



Young Scholars Foundation

# MATHS SYLLABUS

## Grade 1 to 10

### Grade - 1

#### Section 1: Mathematical Reasoning

#### Section 2: General Maths

Number sense (2 digit numbers), Addition and Subtraction, Comparisons, Length, Mass, Money, Time, Geometrical Shapes, Solids and Patterns.

#### Section 3 : Logical Reasoning

Verbal and Non-verbal reasoning. This section includes topics like- blood relation, coding-decoding, Grouping, Analogy, Ranking, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, Out the embedded figure, clock and calendar.

#### Section 4: Wise Wizard

Higher Order Thinking Question – from Section 1 & 2

### Grade - 2

#### Section 1: Mathematical Reasoning

#### Section 2: General Maths

Number sense (3 digit numbers), Addition and Subtraction upto 1000, Multiplication and Division, Comparisons, Length, Mass, Money, Time, Volume, Graphs, Lines and Surfaces, Geometrical Shapes, Solids and Patterns, Ascending and descending.

#### Section 3: Logical Reasoning

Verbal and Non- verbal reasoning. This section includes topics like- blood relation, Coding-decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), Analogy, Ranking, Matrix, spotting out the embedded figure, clock and calendar.

## **Section 4: Wise Wizard**

Higher Order Thinking Question – from Sections 1 & 2

### **Grade - 3**

#### **Section 1: Mathematical Reasoning**

#### **Section 2: General Maths**

Numbers System, Additions and Subtraction within 10000, Addition and Subtraction within 10000, Multiplication and Division, Fractions, Decimals Money, Length, Mass, Volume, Bar Graph, Time, Geometry, Area and Perimeter, ascending, Descending order, Factors and Multiples.

#### **Section 3: Logical Reasoning**

Verbal and Non- verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### **Section 4: Wise Wizard**

Higher Order Thinking Questions- from Sections 1 & 2

### **Grade - 4**

#### **Section 1: Mathematical Reasoning**

#### **Section 2: General Maths**

Number system, Operation on Large Numbers, Roman Numerals, Unitary method, Decimals, Fractions, Time, Money, Geometrical figures, Area and Perimeter, Graphs, Symmetry and Tessellations.

#### **Section 3: Logical Reasoning**

Verbal and Non- Verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### **Section 4: Wise Wizard**

Higher Order Thinking Questions- form Sections 1 & 2

## Grade - 5

### **Section 1: Mathematical Reasoning**

### **Section 2: General Maths**

Number System, Operation on Large Numbers, Roman Numerals, Factors and Multiples, LCM, HCF, Fractions, Decimals, Average, Percentage, Geometry, Area and Perimeter, Time and temperature.

### **Section 3: Logical Reasoning**

Verbal and Non- Verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

### **Section 4: Wise Wizard**

Higher Order Thinking Questions – from Section 1 & 2

## Grade - 6

### **Section 1: Mathematical Reasoning**

### **Section 2: General Maths**

Number System, Operation on Large Numbers, Factors and Multiples, LCM, HCF, Fractions, Decimals, Ratio and Proportion, Percentage, Speed and Time, Algebraic Expressions, Linear equations, Profit and loss, Simplification, Lines and Angles, Triangles, Area and Perimeter, Volume, Graphs and Pie Chart.

### **Section 3: Logical Reasoning**

Verbal and Non- verbal reasoning. This section includes topics like- blood relation, Coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

### **Section 4: Wise Wizard**

Higher Order Thinking Questions- from Sections 1 & 2

## Grade - 7

### **Section 1: Mathematical Reasoning**

## **Section 2: General Maths**

Integers and Rational Numbers, Fractions and Decimals, Ratio and Proportion, Comparing Quantities, Powers and Exponents, Algebraic Expression and Linear Equations, Geometry, Perimeter, Area and Volume, Data Handling, Loss, Profit and Simple interest Based Questions.

## **Section 3: Logical Reasoning**

Verbal and Non- verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), Images, matrix, spotting out the embedded figure, clock and calendar.

## **Section 4: Wise Wizard**

Higher Order Thinking Question- from Section 1 & 2

## **Grade - 8**

### **Section 1: Mathematical Reasoning**

### **Section 2: General Maths**

Rational Numbers, Squares and Square Roots, Cubes and Cube Roots, Exponents and Powers, comparing Quantities, Direct and Inverse Proportions, Linear Equations in One Variable, Algebraic expressions & Identities, Factorisation, Mensuration and Data Handling (Probability). Loss, Profit, and simple Interest & compound interest.

### **Section 3: Logical Reasoning**

Verbal and Non- verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, alphabet series, Problem solving based on pictures, diagrams and shapes, classification (odd one out), images,

Matrix, spotting out the embedded figure, clock and calendar.

### **Section 4: Wise Wizard**

Higher Order Thinking Questions- from Section 1 & 2

## **Grade - 9**

### **Section 1: Mathematical Reasoning**

## **Section 2: General Maths**

Number Systems, Polynomials, Linear Equations in Two Variables, Euclid's Division Lemma, Lines and Angles, Triangles, Quadrilaterals, Areas of Parallelograms and Triangles, Surface Area and Volume, Heron's Formula, Circles, Coordinate Geometry, Probability, Quadratic Equations.

## **Section 3: Logical Reasoning**

Verbal and Non-verbal reasoning. This section includes topics like- blood relation, coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), Images, matrix, spotting out the embedded figure, clock and calendar.

## **Section 4: Wise Wizard**

Higher Order Thinking Questions- from Sections 1 & 2

# **Grade - 10**

## **Section 1: Mathematical Reasoning**

## **Section 2: General Maths**

Polynomials, Quadratic Equations, Arithmetic Progressions, Coordinate Geometry, Introduction to Trigonometry, Trigonometric Identities and Some Applications of Trigonometry, Circles, Areas Related to Circles, Surface Area and Volume, Statistics and Probability.

## **Section 3: Logical Reasoning**

Verbal and Non-verbal reasoning. This section includes topics like- blood relation, Coding- decoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out) images, matrix, spotting out the embedded figure, clock and calendar.

## **Section 4: Wise Wizard**

Higher Order Thinking Questions- form Sections 1 & 2

