

CHOITHRAM SCHOOL, MANIK BAGH, INDORE
ANNUAL CURRICULUM PLAN SESSION 2017 – 2018

CLASS: VI
SUBJECT: MATHS

Month & Working Days	Theme/ Sub-theme	Learning Objectives		Activities &Resources	Expected Learning Outcomes	Assessment
		Subject Specific (Content Based)	Behavioral (Application based)			
June 12 days	Knowing our numbers	Students will be able to: - Understand the importance of place value. - Read and write numbers (more than 5 digits) in the Indian and the International system of numeration. - Compare two or more numbers and order them in ascending or descending order - Perform the four basic arithmetic operations. - Make reasonable estimates. - Convert Roman numerals into Hindu Arabic numerals and vice versa	- Students will be able to manage their pocket money. - Students will be able to estimate their marks.	Hands on Activity based on Systems of numerations and place value / NCERT book	Students learned about: - Comparing two or more 5-digit numbers. - arrange the 5-digit numbers in ascending/descending order - identify and represent the place value of a digit in the number - Compare two or more numbers and order them in ascending or descending order - Represent the number in Indian and International system. - Perform the four basic arithmetic operations. - Makes reasonable estimates. - Is able to convert Hindu Arabic numbers to Roman numbers and vice versa.	Assessment will be done on the basis of decided Rubrics.

June 3 days July 10 days	Whole numbers	Students will be able to: • Understand and define natural numbers and whole numbers • Know about Predecessor and Successor • Make out where and how to use the number line effectively • Appreciating, understanding and demonstrating the properties of whole numbers. • Understand the difference between additive and multiplicative Identity. • Understand the existence and importance of Identity element. • Identify patterns and formulate rules	Problem solving skill Ability of reasoning	Exploring the properties of whole numbers / NCERT book	Students learned about: • understand natural numbers and whole numbers • use of number line for various operations. • find Predecessor and Successor • apply the properties of whole numbers. • identify patterns	Assessment will be done on the basis of decided Rubrics.
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July 14 days	Playing with numbers	Student will be able to: • Understand the terms prime and composite numbers and identify them. • Apply divisibility rules. • Identify factors and multiples • Construct factor-tree and finding prime factors. • Understand common factors and common multiples. • Calculate the HCF and LCM. • Understand the applications of HCF and LCM.	Student will learn to do smart work (by application of divisibility rules)	Sieve of Eratosthenes / NCERT book	Students learned about: • Understand the terms prime and composite numbers and identify them. • Apply divisibility rules. • Identify factors and multiples • Construct factor-tree and finding prime factors. • Understand common factors and common multiples. • Calculate the HCF and LCM. • Understand the applications of HCF and LCM. • Do smart work (by application of divisibility test)	Assessment will be done on the basis of decided Rubrics.
Aug 10 days	Basic geometrical ideas	Students will be able to : • Understand and differentiate between line, line segment and ray. • Identify the pair of lines and differentiates between intersecting and parallel lines • Define and name angle	• Understands and explore linkage of geometry in daily life. • Reasoning skill will increase. • Imagination power will increase.	-----	Students learned about: • Understands and differentiates between line, line segment and ray. • Identifies the pair of lines and differentiates between intersecting and parallel lines	

		vertex and its arm, identifies interior and exterior region of an angle. • Name triangle , its vertices, sides, angles, interior and exterior • Name quadrilateral, its sides, vertices, angles, diagonals, adjacent sides and opposite sides (only convex quadrilateral) • Define circle, its centre, radius, diameter, arc, sector, chord, segment, and semicircle, circumference, interior and exterior region.			• Define and name angle vertex and its arm, identifies interior and exterior region. • Name triangle , its vertices, sides, angles, interior and exterior • Name quadrilateral, its sides, vertices, angles, diagonals, adjacent and opposite sides. • Define circle and its parts • Imagination power will increase.	
Aug 8 days	Understanding Elementary shapes	The students will be able to : • Compare line segments, • Understand parallel lines • Understand perpendicular line • Classification of angles. • Classification of triangle on basis of angles • Classification of triangles of basis of sides. • Understand quadrilateral. • Understand adjacent sides and angles • Understand Opposite sides and angles	• Imagination power will be increased • Students will be able to identify different 3D shapes from surrounding	Angle sum property of quadrilateral by paper cutting activity. Nets of solid shapes	Students learned about: • Compare line segments, • Understand parallel lines, perpendicular lines • Classification of angles. • Classification of triangle on basis of angles • Classification of triangles of basis of sides. • Understand quadrilateral. • Understand adjacent sides and angles • Understand Opposite sides and angles • Properties of trapezium,	Assessment will be done on the basis of decided Rubrics.

		• Properties of trapezium, parallelogram rhombus, `square, and rectangle. • Understand circle and concentric circle. • Understand different types of shapes like cube, cuboid and pyramid.			parallelogram rhombus, `square, and rectangle. • Understand circle and concentric circle. • Understand different types of shapes like cube, cuboid and pyramid. • Net of 3d shapes • Imagination power will be increased • Identify different shapes from their surroundings.	
Sep 10 days	Integers	Students will be able to: • Understand integers as collection of negative Integers, non negative integers • Understand the concept of additive inverse. • Understand the concept that the value of Integers become smaller as one moves to the left and bigger as one moves to the right on the number line. • Explore and identify an integer on a number line, • Perform addition and subtraction of integers using the number line • Perform addition and	• Students will be able to differentiate between positive and negative aspects of life. • Understand use of negative numbers in daily life.	Addition and subtraction of integers / NCERT book	Students learned about: • Understand integers as collection of negative Integers, non negative integers • Understand the concept of additive inverse. • Understand the concept that the value of Integers become smaller as one moves to the left and bigger as one moves to the right on the number line. • Explore and identify an integer on a number line, • Perform addition and subtraction of integers using the number line • Perform addition and	Assessment will be done on the basis of decided Rubrics.

		subtraction of integers without using the number line			subtraction of integers without using the number line • Apply the concepts learned in real life situation. • Differentiate between positive and negative aspects of life. • Understand use of negative numbers in daily life.	
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Nov 12 days	Fractions	Students will be able to: • Define fractions, its components and types of fractions • Represent fractions on the number line • Conversion of improper to mixed fraction and vice versa. • Define equivalent fractions • To find the simplest form of fraction • Compare and order two or more fractions • Perform addition and subtraction on fractions and extend it to solving word problems	Ability of reasoning Problem solving	Representing Mixed Numbers and Improper Fractions using strips of paper / NCERT book	Students learned about: • Is able to understand and represent fractions on a number line • Is able to find equivalent fractions for the given fractions • Is able to compare and order fractions • Is able to add and subtract like and unlike fractions • Is able to apply the concept of fractions in real life situations.	Assessment will be done on the basis of decided Rubrics.

87u Nov 11 days	Decimals	The students will be able to understand: • Decimals as fractions • Representation of decimals on number line • Decimals as an extension of place value system • Expanded form • Use of decimals in daily life • Measures of money value • Measures of length, weight and capacity • Addition of decimals • Subtraction of decimals • Word Problems on decimals	• Unity strengthens, no matter how small the individual unit is • A record can be broken by a difference of a few decimal places. • A life can be saved or lost by a difference of a few decimal places in seconds.	Representation of decimals on grid / NCERT book	Students learned about: • operations on decimals they had learnt in previous classes. • They will learn to identify like and unlike decimals. • They will learn to compute various decimals. • Students will learn to find out the sum of two given decimals. • Students will learn the operation of subtraction over decimals. • They will learn about place value system. • They will also learn to solve application based problems. • They will learn to solve word problems. • They will learn to solve situation based questions. • Students will learn to value the smallest part or unit regardless of how insignificant it might seem. • Students will learn to manage time and value each and every second. • They will learn the use of decimals in various daily life aspects like calculations	Assessment will be done on the basis of decided Rubrics.

					relating to money.	
Dec 10 days	Data handling	The students will be able to understand: • data • organization of data • preparation of frequency distribution table • Construction and interpretation of pictographs • Construction and interpretation of bar graphs	• It's important to keep things and information organized to work properly. • Every unit is important in a group. • Information can be represented in interesting ways like pictograph.	Pictograph and bar graph/ NCERT book	Students learned about: • Term data. • Students will realize the significance of organizing data. • They will learn to prepare frequency distribution table. • Students will be able to draw and interpret pictographs and bar graphs. • Students will learn that every unit is important in a group. • They will also realize that information can be represented in an interesting ways like pictograph.	Assessment will be done on the basis of decided Rubrics.

Dec 12 days	Mensuration	The students will be able to understand: • The concept of perimeter • Perimeter of rectangle • Perimeter of square • Perimeter of equilateral triangle • Perimeter of regular polygon • Application of Perimeter • The concept of Area • Area of square • Area of rectangle • Application of areas of square and rectangle • Word problems based on area of rectangle and square	• There can be many ways to tackle problems in life. • A single wrong step can deviate you from the path. • The smallest seeming mistake can completely change the situation	Area and perimeter of My palm / NCERT book	Students learned about: • concept of perimeter. • They will learn to calculate Perimeter of rectangle, square, equilateral triangle, regular polygon. • They will be able to understand the concept of Area. • They will be able to calculate area of square and rectangle. • Students will learn about applications of perimeter and area. • They will learn to solve problems and situation based questions. • They will also learn to solve application based problems.	Assessment will be done on the basis of decided Rubrics.
Jan 13 days	Algebra	The students will be able to understand: • The concept of and difference between variables and constants. • Algebraic terms and expressions • Equations • Direct method to find the solution of an equation	• Every unit is important in a group. • Learning can be fun if you take it in a positive way • While comparing any two things or situations, or people, the parameters and scales must be same.	General rule using matchsticks / NCERT book	Students learned about: • to differentiate between variables and constants. • They will also learn about algebraic terms and expressions. • They will be able to understand and solve equations. • Students will be able to apply direct method to find	Assessment will be done on the basis of decided Rubrics.

					the solution of an equation • They will learn to calculate probability of a given event. • They will learn to solve problems and situation based questions. • They will also realize that a single wrong step can deviate you from the path.	
Jan 7 days Feb 3 days	Ratio and Proportion	The students will be able to: • Define ratio • Understand the properties of ratio • Compare ratio. • Find equivalent ratio. • Understand concept of proportion. • Understand concept of continued proportion. Understand unitary method.	• While painting walls, combination of colors is taken in proper ratios. • If the ratios of hormones or enzymes in our body are not sync, it could result in illness in the organism.	Paper cutting activity for comparing ratios / NCERT book	Students learned about: • Define ratio • Understand the properties of ratio • Compare ratio. • Find equivalent ratios. • Apply concept of proportion. • Understand concept of continued proportion. • Apply unitary method. • Realize that while cooking different recipes, ingredients must be taken in proper ratios. • Realize that while painting walls, combination of colors is taken in proper ratios. • Understands that if the ratios of hormones or enzymes in our body are not sync, it could result in illness in the organism.	Assessment will be done on the basis of decided Rubrics.

Feb 7 days	Symmetry	The students will be able to understand: • The concept of Symmetry • Axis of Symmetry • Mirror or Reflection Symmetry • Properties of Mirror reflection • Using symmetry in day to day life	Beauty is irrespective of symmetry or asymmetry. Observatory skills. Aesthetic Sense.	Symmetry in Alphabets and digits / NCERT book	Students learned about: • Symmetry. • They can recognize axis of symmetry. • They will be able to understand Mirror or Reflection Symmetry. • They will learn the properties of Mirror reflection. • Students will be able to understand uses of Symmetry in day-to-day-life. • They will also learn to solve application based problems. • Students will learn that not all people are alike; however each and every one of us is a human and holds his own importance. • Students will be able to improve their imagination.	Assessment will be done on the basis of decided Rubrics.
Feb 11 days Mar 4 days	Practical geometry	The students will be able to : • Construct Circle with given radius • Draw line segments with special conditions • Construct perpendicular lines	• Imagination power will be increased • Students will learn to do work with accuracy.(importance of accuracy) • Students will learn to achieve desired goal by systematic	Activity based on concept of perpendicular bisector	Students learned about: • Construct Circle with given radius • Draw line segments with special conditions • Construct perpendicular lines • Construct perpendicular	Assessment will be done on the basis of decided Rubrics.

		● Construct perpendicular bisector. ● Construct equivalent angles ● Construct angles which are multiple of 15°. ● Construct angle bisectors.	approach		bisector. ● Construct equivalent angles ● Construct angles which are multiple of 15° ● Construct angle bisectors. ● Imagination power will be increased ● Students will learn to do work with accuracy. ● Students will learn how to do step by step work to achieve desired goal.	
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