

- Find the total surface area, lateral surface area and volume for the cuboids with the following dimensions
 - $l = 6\text{cm}$; $b = 4\text{cm}$; $h = 3\text{cm}$
 - $l = 8\text{cm}$; $b = 8\text{cm}$; $h = 5\text{cm}$
(give answer in m^2/m^3 as applicable)
 - $l = 1.2\text{m}$; $b = 500\text{cm}$; $h = 800\text{cm}$
 - $l = 1255\text{cm}$; $b = 0.8\text{m}$; $h = 1000\text{cm}$
(give answer in m^2/m^3 as applicable)
- Find the area of cardboard required to prepare a closed box of dimensions $12\text{ cm} \times 10\text{cm} \times 8\text{ cm}$.
- A swimming pool is 15 m in length, 12 m in breadth and 2m in depth. Find the cost of cementing the floor and walls at the rate of Rs.15 per sq m.
- Find the maximum number of cubes of side 2 cm that can be placed inside a cuboid of dimensions $16\text{ cm} \times 12\text{ cm} \times 6\text{ cm}$.
- Find the area of the base of a box of height 4 cm and lateral surface area 120 cm^2 if its length is twice its breadth.
- Find the volume of a cube if its total surface area is 294 sq cm .
- Find the volume of a cuboid if its surface area is 208 sq cm and the ratio of length, breadth and height is $2 : 3 : 4$.
- A Solid cuboid of dimensions $30\text{ cm} \times 25 \times 9\text{ cm}$ is melted and cast into 2 identical cubes. Find the length of the cubes formed.
- A length of a cuboid is 1 more than twice its breadth. The perimeter of the base is 20 cm and total surface area is 122 cm . Find the dimensions of the cuboid.
- An arrangement of wooden cubic blocks, each of side 2 cm , has surface area 216 cm^2 when arranged in the form of a cube. How many blocks are used in the arrangement?
- A solid metallic cuboid of dimensions $10\text{ cm} \times 5\text{ cm} \times 3\text{ cm}$ is melted and cast into a box, of thickness 0.5 cm , without lid. If the outer measurements of the base of the box are 12 cm and 5 cm . find the height of the box,

1. Find the curved surface area, total surface area and volume of a cylinder with diameter 7 cm and height 5 cm ($\pi = \frac{22}{7}$)
2. The total surface area of a cylinder the height 5 cm is 88 sq cm. Find its radius. ($\pi = \frac{22}{7}$)
3. The curved surface area of a cylinder of radius 5 cm is 251.2 sq cm. Find its height. ($\pi = 3.14$)
4. A metal pipe is 7 m long, the cross-section has inner diameter 2 m and outer diameter 2.2 m. Find the cost of painting the pipe from both sides at the rate of Rs. 10 per sq m. ($\pi = \frac{22}{7}$)
5. A road roller has length 2 m and radius 140cm. Find the number of revolutions required by the roller to cover an area of 616 sq m. ($\pi = \frac{22}{7}$)
6. A log of wood in the shape of a cylinder has length 2 m and diameter 70 cm. Find the volume of wood in the log. ($\pi = \frac{22}{7}$)
7. A cylindrical water tank of diameter 4 m and height 3.5 m is filled completely with water. A tap attached to the tank empties the tank at the rate of 2 liters per minute. In how many minutes will the tank be empty? ($\pi = \frac{22}{7}$)
8. A box contains 500 candles, each of length 10 cm and radius 14 mm. Find the volume of wax in the box. ($\pi = \frac{22}{7}$)

1. Complete the following table for a cuboid of length l , breadth b and height h .

Sr. No.	Length, l	Breadth b	Height, h	Lateral Surface Area, LA	Total Surface Area, TA	Volume, V
a	8 cm	5 cm		78 cm ²		
b	7 cm	4 cm	2 mm			
c	6 cm		4 m			120 m ³
d		3 cm	3 cm		54 cm ²	

2. Match the following task, in the first column, with the method, in the second column, to complete the task in the making of bed and pillows.

Sr. No.	Task		Method
a	To find area of pink fabric used	i	Surface area of cuboid
b	To find area of green fabric used	ii	volume of a cuboid
c	To find amount of foam used in mattress	iii	volume of a cylinder
d	To find amount of foam used in pillow	iv	surface area of a cylinder

3. The dimensions of a classroom are 20 feet x 20 feet x 12 feet, Find the sum of the areas of its floor and the four walls.
4. 48 crystals, each in the shape of a cuboid of dimension 4 mm x 3 mm x 3 mm, are combined to get a single cubic crystal. Find the side of the new crystal formed.
5. A rubber tube in the shape of a cylinder is 30cm long and outer diameter of its cross-section is 7 cm and inner diameter is 5.6 cm. Find the inner and outer curved surface area. ($\pi = \frac{22}{7}$)
6. Find the cost of digging a pit of diameter 2 m and depth 14 m at the rate of 10 per m³. ($\pi = \frac{22}{7}$)