Chapter – 11
Mensuration

- **Perimeter**: Length of boundary of a simple closed figure.
- **Area**: The measure of region enclosed in a simple closed figure.
- Area of a trapezium = half of the sum of the lengths of parallel sides × perpendicular distance between them.
- Area of a rhombus = half the product of its diagonals.
- **Perimeter of**:

  Rectangle = 2(l + b)

  Square = 4a

  Triangle = $\frac{1}{2}$ .. ..

  Parallelogram = 2(sum of two adjacent sides)

- **Diagonal of:**

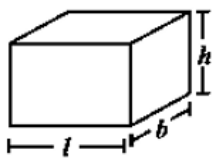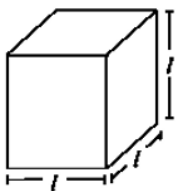 Rectangle = $\sqrt{l^2 + b^2}$

  Square = $\sqrt{2a}$

- **Surface area** of a solid is the sum of the areas of its faces.
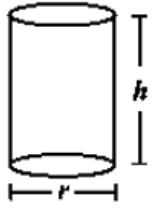- **Surface area of**:

  $a \ cuboid \ = \ 2(lb \ + \ bh \ + \ hl)$

  $a \ cube \ = \ 6l^2$

  $a \ cylinder \ = \ 2\pi r(r \ + \ h)$

- Amount of region occupied by a solid is called its **volume.**
- Volume of

$$= l \times b \times h$$

$$= l^3$$

$$a\ cylinder = \pi r^2\ h$$

(i) $1\ cm^3 = 1\ mL$

(ii) $1L = 1000\ cm^3$

(iii) $1\ m^3 = 1000000\ cm^3 = 1000L$