



Mathematics → Classes I

Mathematics is about a certain way of thinking and reasoning.

Class I →

Geometry

SHAPES & SPATIAL UNDERSTANDING

- ❖ Develops and uses vocabulary of spatial relationship (Top, Bottom, On, Under, Inside, Outside, Above, Below, Near, Far, Before, After)

SOLIDS AROUND US

- ❖ Collects objects from the surroundings having different sizes and shapes like pebbles, boxes, balls, cones, pipes, etc.
- ❖ Sorts, Classifies and describes the objects on the basis of shapes, and other observable properties.
- ❖ Observes and describes the way shapes affect movements like rolling and sliding.
- ❖ Sorts 2 - D shapes such as flat objects made of card etc

Numbers

DEVELOPING A SENSE OF NUMBERNESS, COUNTING AND OPERATIONS OF NUMBERS 1 - 9 AND ZERO

- ❖ Observes object and makes collections of objects.
 - ❖ Arranges the collection of objects in order by - Matching and - One to one correspondence
 - ❖ Counts the number of objects in a collection.
 - ❖ Makes collection of objects corresponding to a specific number.
 - ❖ Recognises and speaks numbers from 1 to 9.
 - ❖ Uses numbers from 1 to 9 in counting and comparison. (Real objects and repeated events like clapping to be used for counting)
 - ❖ Reads and writes numerals from 1 to 9.
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- ❖ Adds and subtracts using real objects and pictures.
- ❖ Adds and subtracts the numbers using symbols '+' and '-'.
- ❖ Approaches zero through the subtraction pattern (such as $3 - 1 = 2$, $3 - 2 = 1$, $3 - 3 = 0$). NUMBERS FROM (10 - 20)
- ❖ Forms Number sequence from 10 to 20.
- ❖ Counts objects using these numbers.
- ❖ Groups objects into a group of 10s and single objects.
- ❖ Develops the vocabulary of group of 'tens' and 'ones'.
- ❖ Shows the group of tens and ones by drawing.
- ❖ Counts the number of tens and ones in a given number.
- ❖ Writes the numerals for eleven to nineteen.
- ❖ Writes numerals for ten and twenty.
- ❖ Compares numbers upto 20.

ADDITION AND SUBTRACTION (UPTO 20)

- ❖ Adds and subtracts numbers upto 20.

NUMBERS FROM 21 - 99

- ❖ Writes numerals for Twenty-one to Ninety nine.
- ❖ Groups objects into tens and ones.
- ❖ Draws representation for groups of ten and ones.
- ❖ Groups a number orally into tens and ones.

MENTAL ARITHMETIC

- ❖ Adds two single digit numbers mentally.

Money

- ❖ Identifies common currency notes and coins.
- ❖ Puts together small amounts of money.



Measurement

LENGTH

- ❖ Distinguishes between near, far, thin, thick, longer/taller, shorter, high, low.
- ❖ Seriates objects by comparing their length.
- ❖ Measures short lengths in terms of non-uniform units (in the context of games e.g. 'Gilli Danda' and 'marble games').
- ❖ Estimates distance and length, and verifies using nonuniform units (e.g. hand span etc.)

WEIGHT

- ❖ Compares between heavy and light objects.

TIME

- ❖ Distinguishes between events occurring in time using terms - earlier and later.
- ❖ Gets the qualitative feel of long & short duration, of school days v/s holidays.
- ❖ Narrates the sequence of events in a day.

Data Handling

- ❖ Collects, represents and interprets simple data such as measuring the arm length or circumference of the head using a paper strip.

Patterns

- ❖ Describes sequences of simple patterns found in shapes in the surroundings and in numbers, e.g. stamping activity using fingers and thumb.
 - ❖ Completes a given sequence of simple patterns found in shapes in the surroundings and in numbers
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