CBSE Syllabus for Class 7
Maths 2020-21

CBSE Syllabus For Class 7 Maths:

Chapters	Name of the Chapters
Chapter 1	Integers
Chapter 2	Fractions and Decimals
Chapter 3	Data Handling
Chapter 4	Simple Equations
Chapter 5	Lines and Angles
Chapter 6	The Triangles and its Properties
Chapter 7	Congruence of Triangles
Chapter 8	Comparing Quantities
Chapter 9	Rational Numbers
Chapter 10	Practical Geometry
Chapter 11	Perimeter and Area
Chapter 12	Algebraic Equation
Chapter 13	Exponents and Powers
Chapter 14	Symmetry
Chapter 15	Visualizing Solid Shapes

Detailed CBSE Syllabus For Class 7 Maths

Let us now see what all are included in each of these chapters:

Chapter 1: **Integers**

1.1: Introduction

1.2: Recall

1.3: Properties of Addition and Subtraction of Integers

- **1.3.1:** Closure under Addition
- **1.3.2:** Closure under Subtraction
- **1.3.3:** Commutative Property
- **1.3.4:** Associative Property
- **1.3.5:** Additive Identity

1.4: Multiplication of Integers

- **1.4.1:** Multiplication of a Positive and a Negative Integer
- **1.4.2:** Multiplication of two Negative Integers
- **1.4.3:** Product of three or more Negative Integers

1.5: Properties of Multiplication of Integers

- **1.5.1:** Closure under Multiplication
- **1.5.2:** Commutativity of Multiplication
- **1.5.3:** Multiplication by Zero
- **1.5.4:** Multiplicative Identity
- **1.5.5:** Associativity for Multiplication
- **1.5.6:** Distributive Property
- **1.5.7:** Making Multiplication Easier

1.6: Division of Integers

1.7: Properties of Division of Integers

Chapter 2: Fractions and Decimals

2.1: Introduction

2.2: How Well Have You Learnt About Fractions?

2.3: Multiplication of Fractions

- **2.3.1:** Multiplication of a Fraction by a Whole Number
- **2.3.2:** Multiplication of a Fraction by a Fraction

2.4: Division of Fractions

- **2.4.1:** Division of Whole Number by a Fraction
- **2.4.2:** Division of a Fraction by a Whole Number
- **2.4.3:** Division of a Fraction by Another Fraction

2.5: How Well Have You Learnt About Decimal Numbers

2.6: Multiplication of Decimal Numbers

- **2.6.1:** Multiplication of Decimal Numbers by 10, 100 and 1000

2.7: Division of Decimal Numbers

- **2.7.1:** Division by 10, 100 and 1000

4.7: Applications of Simple Equations to Practical Situations

Chapter 5: Lines and Angles

5.1: Introduction

5.2: Related Angles

- **5.2.1:** Complementary Angles
- **5.2.2:** Supplementary Angles
- **5.2.3:** Adjacent Angles
- **5.2.4:** Linear Pair
- **5.2.5:** Vertically Opposite Angles

5.3: Pairs of Lines

- **5.3.1:** Intersecting Lines
- **5.3.2:** Transversal
- **5.3.3:** Angles Made by A Transversal
- **5.3.4:** Transversal of Parallel Lines

5.4: Checking for Parallel Lines

Chapter 6: Triangles and its Properties

6.1: Introduction

6.2: Medians of a Triangle

6.3: Altitudes of a Triangle

6.4: Exterior Angle of a Triangle and Its Property

6.5: Angle Sum Property of a Triangle

6.6: Two Special Triangles: Equilateral and Isosceles

6.7: Sum of The Lengths of Two Sides of a Triangle

6.8: Right-Angled Triangles and Pythagoras Property

Chapter 7: Congruence of Triangles

7.1: Introduction

7.2: Congruence of Plane Figures

7.3: Congruence Among Line Segments

7.4: Congruence of Angles

7.5: Congruence of Triangles

7.6: Criteria for Congruence of Triangles

7.7: Congruence Among Right-Angled Triangles

Chapter 8: Comparing Quantities

8.1: Introduction

8.2: Equivalent Ratios

8.3: Percentage – Another Way of Comparing Quantities

- **8.3.1:** Meaning of Percentage
- **8.3.2:** Converting Fractional Numbers to Percentage
- **8.3.3:** Converting Decimals to Percentage
- **8.3.4:** Converting Percentages to Fractions or Decimals
- **8.3.5:** Fun with Estimation

8.4: Use of Percentages

- **8.4.1:** Interpreting Percentages
- **8.4.2:** Converting Percentages To “How Many”
- **8.4.3:** Ratios to Percents
- **8.4.4:** Increase or Decrease as Percent

8.5: Prices Related to An Item or Buying and Selling

- **8.5.1:** Profit or Loss as A Percentage

8.6: Charge Given on Borrowed Money or Simple Interest

- **8.6.1:** Interest for Multiple Years.

Chapter 9: Rational Numbers

9.1: Introduction

9.2: Need for Rational Numbers

9.3: What Are Rational Numbers?

9.4: Positive and Negative Rational Numbers

9.5: Rational Numbers on a Number Line

9.6: Rational Numbers in Standard Form

9.7: Comparison of Rational Numbers

9.8: Rational Numbers Between Two Rational Numbers

9.9: Operations on Rational Numbers

- **9.9.1:** Addition
- **9.9.2:** Subtraction
- **9.9.3:** Multiplication
- **9.9.4:** Division.

Chapter 10: Practical Geometry

10.1: Introduction

10.2: Construction of A Line Parallel To A Given Line, Through A Point Not On The Line

10.3: Construction of Triangles

10.4: Constructing A Triangle When the Lengths of Its Three Sides Are Known (SSS Criterion)

10.5: Constructing A Triangle When the Lengths of Two Sides and The Measure of The Angle Between Them Are Known. (SAS Criterion)

10.6: Constructing A Triangle When the Measures of Two of Its Angles and The Length of The Side Included Between Them Is Given. (ASA Criterion)

10.7: Constructing A Right-Angled Triangle When the Length of One Leg and Its Hypotenuse Are Given (RHS Criterion).

Chapter 11: Perimeter and Area

11.1: Introduction

11.2: Squares and Rectangles

11.2.1: Triangles as Parts Of Rectangles

11.2.2: Generalising For Other Congruent Parts of Rectangles

11.3: Area of A Parallelogram

11.4: Area of A Triangle

11.5: Circles

- **11.5.1:** Circumference of A Circle
- **11.5.2:** Area of Circle

11.6: Conversion of Units

11.7: Applications.

Chapter 12: Algebraic Expressions

12.1: Introduction

12.2: How Are Expressions Formed?

12.3: Terms of An Expression

12.4: Like and Unlike Terms

12.5: Monomials, Binomials, Trinomials and Polynomials

12.6: Addition and Subtraction of Algebraic Expressions

12.7: Finding the Value of An Expression

12.8: Using Algebraic Expressions – Formulas and Rules.

Chapter 13: Exponents and Powers

13.1: Introduction

13.2: Exponents

13.3: Laws of Exponents

- **13.3.1:** Multiplying Powers with The Same Base
- **13.3.2:** Dividing Powers with The Same Base
- **13.3.3:** Taking Power of a Power
- **13.3.4:** Multiplying Powers with The Same Exponents
- **13.3.5:** Dividing Powers with The Same Exponents

13.4: Miscellaneous Examples Using the Laws of Exponents

13.5: Decimal Number System

13.6: Expressing Large Numbers in The Standard Form.

Chapter 14: Symmetry

14.1: Introduction

14.2: Lines of Symmetry for Regular Polygons

14.3: Rotational Symmetry

14.4: Line Symmetry and Rotational Symmetry.

Chapter 15: Visualising Solid Shapes

15.1: Introduction: Plane Figures and Solid Shapes

15.2: Faces, Edges and **Vertices**

15.3: Nets for Building 3-D Shapes

15.4: Drawing Solids on A Flat Surface

- **15.4.1:** Oblique Sketches
- **15.4.2:** Isometric Sketches
- **15.4.3:** Visualising Solid Objects

15.5: Viewing Different Sections of a Solid

- **15.5.1:** One Way to View an Object Is by Cutting Or Slicing
- **15.5.2:** Another Way Is by Shadow Play
- **15.5.3:** A Third Way Is by Looking at It From Certain Angles To Get Different Views.