Grade: V | **Subject : Mathematics**

Sr	Name of	Points to cover	Lesson Plan	Methodolog	Teaching Aid	Location	Activities/	Reff books	No. of	Learning Outcome
1	1. Place Value	**Lesson No/Name :** **1. Place Value** **Learning objective**- Pages 7 to 14 • To review the place value concept and numbers up to six digits • To build, understand, and compare 7-digit and 8-digit numbers Pages 15 to 20 • To understand the international system of writing 6-digit numbers • To round off numbers to the nearest 10, 100, and 1000 • To observe and continue number patterns Pages 21 and 22 • To develop Roman numerals up to 100	Recapitulation of previous knowledge about place value by questioning. Explanation of building and comparing 6 and 7 digit numbers followed by exercise questions. Explanation of international system of numbers using place value chart and video followed by exercise questions. Explanation of rules of rounding numbers with examples and follow up questions. Recalling of symbols used in Roman numerals followed by quetions from the exercises.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Math Lab Activity - Number Pattern	Oxford New Enjoying Mathematics	10	Children will be able to - To review the place value concept and numbers up to six digits To build, understand, and compare 7-digit and 8-digit numbers To understand the international system of writing 6-digit numbers To round off numbers to the nearest 10, 100, and 1000 To observe and continue number patterns To develop Roman numerals up to 100
2	2. Addition,	**Lesson No/Name :**	Induction by solving addition and	Open	PPT, Videos,	Google	Mental Math	Oxford New	10	Children will be able to -
3	9. Shapes, Patterns and Nets	**Lesson No/Name :** **9. Shapes, Patterns and Nets** **Learning objective**- Pages 129 to 131 • To understand symmetry and lines of symmetry • To create symmetrical shapes using the line of symmetry Pages 132 to 136 • To understand the concept of rotation • To identify and create shapes that have quarter and half rotation • Creating patterns using rotation Pages 137 to 139 • To recognise net**s of cubes** ***** To draw cubes and cuboids	Induction of symmetry by using mirror images. Explanation of line of symmetry, creation of symmetrical images with the help of line of symmetry. Explanation of concept of rotation. Practice to identify the rotation in given figures. Practice of drawing cubes and cuboid and identifying the net of cube using paper folding	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Worksheet based on rotation of symbols of 12 Zodiac signs.	Oxford New Enjoying Mathematics	10	Children will be able to - To understand symmetry and lines of symmetry To create symmetrical shapes using the line of symmetry To understand the concept of rotation To identify and create shapes that have quarter and half rotation Creating patterns using rotation To recognise nets of cubes To draw cubes and cuboids

4	10. Geometry Basics	**Lesson No/Name :** **10. Geometry Basics** **Learning objective**- Page 143 to 154 •To develop the concepts of point, line, and line segment •To introduce the concept of ray and angle •To identify parts of an angle and learn how to name them •To measure and classify angles as right, acute, obtuse, and straight •To measure and construct angles using a protractor	Introduction of point, line and line segment with examples and video. Introduction and identification of ray and angles. Explanation of different types of angles based on their measurement. Practice of drawing angles of given measure using a protractor.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Math Lab Activity - To create and recognise angles through paper folding activity	Oxford New Enjoying Mathematics	10	Children will be able to - To develop the concepts of point, line, and line segment To introduce the concept of ray and angle To identify parts of an angle and learn how to name them To measure and classify angles as right, acute, obtuse, and straight To measure and construct angles using a protractor
5	11. Measurement	**Lesson No/Name :** **11. Measurement** **Learning objective**- Pages 158 to 165 •To review various units of measurement •To learn about millimetre •To measure objects to the nearest millimetre •To relate mm, cm, m, and km to one another •To convert from one unit into another Pages 166 to 169 •To relate and convert units of mass—g and kg to one another •To relate and convert units of capacity—ml and l to one another Pages 170 to 173 •To add and subtract measures of length, mass, and capacity •To estimate measures	Recall the units of measurement studied in previous classes. Explanation of different units of length, mass nd capacity with examples using chart and video. Prctice of converting a given unit into other. Solving sums based on addition , subtraction and estimation of measurement.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Activity on estimating measures	Oxford New Enjoying Mathematics	12	Children will be able to - To review various units of measurement To learn about millimetre To measure objects to the nearest millimetre To relate mm, cm, m, and km to one another To convert from one unit into another To relate and convert units of mass—g and kg to one another To relate and convert units of capacity—ml and l to one another To add and subtract measures of length, mass, and capacity To estimate measures

6	3. Multiplication, Division and their Applications	**Lesson No/Name :** **3. Multiplication, Division and their Applications** **Learning objective-** Pages 42 to 47 •To multiply 3- and 4-digit numbers •To divide large numbers by 2-digit divisors •To understand multiplication better •To use the remainder Pages 48 to 49 •To understand and use the concept of averages Pages 50 to 53 •Building skills in problem solving •Solving problems using models	Recall the method of multiplication by solving 3 and 4 digit multiplication. Practice of multiplication tables. Solving model sums on division followed by exercise sums. Explanation of meaning and calculation of averaages. Solving problem sums using models.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Lab Activity - to find average of given numbers using square paper strips.	Oxford New Enjoying Mathematics	9	Children will be able to - To multiply 3- and 4-digit numbers To divide large numbers by 2-digit divisors To understand multiplication better To use the remainder To understand and use the concept of averages Building skills in problem solving Solving problems using models
7	4. Factors	**Lesson No/Name :** **4. Factors** **Learning objective-** Pages 58 to 65 •To review the concept of factors •To understand the rules of divisibility for 2, 3, 4, 5, 6, 9, and 10 •To understand the concept of prime numbers and composite numbers •To find all prime numbers up to 100 •To prime factorise a number •To use factors in real life Pages 66 and 67 •To understand the concept of the highest common factor •To find the HCF of two or more numbers •To understand the use of HCF in real life	Explanation of the meaning of factors with examples and follow up questions. Explanation of divisibility rules by observing number patters, watching videos and solving sums Activity of finding prime numbers from 1 to 100, meaning of prime numbers. Explanation of the meaning of common factors followed by calculation of HCF. Solve word sums based on real life applications of HCF.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Lab activity - Finding HCF	Oxford New Enjoying Mathematics	9	Children will be able to - To review the concept of factors To understand the rules of divisibility for 2, 3, 4, 5, 6, 9, and 10 To understand the concept of prime numbers and composite numbers To find all prime numbers up to 100 To prime factorise a number To use factors in real life To understand the concept of the highest common factor To find the HCF of two or more numbers To understand the use of HCF in real life
8	5. Multiples	**Lesson No/Name :** **5. Multiples** **Learning objective-** Pages 71 to 74 •Revise the concept of multiples and common multiples •Understand the concept of lowest common multiple •Use prime factorisation to find the LCM of two or more numbers	Induction of multiples of a number. Finding common multiples followed by LCM. Calculate the LCM of two or more numbers using prime factoristion method	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Lab activity - Finding LCM	Oxford New Enjoying Mathematics	7	Children will be able to - Revise the concept of multiples and common multiples Understand the concept of lowest common multiple Use prime factorisation to find the LCM of two or more numbers

9	6. Fractions	**Lesson No/Name :** **6. Fractions** **Learning objective**- Pages 78 to 86 •To review the concept of fractions and associated terms •To identify and check equivalent fractions •To reduce a fraction to its lowest term •Comparing and ordering unlike fractions Pages 87 to 99 •Addition and subtraction of unlike fractions with problem sums •Multiplication and division of fractions with problem sums	Induction of fraction and term related to it. Explanation of steps to identify and find the equivalent fractions, reduce to lowest fraction. Practice sums of comparing and ordering fractions. Expalnation of steps followed using practice sums to understand addition, subtraction, multiplication and division of fractions.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Lab activity - Multiplication of fractions.	Oxford New Enjoying Mathematics	15	Children will be able to - To review the concept of fractions and associated terms To identify and check equivalent fractions To reduce a fraction to its lowest term Comparing and ordering unlike fractions Addition and subtraction of unlike fractions with problem sums Multiplication and division of fractions with problem sums
10	12. Perimeter, Area and Volume	**Lesson No/Name :** **12. Perimeter, Area and Volume** **Learning objective**- Pages 175 to 179 •To review the concept of area and perimeter •To develop the formula to calculate perimeter of a rectangle and perimeter of a square •To develop the formula to find the area of squares and rectangles Pages 180 to 186 •To measure the area of a triangle using its relationship to a square or rectangle •To focus on the different units of area •To measure the area of irregular figures •To explore the relationship between area and perimeter Pages 186 to 192 •To develop the concept of volume •To use cubic units as a measure of volume •To develop the formula to calculate volume •To find the volume of other shapes	Explanation of concept of area and perimeter with examples and video. Measuring and calculating area and perimeter of square and rectangle. Explanatiopn of finding volume followed by practice sums	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Colouring and comparing the decimal blocks.	Oxford New Enjoying Mathematics	12	Children will be able to - To review the concept of area and perimeter To develop the formula to calculate perimeter of a rectangle and perimeter of a square To develop the formula to find the area of squares and rectangles To measure the area of a triangle using its relationship to a square or rectangle To focus on the different units of area To measure the area of irregular figures To explore the relationship between area and perimeter To develop the concept of volume To use cubic units as a measure of volume To develop the formula to calculate volume To find the volume of other shapes

11	13. Time and Temperature	**Lesson No/Name :** **13. Time and Temperature** **Learning objective**- Pages 197 to 204 •To develop the relationship between hours and minutes, and seconds and minutes •To add and subtract measures of time •To calculate the finishing or starting time of an event when the duration is known •To calculate the finishing or starting date of an event when the duration in terms of days is known Page 205 and 206 •To develop measurement of temperature using the Celsius scale •To know the range of temperature in the environment—weather, body temperature, freezing and boiling points of water	Recall the units of time and their conversion. Solve sums based on time, calander etc. Introduction to the units of measuring temperature. Discuss the range of temperture in their surroundings.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Mental math sums	Oxford New Enjoying Mathematics	7	Children will be able to - To develop the relationship between hours and minutes, and seconds and minutes To add and subtract measures of time•To calculate the finishing or starting time of an event when the duration is known To calculate the finishing or starting date of an event when the duration in terms of days is known To develop measurement of temperature using the Celsius scale To know the range of temperature in the environment—weather, body temperature, freezing and boiling points of water
12	7. Decimals	**Lesson No/Name :** **7. Decimals** **Learning objective**- Pages 103 to 110 •To review the concept of decimals and tenths and hundredths •To understand thousandths •To build equivalent decimals •To understand the terms like and unlike decimals and convert one into another •To compare and order the value of two or more decimals •To connect decimals and measurements Pages 111 to 114 •To add and subtract decimal numbers	Explanation of plaace value of decimal numbers. Understand like decimals and equivalent decimals with examples and practic sums. Solve sums based on comparision and ordering decimal numbers. Using decimals in measurement followed by exercise questions.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Mental math sums	Oxford New Enjoying Mathematics	9	Children will be able to - To review the concept of decimals and tenths and hundredths To understand thousandths To build equivalent decimals To understand the terms like and unlike decimals and convert one into another To compare and order the value of two or more decimals To connect decimals and measurements To add and subtract decimal numbers

13	8. More about Decimals	**Lesson No/Name :** **8. More about Decimals** **Learning Objectives** Pages 116 to 121 • To multiply decimals with whole numbers • To divide decimals by whole numbers Pages 122 to 124 • To connect decimals and money • To find the unit price of an item by using division of decimals • To find the price of several items once the unit price is known by using multiplication of decimals • Using the strategy of systematic trails in problem solving	Explanation and practice of sums based on multiplication and division of decimal numbers. Solving problem sums using strategy of systematic trails	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom		Oxford New Enjoying Mathematics	10	Children will be able to - To multiply decimals with whole numbers To divide decimals by whole numbers To connect decimals and money To find the unit price of an item by using division of decimals To find the price of several items once the unit price is known by using multiplication of decimals Using the strategy of systematic trails in problem solving
14	14. Mapping skills	**Lesson No/Name :** **14. Mapping skills** **Learning objective-** Pages 209 to 217 •To understand how to read maps •To understand scales in maps •To understand the usefulness of keys in maps •To understand how to read direction in maps	Explanation of scales and steps to read a map. Disussion of keys and directions in map.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Worksheet based on map	Oxford New Enjoying Mathematics	6	Children will be able to - To understand how to read maps To understand scales in maps To understand the usefulness of keys in maps To understand how to read direction in maps
15	15. Handling Data	**Lesson No/Name :** **15. Handling Data** **Learning objective-** Pages 221 to 228 •To review bar graphs and circle graphs •To understand more about circle graphs •To use tally marks to collect data •To understand the basics of line graphs	Recall the bar graphs and circle graphs with examples. Explation of formulating a tabular representation of data using tally marks.	Open classroom discussion, explanation, problem solving, reasoning, visualization	PPT, Videos, Charts	Google Classroom	Lab activity - To recognise the relation between fractions and circle graph	Oxford New Enjoying Mathematics	6	Children will be able to - To review bar graphs and circle graphs To understand more about circle graphs To use tally marks to collect data To understand the basics of line graphs