

**Termwise Syllabus**  
**Session: 2019-20**  
**Class-VI**  
**Subject: Mathematics (Pratibha)**

**Term-I ( April 2019 to September 2019)**

Chapter Name	Content	Learning Outcomes	Suggested Activities
<b>Chapter-1 Knowing our numbers</b>	Introduction, Comparing Numbers, Large Numbers in Practice, Estimation _ nearest tens, hundred, thousands, outcomes of numbers situations, sum and difference, product, Using brackets, Roman Numerals.	The learner will be able to: <ul style="list-style-type: none"> <li>• Differentiate between Indian system and International system of numeration.</li> <li>• Solve daily life situation problems involving addition, multiplication, subtraction, division and fraction.</li> <li>• Estimates the given number.</li> <li>• Express numbers in Roman Numerals &amp; vice-versa.</li> </ul>	<ul style="list-style-type: none"> <li>• Count number of rooms of your school.</li> <li>• Find the number of students in all sections of class.</li> <li>• Count in groups to understand multiply. Distribute the things in groups to understand division.</li> </ul>
<b>Chapter-2 Whole Numbers</b>	Introduction, Whole Numbers, The Number Line. Properties of whole numbers, Patterns in whole numbers  <b>Note: As per SCERT guidelines, content not to be taught- section 2.4 exercise 2.2(to be taught but without emphasizing the use of terminology/name of properties)</b>	The learner will be able to: <ul style="list-style-type: none"> <li>• Add and subtract numbers on number line.</li> <li>• Rearranges the given number and find its solution.</li> <li>• Identify the pattern in a series of numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Learn add and subtract by standing on steps</li> <li>• Game with dice can be used.</li> </ul>
<b>Chapter-3 Playing with Numbers</b>	Introduction, Factors and Multiples, Prime and Composite Numbers, Tests for Divisibility of numbers, Common factors and Common multiples, Some more Divisibility Rules, Prime factorization, Highest Common Factor (HCF), Least Common Multiple (LCM), Some Problems on HCF and LCM.	The learner will be able to: <ul style="list-style-type: none"> <li>• Classify numbers as prime, composite, even and odd.</li> <li>• Check the divisibility of a given number by 2,3,4,5,6,8,9 and 11.</li> <li>• Apply HCF and LCM in daily life situations.</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare 'sieve of Eratosthenes'.</li> </ul>

<b>Chapter-4 Basic Geometric Ideas</b>	Introduction, Points, A Line Segment, A Line, Intersecting Lines, Parallel Lines, Ray, Curves, Polygons, Angles, Triangles. Quadrilaterals, circles.	The learner will be able to: <ul style="list-style-type: none"> <li>• Identify geometrical figures like point, ray, line, line segment, parallel line, intersecting lines in the surroundings and give examples.</li> <li>• Identify the geometrical shapes like triangles, quadrilaterals, circles and their parts.</li> </ul>	<ul style="list-style-type: none"> <li>• Example of line and line segment from daily life.</li> <li>• Identify triangle, quadrilateral, circle from surroundings.</li> <li>• Discussion on the topic of light of sun and candle.</li> </ul>
<b>Chapter -5 Understanding Elementary Shapes</b>	Introduction, Measuring line segment, Angles-right and straight, Angles-Acute, Obtuse and Reflex, Measuring angles, Perpendicular Lines, Classification of Triangles, Quadrilaterals, Polygons, 3-dimensional shapes.	The learner will be able to: <ul style="list-style-type: none"> <li>• Classify the angles as acute, obtuse, reflex, straight, complete and can measure and draw them.</li> <li>• Identify the triangles as scalene, isosceles, equilateral and on the basis of angles.</li> <li>• Identify different quadrilaterals as square, rectangle, parallelogram, rhombus and trapezium.</li> <li>• Identify 3-D shapes and its parts.</li> </ul>	<ul style="list-style-type: none"> <li>• Example of shapes from surroundings.</li> <li>• Examples of 3-D shapes and counting their edges, vertex and faces.</li> </ul>
<b>Chapter-14 Practical Geometry</b>	Introduction, The Circle, A Line Segment, Perpendiculars, perpendicular bisector of a line segment, Angles	The learner will be able to: <ul style="list-style-type: none"> <li>• Construct circle, line segment of given measurements.</li> <li>• Draw perpendicular and perpendicular bisector on line segments.</li> <li>• Identify angles in the surrounding and draw angles of measure <math>30^\circ</math>, <math>45^\circ</math>, <math>60^\circ</math>, <math>75^\circ</math>, <math>90^\circ</math> etc. using ruler and compass.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw any design in circle using compass.</li> <li>• Draw a line segment and bisect it.</li> <li>• Find out geometrical shapes in the house and surroundings.</li> </ul>
<b>Chapter-11 Algebra</b>	Introduction, Matchstick Patterns, The Idea of Variables, More Matchstick patterns, More examples of Variables, use of variables in common rules, expressions and variables, what is an equation, solution of a equation. Using expressions practically.  <b>Note: As per SCERT guidelines, content not to be taught-section 11.6 and exercise 11.2, section 11.7 and exercise 11.3, section 11.9 &amp; 11.10 and exercise 11.5.</b>	The learner will be able to: <ul style="list-style-type: none"> <li>• Identify the variables and solve daily life problems by the use of variable and forming expressions.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify variable and constant.</li> <li>• Puzzles on variables.</li> <li>• Story: "rajeev ki bus yatra" to elaborate variable.</li> </ul>

**Mental Maths, Maths Lab Activities & YUVA sessions**  
Revision of syllabus for Mid Term Exam

**TERM-II (October 2019 to March 2020)**

Chapter Name	Content	Learning Outcomes	Suggested Activities
<b>Chapter-6 Integers</b>	Introduction, integers, addition of integers, subtraction of integers with the help of a number line, Ordering of Integers <b>Note: As per SCERT guidelines, content not to be taught- section 6.2 except 6.2.1, 6.2.2, section 6.3 exercise 6.2 section 6.4 exercise 6.3</b>	The learner will be able to: <ul style="list-style-type: none"> <li>• Identify the integers and represent it on number line.</li> <li>• Compare the different integers and write integers in orders.</li> </ul>	<ul style="list-style-type: none"> <li>• Make understand integers with the help of stairs</li> <li>• Find temperature of Kashmir and Delhi in summer and winter and compare it</li> </ul>
<b>Chapter-7 Fractions</b>	Introduction, Fraction, Fraction on Number Line, Proper, Improper and Mixed Fractions, Equivalent fractions, Simplest form of a fraction, Like fractions, Comparing fractions, Addition and Subtraction of fractions.	The learner will be able to: <ul style="list-style-type: none"> <li>• Represent fraction on number line and shade the given portion as fraction.</li> <li>• Identify fractions as proper, improper, mixed, equivalent and like fractions.</li> <li>• Compare, add and subtract fractions and solve daily life problems involving fractions.</li> </ul>	<ul style="list-style-type: none"> <li>• Divide classroom into parts and write fraction</li> <li>• Paper folding activities</li> <li>• Role play</li> </ul>
<b>Chapter-8 Decimals</b>	Introduction, Tenths, Hundredths, Comparing decimals, Using decimals, Addition of numbers with decimals, Subtraction of numbers with decimals.	The learner will be able to: <ul style="list-style-type: none"> <li>• Identify and compare decimals.</li> <li>• Solve daily life problems involving decimals.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of graph paper to understand decimal</li> <li>• Daily life examples like converting rupee into paisa, cm into metre etc.</li> </ul>
<b>Chapter-9 Data Handling</b>	Introduction, recording data, organizing data, Pictograph, interpretation of a pictograph, drawing a pictograph, a bar graph. <b>Note: As per SCERT guidelines, content not to be taught- Data Handling but to be included in math lab activities only.</b>	The learner will be able to: <ul style="list-style-type: none"> <li>• Collect information and prepare a data.</li> <li>• Learn about tally marks.</li> <li>• Draw and differentiate between bar graph and pictograph.</li> </ul>	<ul style="list-style-type: none"> <li>• Collect information about favourite fruit of students of your class</li> <li>• Find out number of students in each section of VI class</li> </ul>

<b>Chapter-10 Mensuration</b>	Introduction, Perimeter, Area, Area of Rectangle, Area of square.	The learner will be able to: <ul style="list-style-type: none"> <li>Find area and perimeter of the different shapes vis. Square, rectangle, triangle in the surroundings.</li> </ul>	<ul style="list-style-type: none"> <li>Find area and perimeter of your geometry box and notebook.</li> <li>Use of graph paper to find area in square cm.</li> </ul>
<b>Chapter-12 Ratio and Proportion</b>	Introduction, Ratio, Proportion, Unitary method.	The learner will be able to: <ul style="list-style-type: none"> <li>Compare quantities using ratio and check its proportionality.</li> <li>Solve daily life problems using unitary method.</li> </ul>	<ul style="list-style-type: none"> <li>Find ratio of present and absent students in your class</li> </ul>
<b>Chapter-13 Symmetry</b>	Introduction, making symmetric figure, figures with two lines of symmetry, figures with multiple lines of symmetry, reflection and symmetry.  <b>Note: As per SCERT guidelines, content not to be taught-symmetry but to be included in math lab activities.</b>	The learner will be able to: <ul style="list-style-type: none"> <li>Identify symmetry in objects and in surroundings.</li> <li>Draw line of symmetry using paper folding.</li> </ul>	<ul style="list-style-type: none"> <li>Draw line of symmetry in table, butterfly, lock etc.</li> </ul>
<b>Chapter-4 Basic Geometric ideas</b>	<b>(This content of TERM I is to be repeated and evaluated in TERM II)</b>		
<b>Mental Maths, Maths Lab Activities &amp; YUVA sessions</b> <b>Revision of Syllabus for Common Annual School Examination</b>			

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