

Decimeter Cube**1010220****Description**

Wooden cube of size 10cm, made of hardwood, precisely cut and finished, having a total volume of 1dm^3 or 1000cm^3 or 1 liter. Each face of the cube has a square grid of 10x10, total 100 squares of 1cm each. 1st row and 1st column of grid on each face marked 1 to 10.

Density

A cubic decimetre (or litre) occupies a volume of $10\text{ cm} \times 10\text{ cm} \times 10\text{ cm}$ and is thus equal to one-thousandth of a cubic metre.

A litre is a cubic decimetre, which is the volume of a cube $10\text{ centimetres} \times 10\text{ centimetres} \times 10\text{ centimetres}$ ($1\text{ L} \equiv 1\text{ dm}^3 \equiv 1000\text{ cm}^3$). Hence $1\text{ L} \equiv 0.001\text{ m}^3 \equiv 1000\text{ cm}^3$; and 1 m^3 (i.e. a cubic metre, which is the SI unit for volume) is exactly 1000 L .

Volume

Volume refers to the amount of space an object occupies or the capacity of a container.

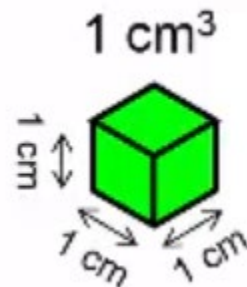
Cubic Centimeter

1cm^3 refers to the space occupies by a cube with

1. A length of 1cm
2. A width of 1 cm
3. A height of 1 cm

Hence, $1\text{cm}^3 = 1\text{ cm} \times 1\text{ cm} \times 1\text{ cm}$

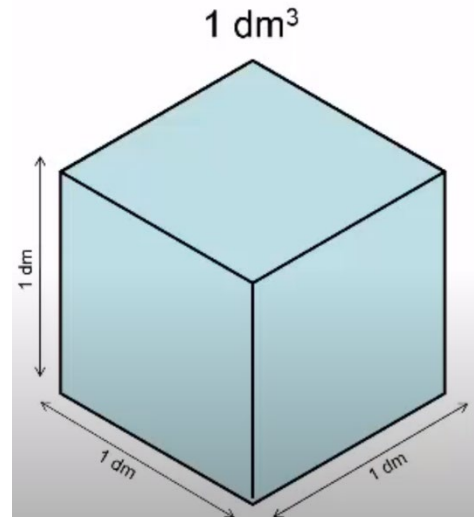
Similarly, $1\text{dm}^3 = 1\text{ dm} \times 1\text{ dm} \times 1\text{ dm}$



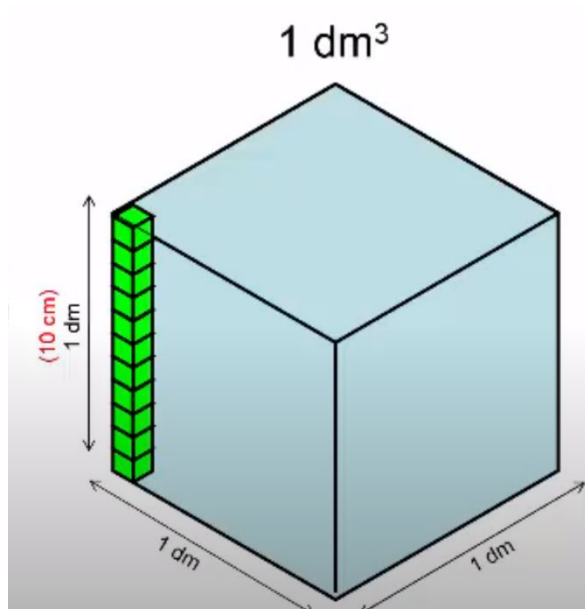
Measure volume using liters.

1 liter equals 1 cubic decimeter

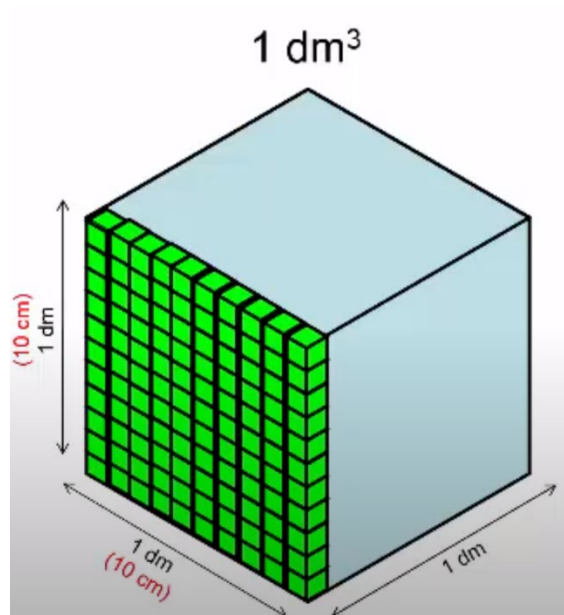
- $1\text{ dm}^3 = 1\text{ dm} \times 1\text{ dm} \times 1\text{ dm}$



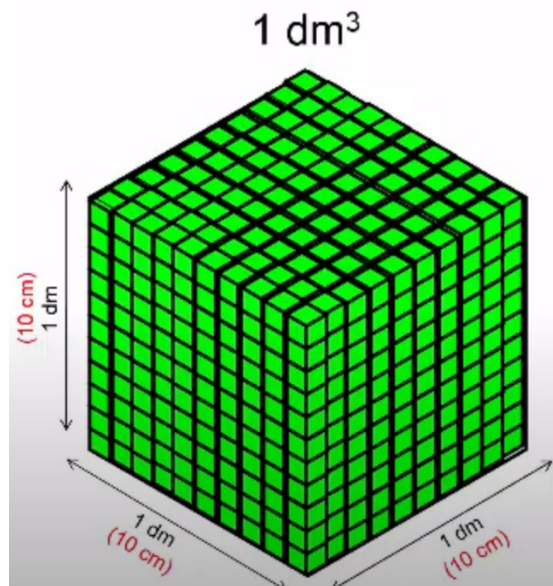
- $1\text{ dm}^3 = 10\text{ cm} \times 1\text{ dm} \times 1\text{ dm}$



- $1\text{ dm}^3 = 10\text{ cm} \times 10\text{ cm} \times 1\text{ dm}$



- $1\text{dm}^3 = 10\text{ cm} \times 10\text{ cm} \times 10\text{ cm}$



$$1\text{dm}^3 = (1\text{ dm})^3 = (10\text{ cm})^3 = 1000\text{ cm}^3$$



Decimeter cube QLB016

$$1 \text{ dm}^3 = 1000 \text{ cm}^3$$