

# MATHS SYLLABUS

## Class 5

### 5<sup>th</sup> Class Maths Syllabus – An Overview

Class 5 Maths plays a crucial role in developing the core foundation for higher grades. It solidifies the mathematical understanding of concepts based on geometry, place value, measurement and fractions. The Class 5 maths syllabus helps students to gradually shift their concrete mathematical knowledge into abstract concepts and topics. Thus, studying each and every topic covered under class 5 maths is important for students.

### Chapter – 1 ( Geometry )

#### SHAPES & SPATIAL UNDERSTANDING

- Gets the feel of perspective while drawing a 3-D object in 2-D.
- Gets the feel of an angle through observation and paper folding.
- Identifies right angles in the environment.
- Classifies angles into right, acute and obtuse angles.
- Represents right angle, acute angle and obtuse angle by drawing and tracing.
- Explores intuitively rotations and reflections of familiar 2-D shapes.
- Explores intuitively symmetry in familiar 3-D shapes.
- Makes the shapes of cubes, cylinders and cones using nets especially designed for this purpose.

### Chapter – 2 ( Numbers )

- Determining place value of numbers beyond 1000.
- Appreciating the role of place value in addition, subtraction and multiplication algorithms.
- Using informal and standard division algorithms.
- Understanding the significance of place value in algebraic operations.
- Adding, subtracting, multiplying and dividing big numbers.
- Brackets and Multiplication.

- Estimating and Rounding numbers of decimal values.
- Factors and Multiples

## **Chapter – 3 ( Mental Arithmetic )**

This section focuses on estimating and verifying sums, differences, products, and quotients using approximation.

- Estimates sums, differences, products and quotients and verifies using approximation.

## **Chapter – 4 ( Fractional Numbers )**

- Finds the fractional part of a collection.
- Compares fractions.
- Identifies equivalent fractions.
- Estimates the degree of closeness of a fraction to known fractions (  $\frac{3}{2}$  ,  $\frac{1}{5}$  ,  $\frac{3}{7}$  etc.)
- Uses decimal fractions in the context of units of length and money.
- Expresses a given fraction in decimal notation and vice versa.

## **Chapter – 5 ( Money )**

This unit involves applying the four arithmetic operations to solve math problems based on money.

- Applies the four operations in solving problems involving money.

## **Chapter – 6 ( Measurement )**

- Determining the area and perimeter of simple geometrical figures.
- Applying the four operations in solving problems involving length, weight, and volume.
- Relating commonly used larger and smaller units of length, weight, and volume and converting one to another.

## LENGTH

- Determines area and perimeter of simple geometrical figures.
- Applies the four operations insolving problems involving length, weight and volume.
- Relates commonly used larger and smaller units of length, weight and volume and converts one to the other.
- Applies simple fractions to quantities.
- Converts fractional larger unit into complete smaller units.
- Appreciates volume of a solid body: intuitively and also by informal measurement.
- Uses addition and subtraction in finding time intervals in simple cases.

## **Chapter – 7 ( Patterns )**

This unit involves identifying patterns in square and triangular numbers, relating sequences of odd numbers between consecutive square numbers, and creating border strip and tiling patterns.

- Collecting 2-dimensional quantitative data.
- Representing the data in the form of a table.
- Drawing a bar graph or a pictograph to present data.

## **Chapter – 8 ( Decimals )**

- (i) Addition of numbers in decimals.
- (ii) Subtraction of numbers in decimals.
- (iii) Multiplication of numbers in decimals.
- (iv) Division of numbers in decimals.

## Chapter – 9 ( Roman Numerals )

Roman numerals is an ancient number system that is still used in many places. In roman numerals, alphabets are used to represent the fixed positive numbers. These roman numerals are I, II, III, IV, V, VI, VII, VIII, IX, and X represent 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 respectively.

The letters used in Roman numerals are:

- I = 1
- V = 5
- X = 10
- L = 50
- C = 100
- D = 500
- M = 1000

