Geometry **(13 hrs.)**

SHAPES & SPATIAL UNDERSTANDING
3-D and 2-D Shapes

- Observes objects in the environment and gets a qualitative feel for their geometrical attributes.
- Identifies the basic 3-D shapes such as cuboid, cylinder, cone, sphere by their names.
- Traces the 2-D outlines of 3-D objects.
- Observes and identifies these 2-D shapes.
- Identifies 2-D shapes viz., rectangle, square, triangle, circle by their names.
- Describes intuitively the properties of these 2-D shapes.
- Identifies and makes straight lines by folding, straight edged objects, stretched strings and draws free hand and with a ruler.
- Draws horizontal, vertical and slant lines (free hand).
- Distinguishes between straight and curved lines.
- Identifies objects by observing their shadows.

Numbers **(46 hrs.)**

NUMBERS

- Reads and writes numerals for numbers up to ninety-nine.
- Expands a number with respect to place values.
- Counts and regroups objects into tens and ones.
- Uses the concept of place value in the comparison of numbers.

Geometry **(16 hrs.)**

SHAPES & SPATIAL UNDERSTANDING

- Gets the feel of perspective while drawing a 3-D object in 2-D.
- Gets the feel of an angle through observation and paper folding.
- Identifies right angles in the environment.
- Classifies angles into right, acute and obtuse angles.
- Represents right angle, acute angle and obtuse angle by drawing and tracing.
- Explores intuitively rotations and reflections of familiar 2-D shapes.
- Explores intuitively symmetry in familiar 3-D shapes.
- Makes the shapes of cubes, cylinders and cones using nets especially designed for this purpose.

Numbers **(40 hrs.)**

NUMBERS AND OPERATIONS

- Finds place value in numbers beyond 1000.
- Appreciates the role of place value in addition, subtraction and multiplication algorithms.
- Uses informal and standard division algorithms.
- Explains the meaning of factors and multiples.

MENTAL ARITHMETIC

- Estimates sums, differences, products and quotients and verifies using approximation.

FRACTIONAL NUMBERS

- Finds the fractional part of a collection.
- Compares fractions.
- Identifies equivalent fractions.
- Estimates the degree of closeness of a fraction to known fractions $(\frac{1}{2}, \frac{1}{4}, \frac{3}{4}\ etc.)$
- Uses decimal fractions in the context of units of length and money.
- Expresses a given fraction in decimal notation and vice versa.

Money **(5 hrs.)**

- Applies the four operations in solving problems involving money.

Measurement **(26 hrs.)**

Length

- Determines area and perimeter of simple geometrical figures.
- Applies the four operations in solving problems involving length, weight and volume.
- Relates commonly used larger and smaller units of length, weight and volume and converts one to the other.
- Applies simple fractions to quantities.
- Converts fractional larger unit into complete smaller units.
- Appreciates volume of a solid body: intuitively and also by informal measurement.
- Uses addition and subtraction in finding time intervals in simple cases.

Data Handling **(6 hrs.)**

- Collects two-dimensional quantitative data represents the data in the form of a table.
- Draws a bar graph or a pictograph to present a data.

Patterns **(6 hrs.)**

- Identifies patterns in square numbers, triangular numbers.
- Relates sequences of odd numbers between consecutive square numbers.
- Makes border strip and tiling patterns.