

CLASS 6th – Mathematics

1. KNOWING OUR NUMBERS

- Introduction
- Comparing Numbers
 - How many numbers can you make?
 - Shifting digits
 - Introducing 10,000
 - Revisiting place value
 - Introducing 1,00,000
 - Larger numbers
 - An aid in reading and writing large numbers
- Large Numbers in Practice
 - Estimation
 - Estimating to the nearest tens by rounding off
 - Estimating to the nearest hundreds by rounding off
 - Estimating to the nearest thousands by rounding off
 - Estimating outcomes of number situations
 - To estimate sum or difference
 - To estimate products
- Using Brackets
 - Expanding brackets
- Roman Numerals

2. WHOLE NUMBERS

- Introduction
- Whole Numbers
- The Number Line
- Properties of Whole Numbers
- Patterns in Whole Numbers

3. PLAYING WITH NUMBERS

- Introduction
- Factors and Multiples
- Prime and Composite Numbers
- Tests for Divisibility of Numbers
- Common Factors and Common Multiples
- Some More Divisibility Rules
- Prime Factorisation
- Highest Common Factor
- Lowest Common Multiple
- Some Problems on HCF and LCM

4. BASIC GEOMETRICAL IDEAS

- Introduction
- Point
- A Line Segment
- A Line
- Intersecting Lines
- Parallel Lines
- Ray
- Curves
- Polygons
- Angles
- Triangles
- Quadrilaterals
- Circles

5. UNDERSTANDING ELEMENTARY SHAPES

- Introduction
- Measuring Line Segments
- Angles – ‘Right’ and ‘Straight’
- Angles – ‘Acute’, ‘Obtuse’ and ‘Reflex’
- Measuring Angles

- Perpendicular Lines
- Classification of Triangles
- Quadrilaterals
- Polygons
- Three Dimensional Shapes

6. INTEGERS

- Introduction
 - Tag me with a sign
- Integers
 - Representation of integers on a number line
 - Ordering of integers
- Addition of Integers
 - Addition of integers on a number line
- Subtraction of Integers with the help of a Number Line

7. FRACTIONS

- Introduction
- A Fraction
- Fraction on the Number Line
- Proper Fractions
- Improper and Mixed Fractions
- Equivalent Fractions
- Simplest Form of a Fraction
- Like Fractions
- Comparing Fractions
 - Comparing like fractions
 - Comparing unlike fractions
- Addition and Subtraction of Fractions
 - Adding or subtracting like fractions
 - Adding and subtracting fractions

8. DECIMALS

- Introduction
- Tenths
- Hundredths
- Comparing Decimals
- Using Decimals
 - Money
 - Length
 - Weight
- Addition of Numbers with Decimals
- Subtraction of Decimals

9. DATA HANDLING

- Introduction
- Recording Data
- Organisation of Data
- Pictograph
- Interpretation of a Pictograph
- Drawing a Pictograph
- A Bar Graph
 - Interpretation of a bar graph
 - Drawing a bar graph

10. MENSURATION

- Introduction
- Perimeter
 - Perimeter of a rectangle
 - Perimeter of regular shapes
- Area
 - Area of a rectangle

- Area of a square

11. ALGEBRA

- Introduction
- Matchstick Patterns
- The Idea of a Variable
- More Matchstick Patterns
- More Examples of Variables
- Use of Variables in Common Rules
- Expressions with Variables
- Using Expressions Practically
- What is an Equation?
- Solution of an Equation

12. RATIO AND PROPORTION

- Introduction
- Ratio
- Proportion
- Unitary Method

13. SYMMETRY

- Introduction
- Making Symmetric Figures: Ink-blot Devils
- Figures with Two Lines of Symmetry
- Figures with Multiple (more than two) Lines of Symmetry
- Reflection and Symmetry

14. PRACTICAL GEOMETRY

- Introduction
- The Circle
- A Line Segment
- Perpendiculars

- Perpendicular to a line through a point on it
- Perpendicular to a line through a point not on it
- The perpendicular bisector of a line segment
- Angles
- Constructing an angle of a given measure
- Constructing a copy of an angle of unknown measure
- Bisector of an angle
- Angles of special measures

