

**TERMWISE SYLLABUS**  
**SESSION-2018-19**  
**CLASS-VII**  
**SUBJECT: MATHEMATICS (PRATIBHA)**

<b>TERM-I ( April 2018 to September 2018)</b>			
<b>Chapter Name</b>	<b>Content</b>	<b>Learning Outcomes</b>	<b>Suggested Activities</b>
<b>Chapter-1 Integers</b>	Introduction, recall, properties of addition and subtraction of integers, multiplication of integers, properties of multiplication of integers , division of integers, properties of integers.	The learner: 1. Solves problem involving additions and subtraction of integers and daily life. Situations involving addition and subtraction. 2. Multiplies and divides two integers.	(Pragati-5) 1. To locate the integers on number line. 2. To multiply the integers on number line. 3. To fill the right integers in the given figure. 4. To find the right key of the doors. 5. To write the appropriate integers in the figure of square. 6. Arrows matching.
<b>Chapter-2 Fraction and Decimals</b>	Introduction, How well you have learnt about fractions? Multiplication of fractions, Division of fractions, How well you have learnt about decimal numbers? Multiplication of decimal numbers, division of decimal numbers.	The learner: 1. Interprets the division and multiplication of fractions. 2. Uses algorithms to multiply and divide fractions and decimals.	(Pragati-5) 1. Introduction using daily life examples. 2. Coloring/shading equal parts
<b>Chapter-3 Data Handling</b>	Introduction, collecting data, organization of data, representative values, arithmetic mean, mode, median, use of bar graphs with a different purpose, chance and probability.	The learner: 1. Interprets data using bar graph such as consumption of electricity is more in winter than summer. Runs scored by team in first 10 over etc.	(Pragati-5) 1. Activity based on the conveyance used by the students. 2. Role play

<b>Chapter-4 Simple Equation</b>	A mind reading game, setting up of an equation, review of what we know, what equation is? Solving an equation, more equations, from solution to equation, application of simple equations to practical situations.	The learner: 1. Represents daily life situations in the form of a simple equation and solves it.	(NCERT) 1. Conversation between teacher and Anuja. 2. Solves equations with the help of balancing.
<b>Chapter -5 Lines and Angles</b>	Introduction, related angles, pair of lines, checking for parallel lines.	The learner: 1. 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.	(Pragati-5) 1. Searching examples of angles around us. 2. Role play on recognition of angles and names of angles.
<b>Chapter-6The triangle and its properties</b>	Introduction, Medians of a triangle, altitudes of a triangle, Exterior angle of a triangle, two special triangle and its property, angle sum property of a triangle, equilateral and isosceles triangle, sum of the lengths of two sides of a triangle, right angled triangles and Pythagoras property.	The learner: 1. Finds unknown angles of a triangle when its two angles are known.	(Pragati-5) 1. Coloring activity to visualization of interior and exterior parts of a triangle. 2. Role play to understand triangle and its parts 3. Drawing different types of triangles on dot paper. 4. Paper folding activity 5. Making triangles from sticks.
<b>Chapter-14 Symmetry</b>	Introduction, line symmetry for regular polygons, rotational symmetry, line symmetry and rotational symmetry.	1. Identifies symmetrical figures from their environment and which shows rotational symmetry. 2. Visualizes the symmetry through paper folding activity	(NCERT) 1. Conversation on the idea of symmetry: Artists, professionals, designers, of clothing or jewellery..... 2. Punching game 3. Copy the diagram about the mirror lines.

			4. Collect and write examples of rotational symmetry from real life.
<b>Chapter -15 Visualizing Solid Shapes</b>	<p>Introduction, Visualizing solid objects, viewing different sections of a solid, looking at it from certain angles to get different views, nets for building 3D shapes. Plane figures and solid shapes, faces, edges and vertices, drawing solids on a flat surface.</p> <p><b>Note: As per SCERT guideline, content not to be taught is complete chapter except sub-section 15.4.3 and section 15.5</b></p>	1. Visualizes solid shapes and can draw their nets.	<p>(NCERT)</p> <ol style="list-style-type: none"> <li>1. Nets for 3-D figures.</li> <li>2. To draw solid shapes on graph paper.</li> <li>3. Oblique and isometric sketches.</li> </ol>
<b>Mental Maths, Maths Lab Activities &amp; YUVA sessions</b> <b>Revision of syllabus for Mid Term Exam</b>			
<b>TERM-II (October 2018 to February 2019)</b>			
Chapter Name	Content	Learning Outcomes	Suggested Activities
<b>Chapter-7 Congruence of Triangles</b>	Introduction, Congruence of plane figures, Congruence among line segments, congruence of angles, congruence of triangles, criteria for congruence of triangles, congruence among right angled triangles.	<p>The learner:</p> <ol style="list-style-type: none"> <li>1. Explains congruency of triangles on the basis of the information given about like (SSS, SAS, ASA, RHS).</li> </ol>	<p>(Pragati-5)</p> <ol style="list-style-type: none"> <li>1. Role plays teacher and Rani.</li> <li>2. Pictorial activity –lest find similar.</li> <li>3. Do you know?</li> </ol>
<b>Chapter-8 Comparing Quantities</b>	Introduction, Equivalent ratios, percentage-another way of comparing quantities, use of percentages, prices related to an item or buying	<p>The learner:</p> <ol style="list-style-type: none"> <li>1. Solves problems related to conversation of percentage to fraction and decimal and vice</li> </ol>	<p>(Pragati-5)</p> <ol style="list-style-type: none"> <li>1. Conversation between friends (Role play) to understand profit loss, % and interest.</li> </ol>

	and selling, charge given on borrowed money or simple interest.	<p>versa.</p> <p>2. Calculates profit/loss percent and rate percent.</p>	
<b>Chapter-10 Practical Geometry</b>	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), constructing a triangle when the measure of of two of its angles and the length of the side included between them is given (ASA criterion), constructing a right-angled triangle when the length of one leg and its hypotenuse are given (RHS criterion).	<p>The learner:</p> <p>1. Using ruler and a pair of compasses, Constructs a line parallel to a given line from a point outside it and triangle.</p>	<p>(Pragati-5)</p> <p>1. Activity- pictures made by Aman cycle, house and car.</p>
<b>Chapter-11 Perimeter and Area</b>	Introduction, square and rectangles, area of parallelogram, area of a triangle, circle, conversion of units, application.	<p>The learner:</p> <p>1. Finds out approximate area of closed shapes by using unit square grid graph sheet.</p> <p>2. Calculates area of the region enclosed in a rectangle and a square.</p>	<p>(Pragati-5)</p> <p>1. In the given grid make rectangles of different sizes but same in area.</p> <p>2. Using method of cutting and pasting of paper find the area of parallelogram.</p> <p>3. Circumference with the help of thread.</p>
<b>Chapter -12 Algebraic Expressions</b>	Introduction, How are expressions formed, terms	<p>The learner:</p> <p>1. Adds and subtracts algebraic expressions.</p>	<p>(Pragati-5)</p> <p>1. Shyana and bob conversation.-role play in the</p>

	of an Expression, like and unlike terms, Monomials, Binomials, Trinomials and Polynomials, addition and subtraction of algebraic expressions, finding the value of an expression, using algebraic expression- formulas and rules.		introduction. 2. Polynomial tree.
<b>Chapter-13 Exponents and Powers</b>	Introduction, exponents, laws of exponents, miscellaneous examples using the laws of exponents, decimal number system, expressing large numbers in the standard form.	The learner: 2. Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers.	(Pragati-5) 1. Conversation between Yogesh and Kavita 2. Do your secret is intact?
<b>Following content of term-1 to be repeated and evaluated in term11</b>			
<b>Chapter-2 Fraction and Decimals</b>			
Introduction, How well you have learnt about fractions? Multiplication of fractions, Division of fractions, How well you have learnt about decimal numbers? Multiplication of decimal numbers, division of decimal numbers.			
<b>Mental Maths, Maths Lab Activities &amp; YUVA sessions Revision of Syllabus for Common Annual School Examination</b>			