# **SPLIT UP SYLLABUS (2020-21)**

## CLASS: VI SUBJECT: MATHEMATICS

**MONTH : APRIL** 

### **NO. OF PERIODS:8**

## **TOPIC -KNOWING OUR NUMBERS.**

#### **NO.OF DAYS :08**

SUB- TOPICS	METHOD OLOGY	TEACHING LEARNING MATERIALS/AIDS	INTERFACE	LEARNING OUTCOME
<ul> <li>Indian system of numeration</li> <li>International system of numeration</li> <li>Conversions of units of length and mass</li> <li>Estimation of outcomes of number operation.</li> </ul>	Discussion method Problem solving method.	<ul> <li>Charts of number system.</li> <li>Addition, subtractions on number line .</li> </ul>	<ul> <li>Parents can provides abacus board and encourage them to use it.</li> <li>Playing games on addition and subtractions</li> </ul>	<ul> <li>Understand the concept of Indian and international system of numeration.</li> <li>Able to convert the units of length and mass.</li> <li>Able to understand to addition ,subtraction</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

**CLASS: VI** 

**MONTH : JUNE** 

### **SUBJECT: MATHEMATICS**

**NO. OF DAYS:10** 

#### **NO. OF PERIODS:10**

#### TOPIC : Ln-02 : WHOLE NUMBERS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Natural numbers</li> <li>Whole numbers</li> <li>Properties of numbers under addition and multiplications.</li> <li>Number line</li> <li>Patterns in whole number.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Charts of number system.</li> <li>Addition, subtraction s on number line</li> <li>Abacus</li> </ul>	<ul> <li>Parents can provides abacus board and encourage them to use it.</li> <li>Playing games on addition and subtractions</li> </ul>	<ul> <li>Able to represent whole numbers on number line.</li> <li>Able to find out the predecessor and the successor of number.</li> <li>Able to do the addition ,multiplication, subtraction of whole number on number lines.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

**CLASS: VI** 

MONTH : JULY

### **SUBJECT: MATHEMATICS**

#### **NO. OF DAYS:08**

#### **NO. OF PERIODS:08**

### **TOPIC** :Ln-03 : PLAYING WITH NUMBERS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/ AIDS	INTERFACE	LEARNING OUTCOME
<ul> <li>Simplification of brackets</li> <li>Multiples and factors</li> <li>Divisibility rule of 2,3,4,5,6,8,9,10, 11</li> <li>Even and odd number</li> <li>Prime and composite numbers</li> <li>Co-prime numbers</li> <li>Prime factorisation</li> </ul>	<ul> <li>Inductiv         <ul> <li>method</li> </ul> </li> <li>Proble         <ul> <li>m</li> <li>solving</li> <li>method</li> </ul> </li> </ul>	<ul> <li>Abacus</li> <li>Using games for developi ng number sense</li> </ul>	<ul> <li>Parents play different types of number games with child.</li> <li>Parents discuss the L.C.M AND H.C.F concepts with child.</li> </ul>	<ul> <li>Able to calculate the factors and multiples of numbers.</li> <li>Able to differentiate prime numbers and composite numbers,</li> <li>Uses divisibility rules to find factor of a number</li> <li>understand the concept LCM and HCF</li> </ul>

**SPLIT UP SYLLABUS (2020-21)** 

**CLASS: VI** 

MONTH : JULY

**SUBJECT: MATHEMATICS** 

**NO. OF DAYS:13** 

**NO. OF PERIODS:13** 

#### TOPIC : Ln-04-BASIC GEOMETRICAL IDEAS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS /AIDS	INTERFACE	LEARNING OUTCOME
<ul> <li>Meaning of points, line segments and line.</li> <li>Meaning of parallel lines and intersecting lines.</li> <li>Polygons,angles ,triangles,quadril ateral and circles.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	Paper cutting of different shapes.	<ul> <li>Parents encourag e child to make differed types of shapes with paper.</li> </ul>	<ul> <li>Understands the basics of geometry and defines them.</li> <li>Visualising the geometrical ideas and explains the properties.</li> <li>Understands about shapes and generalizes that closed figure divide the surface into three parts.</li> <li>Links the shapes available in the nature to the classroom.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

### **SUBJECT: MATHEMATICS**

MONTH : AUGUST

#### NO. OF DAYS:12

### **NO. OF PERIODS-12**

#### **TOPIC** :LN-05-UNDERSTANDING ELEMENTARY SHAPES

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Measuring line segments.</li> <li>Right and straight angles.</li> <li>Acute ,obtuse, and reflux angle.</li> <li>Measuring angles.</li> <li>Classification of triangles on the basics of sides and angles.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	Different types of triangle made by students with the colour paper.	Parents encourage child to make differed types of shapes with paper.	<ol> <li>Understands the measuring techniques and measuring accordingly.</li> <li>Understands the elementary shapes and define them.</li> <li>Visualise the elementary shapes and explain the properties.</li> <li>Link plane shapes to solid shapes <u>OR 2-D TO 3-D.</u></li> <li>Understands the quadrilateral and its classification.</li> <li>Calculate the faces, edges and vertices of 3-D shapes.</li> </ol>

**CLASS: VI** 

# **SPLIT UP SYLLABUS (2020-21)**

**SUBJECT: MATHEMATICS** 

MONTH : AUGUST

**CLASS: VI** 

#### **NO. OF DAYS-10**

**NO. OF PERIODS- 10** 

#### TOPIC :LN-06-INTEGERS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/A IDS	INTERFACE	LEARNING OUTCOME
<ul> <li>Defines integers.</li> <li>Representation of integers on number line.</li> <li>Addition and subtraction of integers.</li> <li>Various properties if integers under addition and subtractions.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Number line on chart paper.</li> <li>Positive negative card game.</li> </ul>	<ul> <li>Parent play different types of number game</li> <li>Children are play different types of number game with friends.</li> </ul>	<ul> <li>Able to define the meaning of integers and how it is related to the whole number.</li> <li>Able to represents the integers on the number line.</li> <li>Able to do the addition and subtraction on number line.</li> <li>Able to do addition and subtraction of integers.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

**CLASS: VI** 

**MONTH : SEPTEMBER** 

### **SUBJECT: MATHEMATICS**

**NO. OF DAYS -15** 

**NO. OF PERIODS-15** 

### **TOPIC** :LN-07-FRACTIONS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Meaning of fractions</li> <li>Representation of fraction on number line.</li> <li>Meaning of proper, improper, and mixed fractions</li> <li>Conversion of improper to mixed fractions</li> <li>Equivalent fractions</li> <li>Addition and subtraction of fractions.</li> </ul>	<ul> <li>Inductiv e method</li> <li>Problem solving method</li> </ul>	<ul> <li>Make different different fraction teams.</li> </ul>	<ul> <li>Parents creates a pictures or pattern using fractions.</li> <li>Parents encourage children to do fraction flowers and other figures.</li> </ul>	<ul> <li>Understand and extends the number number family from natural number to the fractions through integers and whole numbers.</li> <li>Link the fractions to the situations outsides the class.</li> <li>Visualise the fractions and operations on fractions ,convert mixed into improper and vice-versa.</li> <li>Able to do addition and subtraction of fractions</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

**CLASS: VI** 

**MONTH : OCTOBERS** 

### **SUBJECT: MATHEMATICS**

#### **NO. OF DAYS -08**

#### **NO.OF PERIODS-08**

## TOPIC :LN-08-DECIMALS

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Value of tenths , hundredths.</li> <li>Place value and face value of decimals.</li> <li>Place value and face values of decimals number.</li> <li>Comparing decimals</li> <li>Addition and subtractions of decimals.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Quizzes and problems as part of your Deci mals topic.</li> <li>Number games.</li> </ul>	<ul> <li>Parents play different types of number game with children.</li> <li>Parents encourage children to make a chart of decimal numbers.</li> </ul>	<ul> <li>Extends and includes decimals on the number family and understands place value system.</li> <li>Represent decimals on the number line and visualise decimals.</li> <li>Convert fractions into decimals and vice-versa and small units into longer using decimals.</li> <li>Applies basics operations on decimals and computes properly.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

**CLASS: VI** 

**MONTH :NOVEMBER** 

### **SUBJECT: MATHEMATICS**

#### **NO. OF DAYS -10**

#### **NO.OF PERIODS-10**

#### TOPIC : LN-09- DATA HANDLING

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AID S	INTERFACE	LEARNING OUTCOME
<ul> <li>Introduction of data.</li> <li>Recognition, recording, organising data.</li> <li>Pictograph(interpret ation and drawing)</li> <li>Bar graph(interpretation )</li> <li>Difference between bar graph and pictograph.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Venn charts.</li> <li>Bar charts.</li> <li>Card for probability.</li> </ul>	<ul> <li>Parents held children to collects some data for drawing bar graph.</li> </ul>	<ul> <li>Learns why and how data should be organised.</li> <li>Makes own way of organising data using tally mark in pictures and number,</li> <li>Skilled to explore identity and represent data in pictograph and bar graph.</li> <li>Capable of analysing and interpreting pictorial form of data.</li> <li>Understanding the meaning and use of data organisation.</li> </ul>

# SPLIT UP SYLLABUS (2020-21)

**CLASS: VI** 

**MONTH : NOVEMBER** 

### **SUBJECT: MATHEMATICS**

#### **NO. OF DAYS -12**

#### **NO.OF PERIODS-12**

#### **TOPIC** :LN-10-MENSURATION

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Meaning of region and boundary.</li> <li>Meaning and calculation of perimeter.</li> <li>Meaning and calculation of area.</li> <li>Area and perimeter of rectangle and square.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Different paper cutting paper for measure ment of area and perimeter</li> <li>.</li> </ul>	<ul> <li>Parents are encourage to measure the perimeter and area of home and garden.</li> <li>And also measured the area and perimeter of book and copy.</li> </ul>	<ol> <li>Understand concept of perimeter and area .</li> <li>Skilled to derive formula for perimeter and area of rectangle and square.</li> <li>Feels competent to find his own way and strategies for calculating perimeter and area.</li> <li>Get ready to apply the concept for solving day to day based problems.</li> <li>Capable to explains the relationships between the perimeter and area of the geometrical figures.</li> </ol>

# SPLIT UP SYLLABUS (2020-21)

**CLASS: VI** 

MONTH :DECEMBER

#### **SUBJECT: MATHEMATICS**

## NO. OF DAYS-18

#### TOPIC :LN-11-ALGEBRA

#### **NO.OF PERIODS-18**

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>The ideas of variable and constants.</li> <li>Use of variable in common rules.</li> <li>Rules from the arithmetic's.</li> <li>Various expressions with the variables.</li> <li>Using expressions practically.</li> <li>Equations and its solutions.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Using some matchstic ks .</li> <li>Some paper cutting.</li> </ul>	<ul> <li>Parents are encourage to do different patterned using matchstick.</li> </ul>	<ul> <li>Understand the variable and how to use variable in the matchstick patterns.</li> <li>Understands the algebraic expressions and the terms of algebraic expressions.</li> <li>Able to solve word problem related to algebra.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

### **CLASS: VI**

#### **MONTH :JANUARY**

## **SUBJECT: MATHEMATICS**

#### NO. OF DAYS-16

#### **TOPIC** :LN-12-RATIO AND PROPERTION

### **NO.OF PERIODS-16**

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Meaning of ratio and proportion.</li> <li>Two quantities can be compared only if they are in the same ratio.</li> <li>Equivalent ratio.</li> <li>If two ratios are equal we say that they are in proportion.</li> <li>Unitary method.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Different types of paper cutting related to ratio and proportio n.</li> </ul>	<ul> <li>Parents will help the children to find out different types of ratios.</li> </ul>	<ul> <li>Understanding ratio and proportion and describe relationship using ratios.</li> <li>Skilled to compare quantities using proper units of measurements.</li> <li>Competent to find his own way and strategies to apply unitary method to solve day to day real life problems.</li> <li>Skilled to compute accurately and timely.</li> <li>Understands unitary method.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

### **CLASS: VI**

#### MONTH :FEBRUARY

## **SUBJECT: MATHEMATICS**

#### NO. OF DAYS-06

#### TOPIC :LN-13-SYMMETRY

#### **NO.OF PERIODS-06**

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Making symmetric figures.</li> <li>Figures with two lines of symmetry.</li> <li>Figures with two or more lines of symmetry.</li> <li>Reflection and the symmetry.</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	<ul> <li>Different types of symmetri cal figures.</li> </ul>	<ul> <li>Parents will help the child to collect different types of symmetrica I figures from daily life.</li> </ul>	<ul> <li>Finds symmetry in the surrounding and nature.</li> <li>Understanding the meaning and existence of symmetry in our life.</li> <li>Competent to justify the symmetry in shapes .</li> <li>Skilled to draw the symmetrical shapes and lines of symmetry.</li> <li>Capable of completing the figures to show symmetry.</li> </ul>

# **SPLIT UP SYLLABUS (2020-21)**

### **CLASS: VI**

### **SUBJECT: MATHEMATICS**

MONTH :FEBRUARY

#### **NO. OF DAYS-10**

#### **TOPIC** :LN-14-PRACTICAL GEOMETRY

#### **NO.OF PERIODS :10**

SUB- TOPICS	METHODOLO GY	TEACHING LEARNING MATERIALS/AI DS	INTERFACE	LEARNING OUTCOME
<ul> <li>Different types of line and line segments.</li> <li>Different types of angles.</li> <li>Perpendicular bisector of lines.</li> <li>Copy of angles.</li> <li>circle</li> </ul>	<ul> <li>Inductive method</li> <li>Problem solving method</li> </ul>	Geometr y box.	<ul> <li>Parents will help the child to draw different types of figures.</li> </ul>	<ul> <li>Able to draw the line and line segments.</li> <li>Able to draw the angles.</li> <li>Able to draw different types of angles.</li> <li>Able to do the copy of angles.</li> <li>Able to draw circles.</li> <li>Able to draw the line bisector and angle bisectors.</li> </ul>