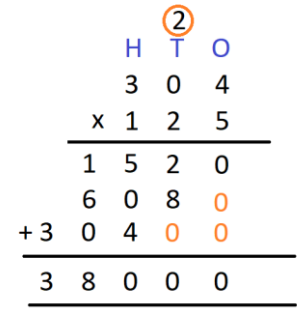
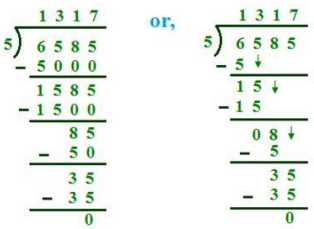
VIDYA PRATISHTHAN'S DR. CYRUS POONAWALLA SCHOOL (CBSE), BARAMATI

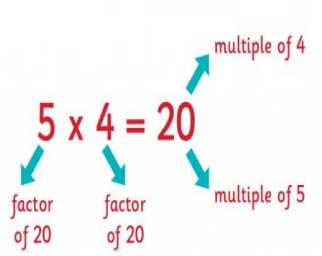
ANNUAL CURRICULUM PLANNING, 2024-25

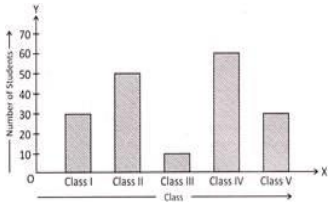
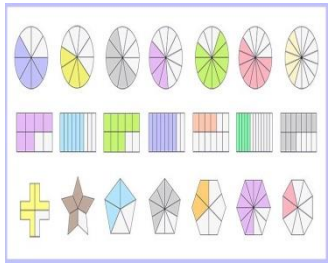
Class: IV **Mathematics** **Marks: 100**

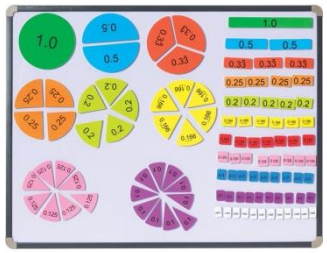
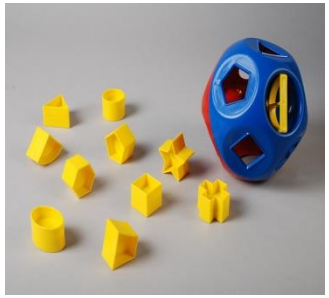
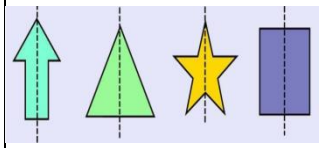
Sr. No.	Content/Topic	Month and Working Days	Learning Objectives	Expected Learning Outcomes	Activity	21st Century Skills	Teaching Aids	Assessment
	Bridge Course	April (19)	Recapitulation: Read & write 3 & 4 digit numbers, know the face value and place value of the numbers, Addition and Subtraction of 3 digit numbers, Simple Multiplication and Division of numbers.	Students are able to recapitulate. Students can read the numbers, add and subtract, multiply and divide 3 digit numbers.	**Activity-** To understand place value using abacus.	Problem Solving	Abacus, Place value chart	Worksheet.
1.	Large Numbers 	April (19)	1. Introducing 'Ten thousands' place value	1. To read and write 5-digit numbers. To know face value & place value.	**Math Lab Manual Activity-1** To form the greatest and smallest numbers using a given set of digits.	Problem Solving	Abacus, Place value chart	Worksheet, Mental Math.
			2. Visualizing a large number and representing it.	2. Represent 5-digit numbers on the Abacus.				
			3. Introducing 'Lakhs' place value.	3. To read and write 6-digit numbers. To know face value & place value.				
			4. Visualizing a large number and representing it.	4. Represent 5-digit numbers on the Abacus.				
			5. To arrange the given large numbers in ascending & descending order.	5. Reorder the number in ascending & descending order.				
			6. Differentiate between Roman and Hindu-Arabic numerals.	6. To identify the symbols used in Roman Numbers.				
			Convert Roman numbers into Hindu-Arabic	To convert Roman numbers into Hindu-				

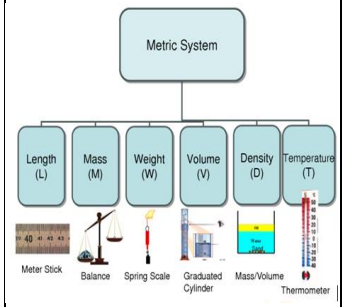
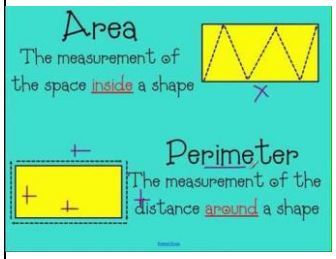
			numbers & vice-versa. 7. Applying concepts learnt in assessments	Arabic numbers & vice-versa. 7. Complete worksheets based on the chapter concepts.				
2	Addition and Subtraction  TTh Th H T O 7 6 4 3 5 - 4 5 3 2 3 3 1 1 1 2	June (19)	1. To add 5-digit and 6-digit numbers without regrouping	1. Perform addition of two 5-digit and 6-digit numbers without regrouping	**Math Lab Manual Activity-2** To understand the concept of estimation through subtraction.	Flexibility and Adaptability Collaboration	Cards of numbers, Blocks of ones, tens & hundreds	*Wor*ksheet, Add the following. Subtract the following.
			2. To add 5-digit and 6-digit numbers with regrouping.	2. Perform addition of two 5-digit and 6-digit numbers with regrouping	Formation of 5-digit numbers			
			3. Apply addition of large numbers to real-life situations.	3. Solve word problems on addition of two 5-digit and 6-digit numbers.	**Math Activity1:** To understand the concept of addition and subtraction of 5-digit and 6-digit numbers.			
			4. To learn the properties of addition.	4. Understand and apply the properties of addition.				
			5. To subtract 5 & 6 digit numbers without regrouping.	5. Perform subtraction of two 5-digit and 6-digit numbers without regrouping				
			6. To subtract 5 & 6 digit numbers with regrouping.	6. Perform subtraction of two 5-digit and 6-digit numbers with regrouping				
			7. Apply subtraction of large numbers to real-life situations.	7. Solve word problems on addition of two 5-digit and 6-digit numbers.				
			8. To learn the properties of subtraction.	8. Understand and apply the properties of subtraction.				

			9. To solve problems involving both addition & subtraction.					
3	Multiplication  	July (22)	1. To understand and apply the properties of multiplication.	Students will be able to-	**Math Lab Manual Activity -3** To find the product of two numbers by lattice method.	Initiative and Self- Direction	Multiplication table chart, marbles	Worksheet, Mental Math worksheet.
			2. To multiply a number by 100, 1000, 10,000. To perform smart multiplication.	1. Building multiplication tables.	**Math Lab Manual Activity-4** To generate the multiples of 10 by multiplication and addition.			
			3. To multiply numbers using grids.	2. Multiply 3-digit number by a 3- digit number.				
			4. To multiply a 4- digit number by a 1- digit & a 2- digit number.	3. Recognize that multiplication can be done in any order.				
			5. To solve word problems on multiplication of 3 & 4 – digit numbers.	4. Multiply numbers by power of 10 and their multiples.				
			6. To estimate the product of two 3- digit numbers to the nearest hundred.					
4	Division  	August (20)	1. To divide a 3-digit number by a 2-digit number by long division with remainder.	Students will be able to-	**Math Activity 2:** To understand equal sharing.	Critical Thinking	Different things i.e. pencil, sharpener to introduce the concept	Worksheet, Mental Math Worksheet.
			2. To divide a 4-digit number by a 1-digit number by long division.	1. Use repeated subtraction to solve division problem.				
			3. To divide a 4-digit number by a 2-digit	2. Apply the properties of division.				

			number by long division.					
			4. Solve word problems on division of 3-digit & 4-digit numbers.	3. Solve word problem related to division.				
			5. To divide a number by 100, 1000, 10,000.					
			6. To estimate the quotient of two numbers.					
5	Factors and Multiples 	August (20)	1. To list the factors of a number.	Students can- 1. Find the factors & multiples of a number.	**Math Lab Manual Activity-5** To find the factors of a given number by pictorial representation.	Problem solving, Critical thinking.	Notebook & pencil	Worksheet Mental Math Worksheet.
			2. To draw the factor tree of a number.	2. Draw the factor tree of a given number.				
			3. To find the common factor & the highest common factor of the given numbers.	3. Write the common factors & common multiples of given numbers.				
			4. To understand facts about multiples.	4. Define even & odd numbers.				
			5. To find the common factor & the lowest common factor of the given numbers.	5. Calculate HCF & LCF of given numbers.				
			6. To check divisibility of a number by 2, 5 & 10.	6. Apply divisibility rules of 2, 5 & 10				
6	Money 	September (18)	1. To add & subtract money.	Students can- 1. Perform addition, subtraction, multiplication & division of money.	**Math Lab Manual Activity-11** To role play buying and selling.	Financial Literacy, Productivity & Accountability. Information literacy	Dummy currency notes, coins, bills, etc.	Convert the following.
			2. To multiply & divide money.	2. Create bills.				

7	Data Handling  	September (18)	1. To interpret a bar graph. 2. To draw a bar graph. 3. To interpret a pie chart. 4. To draw a pie chart.	Students will be able to- 1. Create & interpret a bar graph. 2. Illustrate data using pie chart. 3. Draw conclusions from bar graphs & pie charts.	**Math Lab Manual Activity- 12** To learn to investigate, represent and analyze data. To draw a bar graph & pie chart	Information Literacy, Initiative & self-direction, Environmental literacy	Information chart, ruler, compass & notebook	Read the pictograph to answer the questions. Worksheet
8.	Fractions 	October (18)	1. To recognize simple fractions such as half, one-third, one-fourth, one-eighth. 2. To find equivalent fractions. Reduce a fraction to its lowest terms. 3. To understand like fractions. To compare & order like fractions. 4. To add & subtract like fractions. 5. To understand proper, improper & mixed fractions. 6. To convert mixed fraction into improper fractions & vice a versa. 7. To represent a fraction on the number line.	Students can- 1. Describe the concepts half, one third and quarter by shading. 2. Write equivalent fractions of a given fraction. 3. Define like & unlike fractions. Perform Addition & subtraction of like fractions. 5. Define proper, improper & mixed fractions. 6. Convert mixed fraction into improper fractions & vice a versa. 7. Represent a fraction on the number line.	**Math Lab Manual Activity-6** To understand equivalent fractions by paper folding.	Problem solving, Productivity & Accountability.	Paper cut-outs of circle & square, notebook, ruler, pencil	Worksheet Mental Math Worksheet.
9.	Decimals	October (18)	1. To understand the place value chart of decimal numbers. 2. To understand the concept of tenths,	Students can- 1. Understand the place value chart of decimals. 2. Define tenths, hundreds & thousands.	**Math Lab Manual Activity-7** To understand the concept of decimal	Information Literacy	Notebook, ruler, pencil.	Represent the fractions on a number line.

			hundreds & thousands.	3. Represent fractions as decimals & decimals as fractions.	representation.			
10.	The World of Shapes 	November (12)	1. To measure & draw line segments. 2. To distinguish between open & closed curve. To classify polygons 3. To draw a circle & identify its centre, radius, diameter, chord, circumference. 4. To identify the number of faces, edges & vertices of some 3D shapes.	Students can- 1. Measure & draw line segments. 2. Distinguish between open & closed curves. 3. Define polygon & its types. 4. Draw a circle using a pair of compass. Identify centre, radius, diameter, chord, circumference of a circle. 5. Classify 3D shapes. Construct nets of solid shapes. 3. Use tan gram pieces to create different shapes.	**Math Lab Manual Activity -8** To study the part of a circle.	Social & cross-cultural interaction, Art-Integrated learning, Experiential learning.	Different solid shapes such as cube, cuboid, cone, cylinder etc.	Draw solid shapes on isometric dotted paper. Use tangram pieces to create different shapes.
11.	Pattern & Symmetry 	November (12)	1. To create patterns on addition, subtraction, multiplication & division of numbers 2. To identify symmetrical figures & find the lines of symmetry of symmetrical	Students will be able to- 1. Complete addition, subtraction, multiplication & division patterns in numbers. 2. Identify symmetric figures & their lines of symmetry.	**Math Lab Manual Activity -9** To draw the lines of symmetry and mirror image.	Problem solving, Critical thinking, Experiential learning, Art-Integrated learning	Notebook, Sheets of paper, pencil, ruler.	Draw the lines of symmetry, mirror images & tessellation

			figures.					
			3. To draw mirror image of simple figures.	3. Draw mirror image of simple figures.				
12.	Metric Measures  	December (16)	1. To understand the units of length, convert units of length from one unit to another unit.	Students will be able to- 1. Convert length, weight and capacity from one unit to another unit.	**Math Lab Manual Activity-10** To estimate the length, weight and capacity of different objects and comparing it with real measurement.	Experiential learning, Problem solving, Initiative & Self-direction	Different measures of length, weight and capacity	Worksheet
			2. To add & subtract lengths.	2. Perform addition & subtraction on the measures of length, weight & capacity				
			3. To understand the units of weight, convert units of weight from one unit to another unit.	3. Solve word problems based on addition & subtraction of length, weight & capacity				
			4. To add & subtract weight.					
			5. To understand the units of capacity, convert units of capacity from one unit to another unit.					
			6. To add & subtract capacity.					
13.	Perimeter & Area  	January (22)	1. To explain the perimeter of a figure. Calculate the perimeter of rectangle, square, triangle & closed figures.	Students will be able to- 1. Define perimeter & calculate the perimeter of rectangle, square, triangle & closed figures.	**Activity:** To draw some regular & irregular shapes on a square paper grid and find their area & perimeter.	Problem solving, Critical thinking, Social & Cross-culture interaction, Art-Integrated learning	A square paper grid, pencil, a leaf, ruler, coloured pencils etc.	Worksheet
			2. To explain the area of a figure. Calculate the area of regular shapes & polygons.	2. Calculate the area of regular shapes				
			3. To calculate the area of irregular shapes	3. Calculate the area of irregular shapes				
14.	Time	February (18)	1. To read time to the exact minute.	Students will be able to- 1. Read time to the exact minute.	**Math Lab Manual Activity-** i) To reinforce the concept of	Initiative & self-direction, Technology learning, Experiential	Clock, calendar, ICR	Make a timeline of some important events of our
			2. To write time in 12 hour clock.	2. Write dates in different ways.				

			3. To write time in 24 hour clock.	3. Write time in 12-hour & 24-hour clock.	time. ii) To make model of a clock	learning, Creativity & Innovation.		freedom struggle.
			4. To calculate time duration of an event.	4. Calculate time duration of an event.				
			5. To compute the number of days between two given dates.	5. Calculate the number of days between two given dates.				
			6. To prepare a timeline.	6. Make a timeline.				