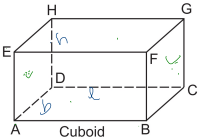
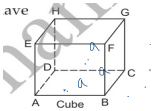
Why solid?

← occupies solid

*Find the volume, the total surface area and the lateral surface area of a cuboid which is* 15 m *long,* 12 m *wide and* 4.5 m *high.*




Vol = l × b × h

Vol = l × b × h
= a × a × a = $a^3$

Total Surface area = 2(lb + bh + lh)

Total Surface area = $a^2 + a^2 + a^2 + a^2 + a^2 + a^2$
= $6a^2$

floor ceil

Lateral surface area = bh + lh + bh + lh
= 2bh + 2lh
= (2b + 2l)h
= 2(l + b)h

Lateral surface area = ABGF + BFHC + CDHM + ADME
= $a^2 + a^2 + a^2 + a^2$
= $4a^2$

Area of four walls = [2(l + b)h]

*How many bricks will be required to construct a wall* 13.5 m *long,* 6 m *high and* 22.5 cm *thick? It is being given that each brick measures* (27 cm × 12.5 cm × 9 cm)?