

S.No	Content	Objectives (Class VI)	Skills	Learning Styles	Activity	Subject Integration	Outcome	Assessment
1	<p>Extension of Number system:</p> <p>Decimal</p>	<p>* To understand that decimals are part of whole.</p> <p>* To expand decimal using place value chart.</p> <p>* To convert fractions to decimals.</p> <p>* To represent decimals on number line.</p> <p>* Addition and subtraction of decimal numbers.</p> <p>* To express money, weight length and capacity in decimals.</p> <p>* Comparing decimals and arranging them in ascending order or descending order.</p>	<p>Drawing skill: To represent decimals on number line.</p> <p>Application skills: apply rules of converting money, length etc.to find out solution of daily life situations.</p> <p>Calculative skill: To solve the sums related to decimal numbers.</p>	<p>Verbal-linguistic style:</p> <p>Kinesthetic Bodily style:</p> <p>Interpersonal:</p> <p>Logical/mathematical:</p> <p>Visual/spatial</p> <p>Intrapersonal:</p> <p>Musical smart:</p>	<p>Explation of converting decimals into fractions and vice versa.Explation of converting higher to lower unit and vice versa & operation(+,-) on it.</p> <p>Representation of decimal on a graph paper.+decimal kit (maths lab).</p> <p>Recapitulation of fractions and their operations by asking questions. * Fractions and decimals are same number only way of representation is different . *Practice of questions related to it. Representation on decimals on number line.</p> <p>They will do the calculations stepwise. Reciting the 'Metric Mambo' K H DG M D C MM King Henry Danced By Drinking Chocolate Milk.</p>	<p>Science: Solving the numericals related to appropriate distance, velocity etc upon decimal point system.</p> <p>S.S.T: Measurement of rainfall, temperature, area etc upto decimal point system.</p> <p>English: Word problems.</p>	<p>* Students will be able to use decimals in real life situations. * Will be able to add or subtract decimal numbers.</p>	<p>1.Oral Test</p> <p>2. Pen paper Test.</p>
2	<p>Statistics: Data Handling</p>	<p>* How to collect and organise raw data in tabular form</p> <p>* How to interpret data using pictogram and graphs.</p> <p>*To represent data through pictograph and graphs.</p>	<p>Drawing skills: By drawing pictograph and bar graph.</p> <p>Observation skill: By observing bar graph, they will be to answer given questions.</p> <p>Analytical skills: Able to analyse ups and down shown in figure.</p>	<p>Verbal-linguistic :</p> <p>Bodily-kinesthetic:</p> <p>Interpersonal:</p>	<p>By Explaining the concept and requirement of organised data.</p> <p>By measuring height and weight of students present in class for activity to represent data using bar graph.</p> <p>By discussing garphs used in our day to day life activities.</p>	<p>Social studies: increase in population by bargraph.</p> <p>Science: Life cycle of human life and growth and development graph according to particular age.</p> <p>Physical Education: Height and weight of person can be represented by graphs.</p>	<p>* students will learn to draw and read information given in for of bar graph which will help them to understand statistical information available in newspaper etc.</p>	<p>* Pen paper</p> <p>* Practical Exam</p>

		<p>* To gather information using graphs and diagrams.</p> <p>* to learn how to use symbols and keys to represent data.</p>	<p>Measuring skills: Measure the length of bars properly and use proper keys/scale to represent data.</p> <p>Calculative skill: Count the number of things given in question to represent Tallymarks and Frequency</p>	<p>Logical/ mathematical: Visual/spatial : Intrapersonal:</p>	<p>Practice of questions of representing data(new) in tabular form using tally marks and frequency etc.</p> <p>Drawing and observing bar graph and pictograph.</p> <p>By representing any information in form of tabular form.</p>	<p>Most of the games uses bargraph to represent information.</p>		
3	<p>Commercial mathematics-</p> <p>Ratio and proportion</p>	<p>* To understand ratio as a comparison of two or more things.</p> <p>* to understand that only quantities of same unit can be compared.</p> <p>* To determine whether the four given numbers are in proportion.</p> <p>*To solve real-life problems pertaining to time and distance, cost and qauantity etc. ising unitary method.</p> <p>* to apply the concept of proportions to practical situations like recipies and deals offered at different stores.</p>	<p>Calculative skills: They will able to convert ratios to fractions and their simplest form.</p> <p>Problem-Solving: Will be able to solve real life problems related to ratio and proportion.</p> <p>Expression: will form statement of woird problems of ratio, proportion and unitary method.</p> <p>Reasoning Skills: They can compare the things only when they are in same unit.</p>	<p>Verbal- Linguistic : Bodily- kinesthetic: Interpersonal: Logical/ mathematical: Intrapersonal: Naturalistic:</p>	<p>Explanation of how things are compared, symbol of ratio and proportion and find out the things using unitary method.</p> <p>Comparing number of boys and girls in the class.</p> <p>Discussion on beautification added by proportion.</p> <p>Solve the numericals based on the concepts.</p> <p>They will do the calculations stepwise.</p> <p>Proportion of air, land and water on Earth.</p>	<p>S.S.T: ratio of girls or boys to given population.</p> <p>Science: * Comparision of speed, distance, weight and time etc. * ratio of components of elements in compounds like in H₂O hydren: Oxygen=2:1 means 2 parts of H₂ is mixed with 1 part of O₂.</p> <p>English: Word problems.</p>	<p>* The students will be able to find the relationship between quantities and use ratio in their day-to-day activities.</p>	<p>Pen paper Test</p>
4	<p><u>Playing with numbers:-</u></p> <p>*simplifications of brackets</p>	<p>The students will enable to</p> <p>*understand the BODMAS rule</p> <p>*learn the divisibility rules.</p> <p>*To find out whether a given</p>	<p><u>calculate skills :-</u> To solve the given problem by using HCF and LCM method</p>	<p><u>verbal-></u></p>	<p>By explaining the types of numbers-prime no., co-prime</p>	<p>science -in solving numbers</p>	<p>The students will be able to perform will be able to perform multiple</p>	

4	<p>multiples and factors</p> <p>*divisibility rules from 2to11</p> <p>*concept of co-prime no.and prime factorisation</p> <p>*H.C.F. and L.C.M.</p> <p>*prime factors and division method for HCF and LCM.</p>	<p>number is a factor of another number or a multiple of another number</p> <p>*To understand that factors are countable and multiplies are infinite</p>	<p>Analytical skills :-</p> <p>* BY observing the problems, they will reasons out that problem is of HCF or LCM.</p> <p>*LCM is always greater than HCF</p> <p>are always not prime number</p> <p><u>Application skill:-</u></p> <p>lese of HCF and LCM in finding the real life problems.</p> <p><u>Expressions skills :-</u></p> <p>To convert the statements of word problem into mathematical form.</p>	<p><u>kinestic /Bodliy-</u> -></p> <p>Interpersonal--></p> <p><u>logical--></u></p> <p><u>Intrapersonal--></u></p>	<p>Twin prime, factors and multiplies</p> <p>To find the HCF of a 2 given number by paper cuting and pasting</p> <p>Discussion on prime, coprime and Twin prime numbers.</p> <p>HCF of two numbers is a factor of their LCM</p> <p>Product of a*b = HCM of a and b * lcm a and b</p> <p>*classify the numbers into prime ,twin prime coprime and find the hcf and lcm of given problems</p>	<p>operations using the BODMAS rule. they will also understand that large numbers can be expressed in a simplier form.</p>	<p>By pen paper test.</p>
5	<p>Proper,Improper Fraction.</p> <p>Comparison of Fraction,</p> <p>Lowest Term, Add And Sub. Of Fraction</p> <p>Conversion Of Decimals Into Fractions.</p>	<p>To enable the student</p> <p>*To understand that fraction and decimals are part of a whole.</p> <p>* To convert fraction to decimals.</p> <p>*To compare fraction and decimals.</p> <p>* To perform four basic operations involving fractions and decimals.</p>	<p><u>Calculating skills:-></u></p> <p>To solve the fraction by using operations (+,-)</p> <p><u>Application skill :-></u></p> <p>apply the rules of solving the fraction in real life situations .</p> <p><u>Reasoning skills :-></u></p> <p>fraction with smaller denominator in greater</p>	<p>verbal-linguistic-</p> <p>kinesthetic/bodily</p> <p><u>interpersonal-></u></p>	<p>Explanation of types of fraction- like, unlike,proper,improper etc,converting into lowest terms and operations on it.</p> <p>To find the product of two fractions experience tally by using coloured papers.</p> <p>Recaptulation of different types of fractions by asking questions.</p>	<p><u>S.St-></u> Distribution of land and water on earth fractionally.</p> <p><u>Science-></u> Solving the mathematical numericals like 1/4 vessel in filled with water and 3/4 is by gas etc.</p> <p><u>English-></u> Word problem</p>	<p>The students will be able to use fractions and decimals in real life situations. They will also be able to remove decimals and fractions.</p> <p>* Oral test</p> <p>* Pen paper test</p>

			than the fraction with greater denominator. Content organisation can organise the data given in word problem expression skill from mathematical expression for given word problem	logical mathematical visual-spatical- intrapersonal-	will use properties of fraction and BODMAS in solving the problems. Observe the type of fraction will do the calculation of fraction step wise			
6	Algebraic Expression	*To learn the basic operation of algebra *To define variables, Numerical expression and algebraic expressions *To Use Different alphabet is to represent a variable *To Differentiate between arithmetic and algebra *To understand that a variable can represent different number at different times	* Calculative Skill:- By Solving Problems *Observation skill :- By Observing matchstick pattern to generalise the formula *Logical skill :- For Solving Problem Related To Ages	Verbal Kinestic/Bodily Interpersonal Interpersonal Logical Visual- Intrapersonal	By Explaining the definition and terms Related to Topic Formation Of Number Pattern by Toothpicks and matchsticks for generalising the formula the formula Group Act. on Conversion of real life Situation into Mathematical Solution By Solving Words problem By Observing And drawing Number Pattern By Solving Problems	Science - In Solving the Numerical of Speed, Time , Distance English- Use of Alphabets	*The Student Will Be able to Identify the term in algebraic exprssion *Able To Frame Algebraic expression for Number Patterns *Able To Corelate Algebra With Their Real Life Situation	*Pen Paper *MCQ *Riddles
			TERM II					
7	<u>GEOMETRY:</u> Understanding Elementary Shapes (2D and 3D)	<u>GENERAL :</u> *To enhance , calculative, logical, analytic and thinking and identification skills. * to memorise properly and apply them.	<u>Drawing skills:</u> they will draw different types of triangles , quadrilateral and polygons etc. <u>Observational skills:</u> They will classify the triangles ,quadrilateral	<u>Verbal - linguistic -> style :</u> <u>Kinesthetic / bodily-> style :</u> <u>Interpersonal</u>	Explanation of different types of triangle on the basis of sides and angles. Explanation of 3D shapes Forming 3D shapes using "Jodo straws " (maths lab activity) recapitulation of angles	* <u>Drawing :</u> in drawing shapes etc. * <u>Science :</u> 3D objects used in science practical like prism, cone test tube etc.	They will be able to explore different 2D and 3D shapes to find similarities and differences among them.	Pen paper test

		<p style="text-align: center;"><u>SPECIFIC:</u></p> <p>* To understand line segment and how they are measured.</p> <p>* To differentiate between 2D and 3D shapes.</p> <p>* To draw shapes accurately using the given measurements.</p> <p>*To recognise shapes based on their number of sides and angles.</p>	<p>and polygons by observing their sides and angles .</p> <p><u>Reasoning skills :</u></p> <p>They can reason out the answers by remembering the properties of A, polygons etc.e.g in square a type of rectangle.</p> <p><u>Measuring skills:</u> they will measure sides , angles of polygon etc.</p>	<p><u>Logical / mathematical style</u></p> <p><u>Visual /spatial style</u></p> <p><u>Intrapersonal</u></p> <p><u>Naturalistic</u></p>	<p>and polygons that they have done in previous class by asking questions .</p> <p>They will find out reason of words used for writing names of polygon. e.g : quad means 4 and pent means 5 etc.</p> <p>They will observe and draw the polygons etc.</p> <p>They will count the no. of faces ,vertices and edges in given 3D figure. and identify the type of triangles ,quadrilateral and polygons.</p> <p>Observing the 3D shapes in their surroundings.</p>		
8	<p>Knowing Our Numbers</p> <p>To enable the students to</p> <p>*understand the meaning of a numeral.</p> <p>*use numerals in a variety of ways.</p> <p>*write numbers in both the Indian and International systems.</p> <p>*read,write,compare and recognise place values.</p> <p>*use numbers in all the 4 operations.</p>	<p>Calculative skill:</p> <p>able to calculate the brackets using 'BODMAS'</p> <p>Estimation skill:</p> <p>estimate the answers</p> <p>4 basic operations on the</p>	<p>Verbal linguistic:</p> <p>Bodily Kinesthetic:</p>	<p>Explanation of both the systems,estimation,simplification by BODMAS</p> <p>Arranging the digits by using flashcard and representing in both systems.</p>	<p>S.Sc - In counting population.</p> <p>Science - In counting number of atoms and molecules.</p>	<p>The students will recognise the importance and use of numbers in day to day life. They will also understand how the 4 operations are related to one another.</p>	<p>By pen paper test(written) Oral:Conversion on money (in both Indian and International System) FA activity(group wise)</p>

		<p>*estimate the sum,difference,product and quotient of given numbers.</p>	<p>given numbers.</p> <p>Observation skill: observe the place value and face value of the digits in given number.</p> <p>Representing skill: to able to represent the number in two forms- Indian and International system,in Roman Numerals.</p> <p>Expression skill: Converting word problems into mathematical form.</p>	<p>Interpersonal:</p> <p>Logic smart:</p>	<p>Discussion on large number and their application. Conversion on Money used in Indian and International system(integrated with English)groupwise.</p> <p>Rounding off the numbers for estimation.</p>		
<p>Whole Numbers(Concept of Natural no. and whole no.,different properties of no.s,concept of number line,formulating rules for whole numbers.</p> <p>9</p>	<p>*Students will be able to perform all the 4 operations using upto 9 digits.</p> <p>*to regroup and rename numbers.</p> <p>*to estimate sum,difference,product and quotient.</p> <p>*to create and solve problems in real life situations.</p>	<p>Calculative skill: To find the least no. which should be added to the no. to get exactly divisible by another no.,to solve the expression by using properties of</p> <p>whole numbers.</p>	<p>Verbal / Linguistic:</p> <p>Kinestic / Bodily:</p> <p>Interpersonal:</p>	<p>Explanation of all properties of whole numbers on all operations.</p> <p>To verify that multiplication is commutative for whole number by graph paper.</p> <p>Discussion on the properties of whole no.s,how it makes the calculation easy and its use.</p>	<p>Science:In solving numeric problem.</p> <p>S.Sc:In solving no. of male ,female and total population etc.</p>	<p>The students will able to estimate no. before looking for the correct answer.They will perform 4 operations for the correct answer.They will perform 4 operations with ease knowing the renaming and regrouping method.</p>	<p>Oral Test</p> <p>Pen Paper Test</p>

			<p>Observation skill: To observe the expression and judge the property to be used in solving it.</p> <p>Analytical skill: Reason out that all the properties are implemented in add and multiply ,not in sub and division</p> <p>Expression skill: Converting the word problem into mathematical expression.</p>	<p>Logical:</p> <p>Visual:</p> <p>Intrapersonal:</p>	<p>They will apply the properties in solving patterns in whole numbers.</p> <p>Representation of whole numbers and + , - operation on it.</p> <p>They will identify the properties by looking at the expression.</p>	<p>Eng:In word problem.</p>	<p>SEA: Activity groupwise :By giving situational Question based on all operation on whole numbers.</p> <p>* Pictorial representation of properties of whole number over addition and multiplication.</p>
<p>10</p> <p>Symmetry *Observation and identification of symmetrical objects.</p> <p>*Reflection of simple 2D objects.</p>	<p>To enable students to understand symmetry in plane shapes.</p> <p>To create symmetrical shapes.</p>	<p>Drawing skill: By drawing symmetrical figures</p>	<p>Verbal/Linguistic:</p>	<p>Explanation of concept of symmetry, line symmetry and reflection.</p>	<p>Drawing: In making rangolis and making sketches.</p>	<p>The students will know about symmetry and its different forms.They will also create and complete symmetric al plane shapes.</p>	<p>By practical work by giving 2D</p> <p>By pen paper *Making Symmetric figure:Ink blot devices by ink and paper</p>

	<p>*Recognition of reflection symmetry.</p>	<p>To understand the properties of 2D shapes in relation to symmetry.</p> <p>To learn different forms of symmetry.</p>	<p>Observation skill: By observing the figures, they will be able to identify the line of symmetry</p> <p>Analytical skill: They will analyse why the given figure is symmetrical</p> <p>Motor skill: They will fold the given 2D figure to identify the line of symmetry</p>	<p>Kinesthetic/Bodily</p> <p>Interpersonal:</p> <p>Logical:</p> <p>Interapersonal:</p> <p>Naturalistic:</p>	<p>To identify the lines of symmetry of simple shapes by paper folding.</p> <p>Discussion on line of symmetry of 2D figure like scalene has no line of symmetry and its reason, how circle has infinite lines of symmetry.</p> <p>They will find out the line of symmetry.</p> <p>They will identify and draw the line of symmetry of given figure.</p> <p>Examples from daily life like horizontal line of symmetry in the body of fish, centre vertical line of symmetry in human beings.</p>	<p>S.ST.:</p> <p>In making maps we draw horizontal and vertical lines of symmetry.</p> <p>Science: In movement of turbines, wind mill, revolving of planet.</p>		<p>folding. *Paper decoration by folding paper.</p> <p>*Kaliedoscope example to see symmetrical images produced. *Rangoli pattern.</p>
11	<p>Practical Geometry</p> <p>Construction</p>	<p>*To use geometrical instruments like ruler, compass, protractor.</p> <p>*To construct line segments using a ruler and a pencil along with a pair of compasses</p> <p>*To construct and measure angles by protractor and compass</p>	<p>Drawing Skills: To construct line, perpendicular, perpendicular bisector, angle and its bisector.</p>	<p>Verbal-linguistic:</p> <p>Bodily-Kinesthetic:</p>	<p>by explaining the concept of constructing line segment and angles with ruler and compass.</p> <p>To form different angles with paper folding.</p>	<p>Drawing: drawing different figures with accuracy.</p> <p>Science: in drawing incident and reflected ray and their angles</p>	<p>*Students will be able to understand how different geometrical shapes are measured and constructed.</p>	<p>Pen Paper Test.</p> <p>By practical activity.</p>

		<p>ss(special angles-60°,30°,90°,120° with compass).</p> <p>*To construct circle.</p> <p>*To construct angle equal to given angle and bisector of an angle.</p> <p>*To construct perpendicular to line segment and a perpendicular bisector of a line segment.</p>	<p>Measuring Skills: To measure line segment and angle with compass for constructing same or equal angle to given angle.</p> <p>Application Skills: can be applied in their day to day life.</p> <p>Observation Skills: observe the rough sketch first to get an idea of construction.</p>	<p>Interpersonal:</p> <p>Logical/Mathematical:</p> <p>Visual-Spatial:</p> <p>Interpersonal:</p> <p>Naturalistic:</p>	<p>By discussing the things that have perpendicular, perpendicular bisector and angle bisector around us.</p> <p>Practice the questions related to it.</p> <p>To construct and observe the line segment, perpendicular, perpendicular bisector, angles and its bisector.</p> <p>They will draw rough sketch to get idea of construction.</p> <p>by observing lines and angles in nature.</p>	<p>of incidence and reflection.</p>		
12	<p>Mensuration: Perimeter and Area</p>	<p>*To learn the difference between perimeter and area.</p> <p>*To demonstrate relationship between area and perimeter.</p> <p>*To determine the perimeter of plane figures ,regular and irregular.</p> <p>*To apply the concept of area and perimeter in real life problems.</p>	<p>Making diagram: By drawing figures and shapes.</p> <p>Expression: Through word problems.</p> <p>Calculative skill: In solving numerical.</p>	<p>Verbal:</p> <p>Body smart</p> <p>Intrapersonal:</p> <p>Logic smart Picture smart</p>	<p>By explaining the definitions and related terms.</p> <p>To layout the dream house on graph paper. To find out area of irregular figure using squared paper.</p> <p>Group discussion on the difference of area of regular and irregular figures. By solving numerical problem. By observing figures.</p>	<p>S.Sc:Area of land of different states.</p> <p>Games:Area and boundary covered for games like badminton, basket ball etc. Eng: Word problems.</p> <p>Drawing:drawing the shapes.</p>	<p>*able to understand the difference between perimeter and area.</p> <p>*able to use the learnt formulae in their day to day lives.</p>	<p>Pen paper Test</p> <p>Oral test: listen formulae.</p> <p>Finding perimeter & area of classroom objects,newspaper,origami,blackboard etc.</p>

				Self smart Nature smart	By solving numerical problems. By core lating the topic with environment- Area and perimeter of piece of land.			
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