

Volume and Surface Area

Surface Area and Volume



Surface Area - is the measure of total area of all the flat and curved surfaces of a three-dimensional figure.

Units : $\text{mm}^2, \text{cm}^2, \text{dm}^2, \text{m}^2, \text{km}^2$

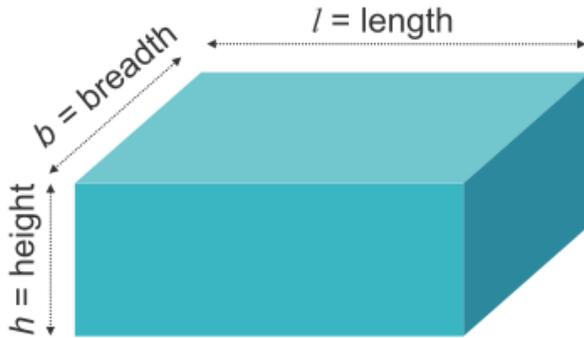
Volume - is the measure of the space occupied by a three-dimensional figure.

Units : $\text{mm}^3, \text{cm}^3, \text{dm}^3, \text{m}^3, \text{km}^3$

Cuboid

Cuboid - A three-dimensional figure that has six rectangular faces at right angles to each other.

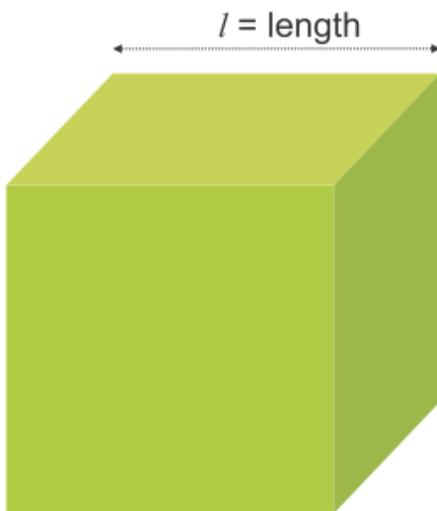
Vertices	Edges	Surface (Faces)	
		Total	Type
8	12	6	Rectangular



Lateral Surface Area	$2h(l + b)$
Surface Area	$2(l \times b) + 2(b \times h) + 2(l \times h)$
Volume	$l \times b \times h$

Cube

Cube - A three-dimensional figure that has six equal square faces.



Vertices	Edges	Surface (Faces)	
		Total	Type
8	12	6	Square

Lateral Surface Area	$4 \times (l)^2$
Surface Area	$6 \times (l)^2$
Volume	$(l)^3$