 10 overs etc.
Chapter-4 Simple Equation	Mind-reading game, Setting up of an equation, Review of what we know, what equation is, More equations, application of simple equations to practical situations	The learner: <ul style="list-style-type: none"> Solves daily life situations by converting it into simple equations 	<ul style="list-style-type: none"> Balancing Scale Activity: Interpret simple equation using balance Math Bingo:solve equations and mark it on Bingo card Equation Treasure Hunt:Reach to the treasure by solving equations

Chapter-5 Lines and Angles	Introduction, line, related angles, pair of lines, checking for parallel lines. (Use Worksheet No. 14,15 dated 10/09/21 to 13/09/21)	The learner: <ul style="list-style-type: none"> Classifies pairs of angles based on their properties as linear, supplementary, complementary, adjacent and vertically opposite and finds the value of the one when the other is given. Justifies the properties between the angles formed by a transversal on cutting two lines 	<ul style="list-style-type: none"> Searching examples of angles around us. Role play on recognition of angles and names of angles. Activities from Pragati
Chapter-9 Perimeter and Area	Area of parallelograms, Area of triangles, Circles	The learner: <ul style="list-style-type: none"> Finds out approximate area of closed shapes by using unit square grid graph sheet. Calculates area of the region enclosed in a rectangle and a square. 	<ul style="list-style-type: none"> In the given grid make rectangles of different sizes but same in area. Using method of cutting and pasting of paper find the area of parallelogram. Circumference with the help of thread.
Chapter-12 Symmetry	Introduction, Lines of symmetry for regular polygons, Rotational Symmetry, Line Symmetry and Rotational Symmetry	The learner: <ul style="list-style-type: none"> Identifies symmetrical figures from their environment Visualizes the symmetry Through paper folding activity 	<ul style="list-style-type: none"> Conversation on the idea of symmetry: Artists, professionals, designers of clothing ,jewellery..... <ol style="list-style-type: none"> Punching game Copy the diagram about the mirror lines. Collect and write examples of rotational symmetry from real life.
➤ The above syllabus is to be completed for Mid-Term Examination by 06th September, 2025. ➤ Mental Math & Math Lab Activities ➤ Revision of syllabus for term examination			
MID TERM EXAMINATION			

Chapter-2 Fraction and Decimals	Multiplication of fractions, Division of fractions, Multiplication of decimal numbers, division of decimal numbers. (Use Worksheet No. 10,11,12,13 dated 16/08/21 to 06/09/21)	The learner: <ul style="list-style-type: none"> • Interprets the division and multiplication of fractions. • Explores multiplication/division of fractions and decimals through images, paper folding and daily life situations. 	<ul style="list-style-type: none"> • Introduction using daily life examples. • Colouring/shading equal parts • Work on decimals using graph paper and Dienes blocks.
Chapter-6 The triangle and its properties	Introduction, Medians of a triangle, altitudes of a triangle, Exterior angle of a triangle and its property, angle sum property of a triangle, two special triangles: equilateral and isosceles, sum of the lengths of two sides of a triangle, right angled triangles and Pythagoras property. (Use Worksheet No. 27,28,29,30 dated 27/10/21 to 12/11/21)	The learner: <ul style="list-style-type: none"> • Finds unknown angles of a triangle when its two angles are known. • Discovers the properties of external angles of a triangle 	<ul style="list-style-type: none"> • Colouring activity to 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. • Paper folding activity • Making triangles from sticks.
Chapter-7 Comparing Quantities	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 dated 15/11/21 to 03/12/21)	The learner: <ul style="list-style-type: none"> • Solves problems related to conversion of percentage to fraction and decimal and vice versa. • Calculates profit/loss percent and rate percent. 	<ul style="list-style-type: none"> • Conversation between friends (Role play) to understand profit loss, % and interest.
Chapter-8 Rational Numbers	Introduction, Need for rational numbers, what are rational numbers, positive and negative rational numbers, rational numbers on number line, rational numbers in standard form, comparison of rational numbers, rational numbers between two rational numbers, operation on rational numbers	The learner: <ul style="list-style-type: none"> • Solves daily life problems related to rational numbers 	<ul style="list-style-type: none"> • Number line activity: Represent rational numbers on number line • Comparison game: Compare different rational numbers and identify largest & smallest • Fraction Dominos: Join rational numbers in correct sequence

Chapter-10 Algebraic Expressions	Introduction, How are expressions formed? , Terms of an expression, like and unlike terms, monomial, binomial, trinomial, polynomial, finding the value of an expression.	The learner: <ul style="list-style-type: none"> • Forms algebraic expressions using variable and constant. • Adds and subtracts algebraic expressions. 	(Pragati) <ul style="list-style-type: none"> • Shyana and Bob conversation –role play in the introduction. • Polynomial tree.
Chapter-11 Exponents and Powers	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 dated 17/09/21 to 24/09/21)	The learner: <ul style="list-style-type: none"> • Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers. 	Pragati <ul style="list-style-type: none"> • Conversation between Yogesh and Kavita • Is your secret intact?
Chapter-13 Visualizing Solid Shapes	Introduction,: plane figures and solids figures, faces, edges and vertices, nets for building 3D shapes, drawing solids on a flat surface, viewing different sections of a solid (Use Worksheet No. 21,22 dated 04/10/21 to 08/10/21)	The learner: <ul style="list-style-type: none"> • Visualizes solid shapes and can draw their nets • Recognizes and draw the top, front and side views of 3D objects. 	(NCERT) <ul style="list-style-type: none"> • Nets for 3-D figures. • To draw solid shapes on graph paper. • Oblique and isometric sketches.
➤ The whole syllabus is to be completed for Annual Examination by 31st January, 2026. ➤ Mental Math & Math Lab Activities ➤ Revision of syllabus for Annual Examination			
ANNUAL EXAMINATION 2026			
Note: The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.			