

---

## Numbers

---

### 1 *Comprehension of cardinal numbers.*

---

- ◆◆ 1.1 Identify numbers in millions.
- ◆ 1.2 Read and write numbers in millions.
- ◆◆ 1.3 Determine the number of millions, hundred-thousands, ten-thousands, thousands, hundreds, tens and ones in a seven digit number.

### 2 *Arithmetical operations.*

---

- ◆◆ 2.1 Add, subtract, multiply and divide whole numbers.
- ◆ 2.2 Solve word problems involving addition, subtraction, multiplication and division of whole numbers.

### 3 *Types of numbers.*

---

- ◆◆ 3.1 Identify whole numbers, even numbers and odd numbers.
- 3.2 Identify prime numbers up to 100.
- ◆◆ 3.3 Give multiples of numbers.
- 3.4 Give the factors of numbers up to 50.

### 4 *Divisibility, prime factorization and L.C.M.*

---

- 4.1 Use the divisibility rules of 2, 3, 4, 5, 6, 9 and 10.
- 4.2 Find the prime factorization of 2-3 digit numbers.
- 4.3 Find the lowest common multiples of two to three 1-2 digit numbers.

◆ review only topic

◆◆ review only topic

See page 2

---

# Fractions

---

## 1 *Comprehension of fractions.*

---

- ◆ 1.1 Form fractions from given information.
- 1.2 Form equivalent fractions to a given fraction.
- ◆ 1.3 Reduce fractions to their lowest term.
- 1.4 Compare fractions with different denominators.
- ◆ 1.5 Convert improper fractions to mixed numbers and vice versa.

## 2 *Addition and subtraction of fractions.*

---

- 2.1 Carry out addition of two fractions (where the denominator is a 1-2 digit number) with different denominators.
- 2.2 Carry out subtraction of fractions (where the denominator is a 1-2 digit number) with different denominators.

## 3 *Multiplication and division of fractions.*

---

- 3.1 Carry out multiplication of two fractions.
- 3.2 Carry out division of two fractions.

## 4 *Application of fractions.*

---

- 4.1 Solve word problems involving fractions.

◆ review only topic  
◆◆ review only topic  
See page 2

---

# Decimals

---

## **1** *Comprehension of decimal numbers.*

---

- 1.1 Read and interpret decimal numbers up to 3 decimal places.
- 1.2 Arrange decimal numbers in order.
- 1.3 Compare decimal numbers using  $>$  or  $<$ .

## **2** *Operation of decimal numbers.*

---

- 2.1 Addition of 2-3 decimal numbers up to 3 decimal places.
- 2.2 Subtraction of decimal numbers up to 3 decimal places.
- 2.3 Solve operations involving addition and subtraction of decimal numbers up to 3 decimal places.
- 2.4 Multiplication of decimal number by a decimal number (up to 3 decimal places).
- 2.5 Division of decimal numbers (up to 3 decimal places) by whole numbers (where dividend should be divisible by the divisor).
- 2.6 Multiplication and division of decimals by 10, 100, 1000 etc.

## **3** *Application of decimal numbers.*

---

- 3.1 Solve word problems involving decimal numbers.

---

# Directed Numbers

---

## **1** *Comprehension of directed numbers.*

---

- 1.1 Use of positive and negative numbers.
- 1.2 Compare positive and negative numbers using  $>$  or  $<$ .
- 1.3 Addition of positive and negative numbers (2 numbers).
- 1.4 Subtraction of positive and negative numbers (2 numbers).
- 1.5 Multiplication of positive and negative numbers.
- 1.6 Division of positive and negative numbers.

---

# Algebra and Equations

---

## 1 *Comprehension of algebra.*

---

- 1.1 Use letters to represent unknowns and write simple algebraic expressions involving one variable for a given situation (e.g.  $2 + y$ ).
- 1.2 Add and subtract algebraic expressions involving 1-3 variables (exclude terms with exponents).
- 1.3 Multiply algebraic expressions involving 1-3 variables (exclude terms with exponents).
- 1.4 Evaluate simple algebraic expressions in 1-3 variables by substitution (exclude terms with exponents).
- 1.5 Simplify expressions with parenthesis (e.g.  $3x(5 - 2y)$ ).

## 2 *Comprehension of equations.*

---

- 2.1 Solve simple linear equations (e.g.  $a + 2 = 3$ ,  $2c = 12$ ,  $\frac{x}{3} = 6$ ,  $-2 + 2u = -6$ ).

---

# Geometry

---

## 1 *Comprehension of angles.*

---

- 1.1 Measure angles less than  $360^\circ$ .
- 1.2 Draw angles less than  $360^\circ$  using a protractor.
- 1.3 Recognise acute, obtuse, reflex, right angles and straight angles.
- 1.4 Naming angles (e.g.  $\angle ABC$ ,  $\angle x$ ).
- 1.5 Identify and name complementary angles, supplementary angles and angles at a point.
- 1.6 Find unknown angles involving a right angle, angles on a straight line, angles at a point (to find only one angle).

## 2 *Geometric construction.*

---

- 2.1 Bisect a given angle.
- 2.2 Construct  $60^\circ$ ,  $30^\circ$ ,  $90^\circ$ ,  $45^\circ$  and  $120^\circ$
- 2.3 Draw quadrilaterals (square, rectangle, parallelogram, trapezium and rhombus) accurately.

---

# Ratio and Proportion

---

## 1 *Comprehension of ratio.*

---

- 1.1 Introduce the meaning of the ratio notation “:”.
- 1.2 Use ratios to show the relative sizes of two quantities.
- 1.3 Simplify ratios with whole numbers.

## 2 *Comprehension of proportion.*

---

- 2.1 Find the missing number in equal ratios.
- 2.2 Solve simple word problems involving direct proportions.

---

# Percentage

---

## **1** *Comprehension of percentage.*

---

- 1.1 Introduce the meaning of the percentage notation “%”.
- 1.2 Recognize the equivalent between percentage and fraction.
- 1.3 Change proper fraction to percentage, and vice versa.
- 1.4 Calculate the percentage of a quantity.

## **2** *Application of percentage.*

---

- 2.1 Solve 1-2 step word problems involving percentages (e.g.: There are 5 children in a team. Three of them are boys. The rest are girls. What percentage of the children are girls?)
- 2.2 Solve 1-step word problems involving percentage of a quantity.

---

# Statistics

---

## **1** *Measure of central tendency.*

---

- 1.1 Find the average of set of numbers.

## **2** *Comprehension of graph.*

---

- 2.1 Read and interpret data presented in pictographs, bar graphs and line graphs.
- 2.2 Construct pictographs, bar graphs and line graphs.

---

# Perimeter

---

## 1 *Comprehension of perimeter.*

---

- ◆ 1.1 Find the perimeter of different shapes when the sides are given.
- 1.2 Introduce the formulae for finding the perimeter of squares and rectangles.
- 1.3 Find the perimeter of compound figures, where the dimension of some sides are not given (exclude giving semi circles).
- 1.4 Find the circumference of circles, where the radius or diameter is given.

## 2 *Application of perimeter.*

---

- 2.2 Solve word problems involving perimeter.

---

# Area

---

## 1 *Comprehension of area.*

---

- 1.1 Use formula to calculate the area of rectangles, squares, triangles and circles.
- 1.2 Find the area of compound figures made up of rectangles and/or squares and/or triangles.
- 1.3 Find the area of shaded regions made up of rectangles and/or squares and/or triangles and/or circles.

## 2 *Application of area.*

---

- 2.1 Solve word problems involving area of rectangles, squares, triangles and circles.

◆ review only topic

◆◆ review only topic

See page 2

---

# Volume

---

## 1 *Comprehension of volume.*

---

- ◆ 1.1 Use formula to calculate the volume of cuboids and cubes.
- 1.2 Find the dimensions of a cuboid given its volume and other dimensions.

## 2 *Application of volume.*

---

- 2.1 Solve word problems involving volume of cuboids and cubes.

◆ review only topic  
◆◆ review only topic  
See page 2