Volume and Capacity

Volume is the space taken up by an object itself, while **capacity** refers to the amount of substance, like a liquid or a gas, which a container can hold.

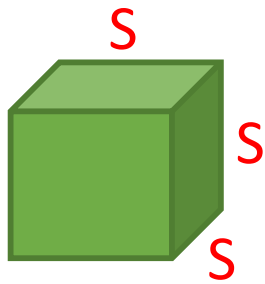
Volume is usually measured in:

cm^3 or m^3

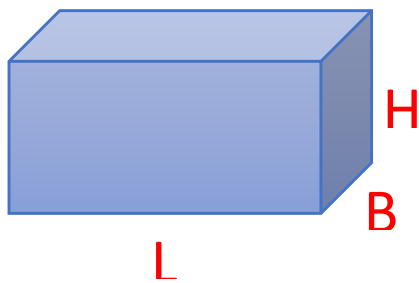
The main unit for liquid measurement is the *LITRE (L)*

1 litre = 1000 ml

Volume of a Cube = S x S x S



Volume of a Cuboid = L x B x H



Finding length, breadth and height of cuboid

$L = \frac{Vol}{B \times H}$	$B = \frac{Vol}{L \times H}$	$H = \frac{Vol}{L \times B}$

Metric units of Volume and Capacity

$1000\ cm^3 = 1L$

$1000\ cm^3 = 1000\ ml$

1 litre = 1000 ml

$1\ cm^3 = 1\ ml$

Eg. 4000 ml to Litres = 4000 ÷ 1000 = 4L

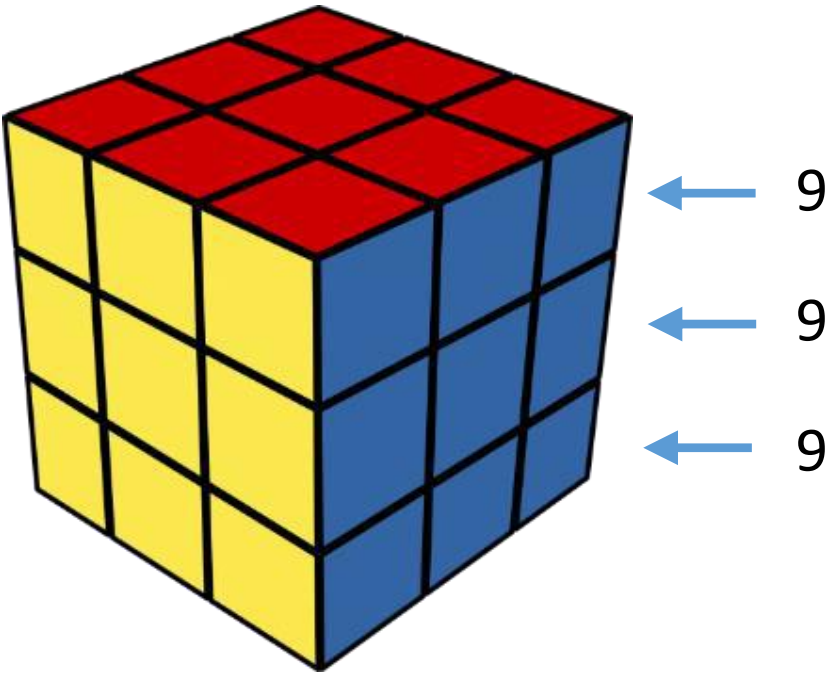
Divide 4000 by the unit converter.

**the unit converter is the number of "small units" in the large unit. Above: 1000ml=1L*

Multiply for the reverse operation of L to ml.

4L x 1000 = 4000ml

Counting cubes



We can determine the volume of the above figure by counting all the smaller cubes in it.

For each layer we would get nine, so 3 layers would give us a total of 27 cubic units.

To find the *number of smaller objects* that can fit in a *larger object*:

Divide the volume of the larger object by the volume of the smaller object.

Vol of large object ÷ Vol of small object