

## SYLLABUS (2018–2019)

Class VI

SUBJECT- MATHEMATICS

### Syllabus for April to September:

#### Chapters:

- 1 Knowing Our Numbers
- 2 Whole Numbers
- 3 Playing with Numbers
- 4 Basic Geometrical Ideas
- 5 Understanding Elementary Shapes
- 6 Integers
- 7 Fractions

#### April:

**1<sup>st</sup> week (2<sup>nd</sup> to 7<sup>th</sup> April): Basic Concepts**

**2<sup>nd</sup> week (9<sup>th</sup> to 14<sup>th</sup> April): Chapter 1 – Knowing Our Numbers**

Numbers in our daily life, Hindu Arabic Number System, Comparing and ordering large numbers,

**3<sup>rd</sup> week (16<sup>th</sup> to 21<sup>st</sup> April):** Building numbers, The Indian System of Numeration.

The International system of numeration, use of numbers in everyday life, Estimation, Estimating sums, Differences, Products, Products and Quotients, Roman Numerals.

**4<sup>th</sup> week (23<sup>rd</sup> to 30<sup>th</sup> April): Chapter 2 – Whole Numbers**

Natural numbers, Whole numbers, comparing two whole numbers, Representation of whole numbers on number line

#### May :

**1<sup>st</sup> week (1<sup>st</sup> to 5<sup>th</sup> May):** operations on whole numbers (Operation of addition and subtraction)

Operations on whole numbers. (Operations of Multiplication and Division)

**2<sup>nd</sup> week (7<sup>th</sup> to 12<sup>th</sup> May): Chapter 3 – Playing with Numbers**

Simplification of Numerical impressions (Using BODMAS and types of brackets).

Factors, Multiples, Prime and composite numbers

**3<sup>rd</sup> week (14<sup>th</sup> to 19<sup>th</sup> May):** facts about Prime numbers, composite Numbers, Tests for Divisibility of numbers, HCF (Prime factorization & continued division method)

**4<sup>th</sup> week (21<sup>st</sup> to 26<sup>th</sup> May):** LCM (By listing multiples, prime factorization), word problems on HCF and LCM,

**July:**

**1<sup>st</sup> week (2<sup>nd</sup> to 7<sup>th</sup> July): Chapter 4 – Basic Geometrical Ideas**

Introduction, few facts about Point, line, line segment, ray, plane, open and closed figures, Angles, Types of angles, Triangles, Types of a triangle.

**2<sup>nd</sup> week (9<sup>th</sup> to 14<sup>th</sup> July):** Quadrilateral: Sides, Angles and Diagonals of a quadrilateral, Circle, parts of a Circle, Relation between radius and diameter and circumference of a circle.

**3<sup>rd</sup> week (16<sup>th</sup> to 21<sup>st</sup> July): Chapter 5 – Understanding Elementary Shapes:** Comparing and measuring two line segments, measure of angles, Classification of triangles, Classification of quadrilaterals, polygons and three dimensional shapes.

**4<sup>th</sup> week (23<sup>rd</sup> to 28<sup>th</sup> July): Chapter 6– Integers:** Introduction, Representing integers on the number line, ordering of integers, addition of integers, subtraction of integers.

**August:**

**1<sup>st</sup> week (1<sup>st</sup> to 4<sup>th</sup> August): Chapter 6– Integers:,** Addition and subtraction of integers on number line.

**Chapter 7 – Fractions:** Introduction, types of fractions, conversion of unlike fractions into like fractions.

**2<sup>nd</sup> week (6<sup>th</sup> to 11<sup>th</sup> August) :** Fraction on number line, Equivalent fractions , Simplest form of a fraction

**3<sup>rd</sup> week (13<sup>th</sup> to 18<sup>th</sup> August) :** Comparison of like fractions and unlike fractions , addition and subtraction of like fractions, Addition and subtraction of unlike fractions and mixed fractions.

**4<sup>th</sup> week (20<sup>th</sup> to 25<sup>th</sup> August):** Revision

**5<sup>th</sup> week (27<sup>th</sup> to 31<sup>st</sup> August) :**Revision

**September:** Revision and Mid Term Exam

**Activities:**

1. Activity based on numeration
2. Activity based on divisibility rule
3. Activity based on properties of quadrilaterals.
4. Activity based on integers.
5. Activity based on fractions.

## **Syllabus for October to December:**

### **Chapters:**

8 Decimals  
9 Data Handling  
10 Mensuration  
11 Algebra  
12 Symmetry  
13 Ratio and Proportion  
14 Practical Geometry

### **October:**

#### **1<sup>st</sup> week (1<sup>st</sup> to 6<sup>th</sup> October): Chapter 8 – Decimals**

Representation of decimals on number line, expanded form, changing a decimal numeral to a fraction, comparison of two decimal numbers.

**2<sup>nd</sup> week (8<sup>th</sup> to 13<sup>th</sup> October):** use of decimals, addition of numbers with decimals, subtraction of decimals

**3<sup>rd</sup> week (15<sup>th</sup> to 20<sup>th</sup> October): Chapter 9 – Data Handling:** Introduction, Organization of data. read and draw pictograph, read and draw bar graphs **Chapter 10 – Mensuration:** Introduction, perimeter of rectangle.

**4<sup>th</sup> week (22<sup>nd</sup> to 27<sup>th</sup> October):** applications to find perimeter of rectangle, perimeter of regular shapes. perimeter of square.

**5<sup>th</sup> week (29<sup>th</sup> to 31<sup>st</sup> October):** concept of area of a rectangle and square , measures of area

### **November:**

**1<sup>st</sup> week (2<sup>nd</sup> to 4<sup>th</sup> November):** . word problems, Finding areas of compound figures.

**Chapter 11 – Algebra:** Use of letters as symbols for numbers.

**2<sup>nd</sup> week (5<sup>th</sup> to 10<sup>th</sup> November) :** indicating multiplication & division with symbols, translating words into algebraic symbols, substitution.

**3<sup>rd</sup> week (12<sup>th</sup> to 17<sup>th</sup> November):** Equation and solution of an equation , **Chapter 12 – Ratio and proportion** concept of ratio, simplest form of ratio.

**4<sup>th</sup> week (19<sup>th</sup> to 24<sup>th</sup> November):** word problems on ratio, Division of a given quantity in a given ratio, proportion – introduction.

**5<sup>th</sup> week (26<sup>th</sup> to 30<sup>th</sup> November):** find missing term of a proportion, word problems. Unitary Method.

**December:**

**1<sup>st</sup> week (3<sup>rd</sup> to 8<sup>th</sup> December) : Chapter 13 – Symmetry**

Introduction, reflecting shapes, reflection line, symmetry in alphabets and in plane figures

**.2<sup>nd</sup> week (10<sup>th</sup> to 15<sup>th</sup> December):**. obtain the image of a point after reflection, finding reflection line

**3<sup>rd</sup> week (17<sup>th</sup> to 22<sup>nd</sup> December) : Chapter 14 – Practical Geometry:** Construction of a circle when its radius is known

**4<sup>th</sup> week (24<sup>th</sup> to 29<sup>th</sup> December):** Construction of a line segment, draw a perpendicular to a given length

**Activities:**

1. Worksheet based on decimals
2. Activity based on bargraph and pictograph
3. Activity based on perimeter of compound figures
4. Activity based on symmetry
5. Activity based on practical geometry

**January: Chapter 14- Practical Geometry:** The perpendicular bisector of a line segment, to construct an angle equal to a given angle, angles of special measure using compasses and a ruler.

**February:** Revision (Final Exams)