

MATHS SYLLABUS

Class – 6

Chapter Number	Chapter Name
Chapter 1	Number System
1.1	Knowing our numbers
1.2	Playing With numbers
1.3	Whole Numbers
1.4	Integers
1.5	Fractions
Chapter 2	<u>Algebra</u>
Chapter 3	<u>Ratio And Proportion</u>
Chapter 4	<u>Mensuration</u>
Chapter 5	Geometry

6th Class Maths Syllabus – An Overview

There are a total of 13 chapters(with sub-chapters) in the Maths Syllabus for Class 6 CBSE, comprising numbers, algebra, geometry, data handling, and other basic mathematical concepts. The complete syllabus can be accessed on a computer or smartphone using the link given below. Having the syllabus on a device offers the

convenience of use for students and they can readily refer to it even offline. A detailed chapter-wise description of the syllabus has also been given below.

Chapter – 1 (Number System)

(i) Knowing our Numbers:

Students will learn about Indian and universal arrangements of numeration, estimation of large numbers, and Roman numerals. With the study material on ITSE, students will have several options to practice these topics thoroughly for their exams.

1.1) Comparing and Ordering 4-Digit Numbers

1.2) Estimation

1.3) Large Numbers

1.4) Large Numbers in Practice

1.5) Roman Numerals

(ii) Playing with Numbers:

Students will be introduced to the concepts of the highest common factor (HCF) and lowest common multiple (LCM) along with perfect numbers, primes, composites, and co-primes.

- Factors and multiples
- Prime numbers and Composite numbers
- Test for divisibility of numbers
- Common factors and common multiples
- Prime factorization
- Highest Common Factor (HCF)
- Lowest Common Multiple (LCM)
- Some problems on HCF and LCM.

(iii) Whole numbers :-

Natural numbers, whole numbers, properties of numbers (commutative, associative, distributive, additive identity, multiplicative identity), number line. Seeing patterns, identifying and formulating rules to be done by children.

- (i) Identities and Special Properties of Whole Numbers.
- (ii) Introduction to Whole Numbers.
- (iii) Patterns in Whole Numbers.
- (iv) Properties of Whole Numbers.

(iv) Negative Numbers and Integers:-

Integers present the basic idea of negative and positive numbers. Students will learn about them along with the representation of integers.

- Tag 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.

(v) Fractions:

- A Fraction
- Fraction on the Number Line
- Proper Fractions
- Improper and Mixed fractions
- Equivalent Fractions
- Simplest Form of a Fraction
- Like Fractions
- Comparing Fractions
- Addition and Subtraction of Fractions

Chapter – 2 (Algebra)

Algebra, one of the most important parts of Maths, will be introduced to students in this chapter. Algebra is very important for students to score well in higher studies. If students understand algebra well at this stage, then they won't fear Maths, in fact, they would be fascinated by it.

INTRODUCTION TO ALGEBRA

- Introduction to variable through patterns and through appropriate word problems and generalisations (example $5 \times 1 = 5$ etc.)
- Generate such patterns with more examples.
- Introduction to unknowns through examples with simple contexts (single operations)
 - Use of Variables in Common Rules
 - Expressions with Variables
 - Using Expressions Practically
 - Using Expression with Variables
 - Solution of an Equation

Chapter – 3 (Ratio and Proportion)

This chapter can be viewed as the next stage of division basics. Besides Maths, ratio and proportion is used in various other subjects as well. So, it is important that students clear their concepts in this topic.

- Understanding the concept of Ratio.
- Proportion as equality of two ratios.
- Unitary method
- Word Problem

Chapter – 4 (Geometry)

This is one of the most enjoyable chapters of Maths as students will learn to draw various geometric figures using tools.

1. Basic geometrical ideas

- Introduction to Geometry
- Open and closed figures
- Curvilinear and linear boundaries
- Line, line segment, ray.
- Interior and exterior of closed figures
- Angle
- Triangle
- Quadrilateral
- Circle

2. Understanding Elementary Shapes (2-D and 3-D)

- Measure of Line segment
- Measure of angles
- Pair of lines – Intersecting and perpendicular lines, Parallel lines
- Types of angles- right, acute, reflex, zero, obtuse, straight and complete angle
- Classification of triangles
- Types of quadrilaterals
- Simple polygons
- Identification of 3-D shapes: cylinder, cubes, prism, pyramid, cuboids, cone, sphere
- Elements of 3-D figures
- Nets for cube, cuboids, cylinders, cones and tetrahedrons.

3. Symmetry: (reflection)

Chapter – 5 (Mensuration)

In this chapter, students will learn to measure the dimensions and areas of various shapes and figures.

Concept of Perimeter and Introduction to Area

- Introduction to perimeter
- General understanding of perimeter
- Shapes of different kinds with the same perimeter
- Concept of area
- Area of a rectangle and a square.
- Perimeter of a rectangle.