

# Mathematics Grade 6 Curriculum



Sessions 1 - 34



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## Sessions 1 - 9



### Numbers and Operations

- Understand 10-digit numbers
- Compare and order 10-digit numbers
- Skip count and round off 10-digit numbers
- Add and subtract 10-digit numbers, and understand their properties
- RDP Session(Revision, Doubt and Practice Session)** 
- Multiply and divide 10-digit numbers, and understand their properties
- Perform mental arithmetic operations with 10-digit numbers
- Estimate 10-digit numbers
- Simplify using order of operations
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-1** 

## Sessions 10 - 22



### Integers and their Operations

- Understand negative numbers and integers
- Represent integers on the number line, and compare and order them
- Find Absolute Value of Integers
- Add Integers
- RDP Session(Revision, Doubt and Practice Session)** 
- Subtract Integers and Solve Expressions with Integers Using Addition and Subtraction
- Multiply Integers and Understand the Properties
- Divide Integers and Understand the Properties
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-2** 

## Sessions 23 - 34



### Fractions and Decimals

- RECAP: Fractions
- Work with types of fractions, equivalent fractions, and addition and subtraction of fractions
- Multiply fractions by whole numbers and fractions
- RDP Session(Revision, Doubt and Practice Session)** 
- Divide fractions by whole numbers and fractions, and solve mixed problems
- Convert a decimal into a fraction and vice versa, and compare and order decimals
- Perform all 4 operations on decimals
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-3** 

# Mathematics Grade 6 Curriculum



Sessions 35 - 77



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## Sessions 35 - 44

### Factors, Multiples, Primes and Exponents

- Understand factors, multiples, and their properties; primes and prime factorization
- Understand and apply the concepts of HCF and LCM
- Work on Divisibility Tests
- **RDP Session(Revision, Doubt and Practice Session)**
- Understand exponents and their laws, and solve problems on them
- Understand and find squares and square roots
- Understand and find cubes and cube roots
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-4**

## Sessions 45 - 57

### An Introduction to Algebra

- Decode and predict patterns and understand variables
- Convert statements to variables and substitute values of variables
- Understand variables, constants, and terms, and perform operations on variables
- Identify like and unlike terms, and simplify and classify expressions
- **RDP Session(Revision, Doubt and Practice Session)**
- Evaluate algebraic expressions
- Visually represent equations and inequations
- Understand and solve one-variable linear equations
- Solve using balancing method and transposition method
- Solve word problems on one-variable linear equations
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-5**

## Sessions 58 - 63

### Operations on Algebraic Expressions

- Simplify expressions using BODMAS
- Add and subtract expressions, and find HCF of expressions
- Multiply and divide monomials and binomials
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-6**

## Sessions 64 - 77

### Geometry

- Add and Subtract Angles, and Understand Complementary and Supplementary Angles
- Work with Intersecting Lines, Parallel Lines, Transversals and Pairs of Angles
- Classify Triangles by Angles and Find the Relationship Between the Sides of a Triangle
- Understand and Apply Angle Sum Property and Exterior Angle Property of a Triangle
- **RDP Session(Revision, Doubt and Practice Session)**
- Understand Quadrilaterals and their Angle Sum Property and Recap Circles
- Learn about Polyhedrons, Pyramids, and Prisms
- Understand and Apply Lines of Symmetry and Mirror Images
- **RDP Session(Revision, Doubt and Practice Session)**
- Construct Line Segments, Perpendicular Bisectors, and Perpendicular to a Line Segment
- Construct an Angle Equal to Another Angle, Parallel Lines and an Angle Bisector, and Specific Angles
- Construct Chords and Sectors of a Circle
- **RDP Session(Revision, Doubt and Practice Session)**
- **Checkpoint Assessment-7**

# Mathematics Grade 6 Curriculum



Sessions 78 - 144



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## Sessions 78 - 82

### Mensuration

- Work on perimeter and area of squares and rectangles
- Understand the concept of surface area and volume of cubes and cuboids
- Work with volume of cubes and cuboids and unit conversions (surface area and volume)
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-8** 

## Sessions 83 - 88

### Data Handling

- Understand the concept of average
- Interpret and create bar graphs
- Interpret line graphs
- Interpret and create pie charts
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-9** 

## Sessions 89 - 95

### Set Theory

- Basics of Sets
- Comparison of Sets
- RDP Session(Revision, Doubt and Practice Session)** 
- Checkpoint Assessment-10** 

## Sessions 96

### Final Assessment

## Sessions 97 - 144

### Vedic Maths

- Multiplication of number by 9, 99, 999 and 9999
- Series addition
- Division by 11 using subtraction
- Multiplication vertically and crosswise(2D X 2D)
- Multiplication vertically and crosswise(3D X 3D)
- Multiplication tables up to 99
- Simple Fraction
- Squares of 2 digit and 3 digit numbers near 10 and 100
- Square root of perfect square by observation method
- Easiest way to find HCF
- Finding the Day of any Date between 2000-2099
- Answer check method of multiplication and division

### Mental Ability/ Logical Reasoning

- Mirror and Water Images
- Calendar
- Sudoku
- Embedded Figures
- Inserting The Missing Character
- Seating Arrangement