

## Competition Levels

Level-1	Level-2	Level-3	Level-4	Level-5	Level-6	Level-7
Quarter-1-Prelims	Quarter-1-Nationals	Quarter-2-Prelims	Quarter-2-Nationals	Quarter-3-Prelims	Quarter-3-Nationals	Jumbo Nationals

The qualifiers from each prelim can participate in the respective National Championship.

The participants of the Jumbo National Championship will be the qualifiers from the National Championships based on an average percentile of the four National Championships.

The prelims will comprise of written rounds. The National Championship and the Jumbo National Championship will have written and oral rounds

## Grade-5: Syllabus Spread

### Quarter -1 Prelims & National Championship

1. Fun with Numbers  
Numbers and Operations
  - a. Adding and subtracting (6 digits) Indian and international system
  - b. Place and face value, expand, standard form
  - c. Rounding numbers
  - d. Story sums all 4 operations (addition, subtraction, multiplication and division)
  - e. Arranging numbers ascending order and descending order.
  - f. Building smallest and largest 6-digit numbers with and without repetition of given digits.
  - g. Successor and Predecessor.
  - h. Estimating sums, differences and products of given numbers.

#### Roman Numerals

- a. All 7 symbols
- b. Addition/subtraction/multiplication/division – using symbols

#### 2. Patterns

- a. Identifies patterns in multiplication and division
- b. Multiplying and dividing by 10s, 100s, 1000s
- c. Identifying geometrical patterns based on symmetry
- d. Skip counting addition and subtraction
- e. Even and odd numbers

#### Factors and Multiples

- a. Properties of factors and multiples
- b. Introduction to prime/composite/twin prime and co-prime numbers
- c. Divisibility rules (2;3;4;5;6;8;9;10;11)
- d. HCF and LCM

### Quarter -2 Prelims & National Championship

Chapters for Quarter 1 Plus the following chapters:

3. Fractions- (shaded/ Unshaded)
  - a. Colouring the shaded/unshaded fractions
  - b. Types of fraction
  - c. Conversion of fraction (mixed to proper and vice versa).
  - d. Addition/subtraction and comparing - unlike fractions, equivalent fractions, adding and subtracting fractions and fractions multiplied by a whole number.
  - e. Equalize Numerators/ denominators
  - f. Reciprocal of fraction
  - g. Story sums

#### Decimals

- a. Adding, subtraction, multiplying, dividing and Comparing
- b. Conversion

#### 4. Measurements – Length /Weight/ Capacity

- a. Comparing the quantities
- b. Addition and subtraction to equalize both sides LHS and RHS
- c. Conversions

#### Measurement (Length)

- a. Relating metre with centimetre;
- b. Converting metre into centimetres and vice versa.
- c. Solving problems involving length and distances.
- d. Estimating the length of an object and the distance between two given locations.

#### Measurement (Weight)

- a. Weighing objects using a balance and standard units.

- b. Determining the sums and differences of weights.
- c. Estimates the weight of an object and verifying using a balance.

#### Measurement (Volume)

- a. Measuring volumes of given liquid using containers marked with standard units.
- b. Determining sums and differences of volumes.
- c. Estimating the volume of a liquid contained in a vessel and verifying by measuring.
- d. Story sum – using all 4 operations (all quantities)

#### 5. Time and Temperature

- a. Reading 12hr/24 hr clock, time intervals, am & pm
- b. Elapsed time
- c. Knowing Calendar
- d. Knowing the days and months
- e. Converting units of time - Seconds, minutes, hours, days, weeks and years
- f. Understanding the duration of long and short time intervals.
- g. Expressing time, using the terms, 'a.m.' and 'p.m.'
- h. Estimating the duration of familiar events.
- i. Computing the number of days between two dates.
- j. Time word problems

#### Temperature

- a. 2 units – Fahrenheit and Celsius
- b. Classify the temperature conversion

#### 6. Data handling - Tally Marks & Bar Graph

- a. Tally marks (identify and plotting)
- b. Bar graph (reading the bar graph and answering)
- c. Plotting the bar graph
- d. Drawing conclusions from the data.
- e. Pictograph
- f. Line graphs

### Quarter -3 Prelims & National Championship

Chapters for Quarter 2 Plus the following chapters:

7. Money - (Bill & Currency)
  - a. Identifying Indian coins and notes (currency)
  - b. Reverse and Obverse sides of the coin
  - c. Putting together small amounts of money.
  - d. Adding, subtracting, multiplying and division.
    - Making a Bill
    - Comparison

#### 8. Geometry

Fundamental understanding (2D/3D) Shapes

#### Lines and angles

- a. Concepts – point, line, ray, line segment, parallel lines, intersecting angles
- b. Types of triangles and angles
- c. Classify angles on the basis of measurement
- d. Measuring an angle

#### Area and Perimeter

- a. Area and perimeter of irregular shapes by counting squares
- b. Area and perimeter of regular polygon (measurement)

#### Symmetry

- a. Knowing the lines of symmetry
- b. Turning the shapes ( $\frac{1}{2}$ ;  $\frac{1}{4}$ ;  $\frac{3}{4}$  and full)