



Grade 6

• Number System

Whole Numbers, Integers, and Rational Numbers Fractions, Decimals, and Percents Factors and Multiples Prime Factorization

Arithmetic

Operations on Numbers: Addition, Subtraction, Multiplication, and Division Fractions and Decimal Operations Ratios and Proportions

Geometry

Basic Shapes and Properties (Triangles, Quadrilaterals, Circles) Angles (Acute, Obtuse, Right) Symmetry and Reflection

• Algebra

Basic Concepts of Algebra Variables, Constants, and Expressions Simple Equations (Linear)

Mensuration

Perimeter, Area, and Volume of Basic Geometrical Shapes Surface Area of Cubes and Cuboids

Data Handling

Bar Graphs and Pictograms Mean, Median, Mode





Grade 7

• Integers and Rational Numbers

Operations on Integers (Addition, Subtraction, Multiplication, and Division)

Rational Numbers and their Operations

Algebra

Algebraic Expressions and Identities Simplification of Expressions Linear Equations in One Variable

Geometry

Triangles (Types, Properties)
Properties of Parallel Lines
Construction of Triangles and Other Polygons

Mensuration

Area and Perimeter of Complex Figures (Rectangles, Parallelograms, Circles)
Surface Area and Volume of 3D Shapes (Cubes, Cylinders)

Data Handling

Frequency Distribution and Cumulative Frequency Probability (Basic Concepts and Probability Experiment)



以此此 Syllabus!



<u>Grade 8</u>

• Linear Equations in One Variable

Solving Equations using Various Methods

• Algebra

Factorization of Polynomials Introduction to Quadratic Equations

Geometry

Understanding Congruence of Triangles
Properties of Quadrilaterals (Rectangle, Square, Parallelogram, etc.)
Circles: Chords, Radius, Diameter, and Circumference

Mensuration

Surface Area and Volume of Solids (Cone, Sphere, Cylinder)

• Data Handling

Graphical Representation of Data (Bar Graphs, Histograms, Line Graphs) Measures of Central Tendency: Mean, Median, Mode

• Statistics

Introduction to Probability





<u>Grade 9</u>

• Number System

Real Numbers and their Properties Laws of Exponents Surds and Indices

• Algebra

Polynomials (Degree, Addition, Subtraction, Multiplication) Factorization of Polynomials Linear Equations in Two Variables

• Coordinate Geometry

Cartesian Plane and Coordinates Distance Formula, Section Formula, Midpoint Formula

Geometry

Triangles: Types, Properties, and Proofs (Congruence and Similarity)

Area of Similar Triangles

Circles: Tangents and Secants

Mensuration

Surface Area and Volume of Solids (Cylinder, Cone, Sphere)

• Statistics

Probability

Graphs: Histograms, Ogives, and Frequency Curves





<u>Grade 10</u>

• Algebra

Quadratic Equations (Factorization, Completing the Square, Formula) Arithmetic Progression (AP) Polynomials (Roots, Zeros, Factorization)

Geometry

Coordinate Geometry (Slope of a Line, Equation of a Line, Distance Formula)
Triangles & Circles

Mensuration

Surface Area and Volume of Solids (Cylinders, Cones, Spheres) Area of a Circle, Sector, and Segment

• Statistics and Probability

Measures of Central Tendency (Mean, Median, Mode) Probability (Events, Sample Space, Theorems)

Real Numbers

Euclid's Division Lemma and Applications LCM and HCF: Methods and Applications

• Trigonometry

Basic Trigonometric Ratios and Identities Applications of Trigonometry (Height and Distance Problems)