

# Volume

- the amount of **cubes** inside an object; the capacity of a 3D shape

A rectangular prism is 10 cm long, 5 cm wide and 6 cm high

The length is 10cm

(1 row of 10 cubes)

Volume of 1 row=10cm

Width is 5cm

(5 rows of 10 cubes)

Volume of 1 layer

$5 \times 10 = 50\text{cm}$

Height is 6cm

(6 layers of 50 cubes)

Volume of 6 layers

$6 \times 50 = 300\text{ cm}$

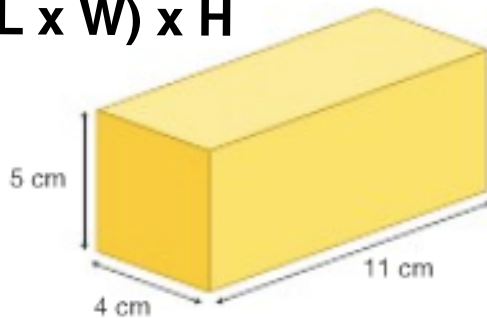


**Formula:  $V = L \times W \times H$  or**  
 **$V = \text{Area of base} \times H$**   
 **$= (L \times W) \times H$**

V = Volume

L = Length

W = Width, H = Height



$$\begin{aligned} V &= L \times W \times H \\ &= 11 \times 4 \times 5 \\ &= 220\text{ cm} \end{aligned}$$