VIDYA PRATISHTHAN'S DR. CYRUS POONAWALLA SCHOOL (CBSE), BARAMATI

Std-VI

MATHEMATIC

Sr. No.	Content / Topic	Month days	Learning Objectives	Expected Learning Outcome	Activity / Practical	Teaching Aid	Assessment
1	Bridge Course (Large Numbers, Operations on Large Numbers, Factors & Multiples)	April 10 Days	Students will be able to:- - Write the number name in Indian & International System of numeration. - Find the sum and difference of Roman Numerals. - Find the sum, difference, product & division of the given numbers. - Divide the numbers by using the rules of tests of divisibility. - Find Factors & Multiples of given numbers. - Calculate HCF & LCM by prime factorization method & by short division method. - Find the difference between LCM & HCF.	Students would be able to:- - Describe the Indian & International System of numeration. - The sum and difference of Roman Numerals. - Perform addition, subtraction, multiplication & division of large numbers. - Apply the rules of tests of divisibility. - Write Factors & Multiples of given numbers. - Calculate HCF & LCM by prime factorization method & by short division method. - Define the relation between LCM & HCF.	Fun With Maths Crossword Puzzle.	ICR, Green board.	Worksheet.
2	Knowing Our Numbers	April 10 Days	Students will be able to :- - Find the place value of the digit in order to list total numbers. - Expand the given number in order to know the place value of a given digit in a particular number. - Write the 9 digits number in expanded form in order to write its number name. - Use of commas helps in reading and writing large numbers. - Large numbers are needed in many places in daily life. In order to write its number name.	Students would be able to :- - Applies appropriate Operations. - (Addition, subtraction, multiplication and division) in order to solves problems Involving large numbers.	Expand the order to know the place value of a given digit in a particular Number.	Materials required: Algebraic tiles, arrow cards	Assessment will be done on the basis of decided rubrics.
3	Whole Numbers	April 03 Days June 08 Days	Students will be able to :- - Understand the predecessor of One in order to know the whole number. - Explain the whole number in order to know the predecessor of 1 and the - Subtraction of the two same number. - -Draw the Number line in order to represent the whole number. - Draw a number line in order to find the predecessor and successor of a given number - Represent the Numbers on Number line in order to perform number operation.	Students would be able to :- - Students will be able to show how to use place value to round whole numbers.	Adding Whole Numbers (Group Activity)	Place Value Chart & Blocks	Assessment will be done on The basis of decided rubrics.

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4	Playing with Numbers	June 09 Days July 03 Days	Students will be able to :- - Arrange the numbers in a row in order to determine the factors of a given number. - Determine the numbers which exactly divide the given number in order to find the factors. - Write the factors of a given number in order to determine prime and composite numbers. - Evaluate the factors of given two or more numbers in order to find the common factors and multiples. - Apply the rules of divisibility in order to find the factors of a number quickly. - Factorise a number through prime factorisation in order list the prime's factors. - List down the common factors of given numbers in order to determine their HCF. - List down the common multiples of given numbers in order to determine their LCM. - -Apply the concept of HCF in order to solve related real-life problems. - -Apply the concept of LCM in order to solve related real-life problems.	Students would be able to :- - Identifies number - Patterns through factorization in order to recognize and appreciate (through patterns) the broad classification of numbers as even, odd, prime, co- prime, etc. - Applies the concept of HCF or LCM in order to solve problems in a - Real-life situation.	Let's make Rectangles	Bottle tops, Beads, Pebbles.	Assessment will be done on the basis of decided rubrics.
5	Basic Geometrical Ideas	July 08 Days	Students will be able to :- - Discuss and give example(s) in order to explain the importance of a point. - Give example(s) in order to describe a line segment & a line. - Examine the given lines in order to identify intersecting lines and identify parallel lines among them. - Describe a ray in order to identify it from the given figures. - Compare the given figures in order to identify a ray, line, line segment among them. - Give example(s) in order to demonstrate an understanding of a simple curve and a curve that is not simple. - Describe an open curve and a closed curve in order to distinguish between the two. - Discuss the parts of a closed curve in order to determine the position of a point with respect to it. - Discuss the elements of an Angle: Vertex, arm, interior and exterior in order to identify	Students would be able to :- - Provides examples from - surround in order to describes - geometrical ideas like line, line segment, open and closed figures, angle, - triangle, quadrilateral, circle, etc.	Students will be able to recognize and illustrate geometric properties in real life, including recognizing shapes have volume or are flat plane figures -2D – 3D Scavenger Hunt	Worksheet, multi colored chalks, pencil -2D Figures, 3D Figures.	Assessment will be done on the basis of decided rubrics.

			it for the given angles.				
6	Understanding Elementary Shapes	August 12 Days	Students will be able to :- - Measure the given line segments in order to compare them. - Examine the rotation of angles in order to classify angles based on the amount of rotation. - Compare the given angles in order to classify them as an acute angle, obtuse angle or a reflex angle according to their measure. - Identify the different types of angles in our surroundings in order to demonstrate an understanding of angles. - Use a protractor in order to draw an angle of the given measure. - Describe perpendicular and a perpendicular bisector in order to identify the same in the given figure. Give example(s) of perpendicular lines in order to demonstrate an understanding of the same. - Observe the measure of sides of a triangle in order to classify it into different types (scalene, isosceles, and equilateral) based on its sides. - Observe the measure of angles of a triangle in order to classify it into different types (acute, obtuse, right) based on its angles. - Examine the given figures in order to classify type quadrilaterals based on their properties. - Examine the given figures in order to identify polygons. - Describe polygons in order to classify them based on their number of sides and angles.	Students would be able to :- - demonstrate an understanding of angles: - Identifies examples - of angles in the surrounding - Classifies angles according to their measure - Estimates the measure of angles using 45°, 90°, and 180° as reference angles - Classifies triangles with Different measurements in order to show different types of triangle based on their angles and sides. - For example- scalene, isosceles or equilateral - on the basis of - sides, etc. -Classifies quadrilaterals with different measurements in order - to show different types - of quadrilaterals based on their sides and internal angles. For example – square, rectangle, rhombus, trapezium etc.	-Measure the given line segments in order to compare them. -Compare the given angles in order to classify them as a right angle, straight angle or a complete angle. -Use a protractor in order to draw an angle of the given measure. -Observe the measure of angles of a triangle in order to classify it into different types (acute, obtuse, and right) based on its angles. -Examine the given figures in order to identify polygons.	Pencil, Compass, Scale, protractor etc.	Assessment will be done on the basis of decided rubrics.
7	Integers	August 12 Days	Students will be able to :- - Represent integers with their signs in order to differentiate positive number, negative number and zero from each other - Denote numbers with their signs in order to represent real life situations like temperature scale, credit debit etc. - Represent the integer on Number Line in order to in order to determine its position	Students would be able to :- - Applies addition and subtraction rules involving positive and negative integers in order to solve real life problems.	Represent integers with their signs in order to differentiate positive number, negative number and zero from each other	Number line.	Assessment will be done on the basis of decided rubrics.

			with respect to other integers - Determine one more and one less of a given integers in order to find its predecessor and successor. - Determine the order of integers in order to represent them on number line and draw - Comparison between them. - Represent the integers on number line in order to perform arithmetic operations on them. - Apply the rules of integer's operations in order to perform arithmetic operations on them.		Determine the order of integers in order to represent them on a number line and draw a comparison between them. - To model addition of integers		
8	Fractions	September 12 Days	Students will be able to :- - Represent a number as a part of the whole in order to determine the fraction - Draw equal parts between the whole numbers in order to represent fractions on a number line - Write proper fractions in order to deduce that they are always less than 1/numerator is less than denominator - Write fractions where numerator is greater than denominator in order to determine improper fractions - -Write the improper fraction in the form of mixed fraction - Multiply/Divide the numerator and - denominator with the same number in order to find equivalent fractions - Perform cross multiplication among two fractions in order to verify their equivalence - Reduce the fraction in order to determine its simplest form - Check the denominators of the fractions in order distinguish between like and unlike fractions.	Students would be able to :- - Calculates fractions and decimals in different real-life situations in order to identify the appropriate quantity of money, length, temperature etc. - For example, 7½ meters of cloth. Distance between two places is 112.5 km etc. - Calculates addition and subtraction of fractions and decimals in order to solve daily life problems involving quantities measure between two integers.	Represent a number as a part of the whole in order to determine the fraction. Convert the given fractions into its equivalent fractions in order to perform addition on them. Multiply the numerator and denominator with the same number in order to find equivalent fractions.	Colored chalks, worksheets, colored sheets, graph paper - Colored sheet, scale	Assessment will be done on the basis of decided rubrics.
9	Decimals	October 18 Days	Students will be able to :- - Write rupees paisa in decimal form in order to know the meaning and relevance of dot point - Represent number in its unit part in order to write it in decimal form. - Represent number in its unit part in order to write it in decimal form.	Students would be able to :- - Calculates fractions and decimals in different real-life situations in order to identify the appropriate quantity of money, length, temperature etc. For example, 7½ meters of cloth. Distance between two places is 112.5 km etc.	-Write rupees paisa in decimal form in order to know the meaning and relevance of dot point.	Activity Sheet.	Assessment will be done on the basis of decided rubrics.

			- Determine the place value of decimal numbers up to hundredth in order to write the number in expanded form. Determine the part and whole of a given decimal number in order to represent it in the form of fractions. Determine the place of the digits of a decimal number in order to write it in words Compare the units and parts of the - decimal numbers in order to compare them as a whole - Represent/Convert the money, length and weight into smaller units in order to represent it into decimal form - Add and subtract the whole and parts of decimal numbers in order to find their sum and difference.	- Calculates addition and subtraction of fractions and decimals in order to solve daily - life problems - involving quantities that measure between two integers	- Students will be able to read, write, add and subtract decimals in order to solve decimals related problems.		
10	Data Handling	October 08 Days	Students will be able to :- - Observe different tables in order to gather the information recorded in the table - Group and compare raw data systematically in order to infer the relevant information quickly - Organize raw data into a table using tally marks in order to organize the given data	Students would be able to :- - Arranges given/collected information such as expenditure on different items in a family in the last six months, in the form of table, pictograph and bar graph in order to interpret them.	- Students will Interpret bar graph in order to find the relevant information represented by the bar Graph	Graph paper.	Assessment will be done on the basis of decided rubrics.
11	Mensuration	November 14 Days December 04 Days	Students will be able to :- - Give example(s) in order to define perimeter of closed figures. - Deduce and apply the formula to determine the perimeter of a rectangle. Deduce and apply the formula to determine the perimeter of a square. - Deduce and generalize the formula to determine the perimeter of a regular polygon Give examples in order to defend that different shapes can have the same perimeter - Count the squares in order to estimate the area of the given closed curve in the squares grid sheet - Deduce and apply the formula in order to determine the area of a rectangle. - Deduce and apply the formula in order to determine the area of a square.	Students would be able to :- - Calculates perimeter and area of rectangular 2-d and 3-d objects to measure them for real life objects - Finds out the perimeter and area of the rectangular objects in order to calculate them for commonly found objects from the surroundings like floor of the class room, surfaces of a - chalk box etc.	Deduce and apply the formula in order to determine the area of a rectangle. Deduce and apply the formula in order to determine the area of a square. Calculate skin surface area	Colored chalks, graph paper, colored paper, bangle, cut-outs, Square grid paper of A4 size, two Dice Newspaper Masking tape Measuring tape or meter stick	Assessment will be done on the basis of decided rubrics.

						Lots of open floor space A partner	
12	Algebra	December 16 Days	Students will be able to :- - Describe algebraic expressions in order to distinguish them from arithmetic expressions. - Examine patterns in order to identify relationship in - Patterns. - Use variable with different operations in order to generalise a given situation. - Use variable(s) in order to express some mathematical rules and formulae. - Use variable with different operations in order to form an algebraic expression. - Change the given algebraic expression in statements in order to describe the situation in ordinary language.	Students would be able to :- - Involves use of variables with different operations to generalise a given situation in order - to find a solution to a given problem e.g., perimeter of a rectangle with sides x units and 3 units is 2(x+3) units - Uses unitary method in problem solving to calculate the quantity for one unit in order to calculate the total quantity for larger quantities.	- Students will be able to identify and apply the steps in evaluating Algebraic expressions in order to help the students in problem solving, logic, patterns, and reasoning. - To show the identity $(\boldsymbol{a} + \boldsymbol{b})\mathbf{2}$	- Activity Sheet	Assessment will be done on the basis of decided rubrics.
13	Ratio and Proportion	January 16 Days	Students will be able to :- - Represent two quantities in same unit in order to compare them - Compare two quantities in order to find their ratio - Multiply/divide numerator and denominator by same number in order to find equivalent ratio. - Compare ratio in order to determine whether they are in proportion .Solve the proportion in order to find out the missing term - Solve the problems with the help of unitary method in order to compute the value of one article, given the value of many.	Students would be able to :- - Represents the measurement as ratios in order to compare two quantities in real life e.g., the ratio of girls to boys in a particular class in 3:2	Represent two quantities in same unit in order to compare them. To compare two quantities in order to find their ratio and proportion Meeting real life ratio challenges (recipes)	-Pictures of Equivalent ratio, proportion, similar triangles - Actual recipes	Assessment will be done on the basis of decided rubrics.
14	Symmetry	January 10 Days February	Students will be able to :- - Explain the meaning of symmetry in order to identify symmetric figures in our	Students would be able to :- - In order to demonstrate an	- 1. Identify symmetrical 2-D shapes which are symmetrical	-Squares cut out from constructio n paper or	Assessment will be done on the basis

		05 Days.	surrounding. Identify symmetrical 2-Dimensional shapes which are symmetrical along one line in order to demonstrate an understanding of the same.	understanding of line of symmetry	along one line in order to demonstrate an understanding of the same.	sticky notes.	of decided rubrics.