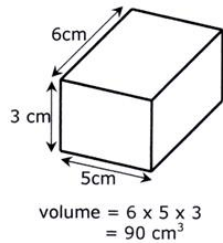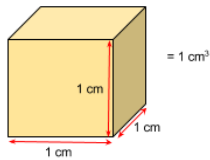<u>5/6/2020 - Volume Investigation</u>

You will need a tape measure
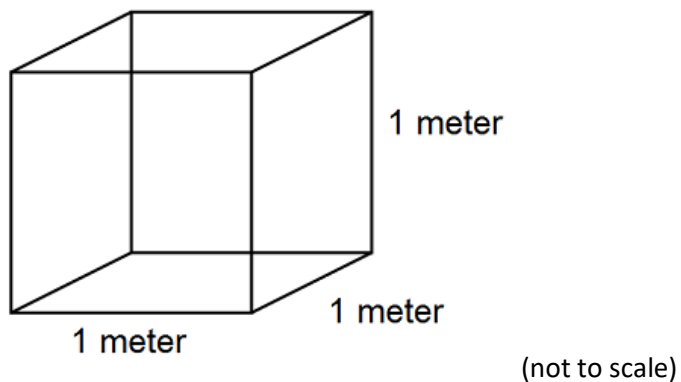
Yesterday we learned about the volume of shapes.

Volume of a cube or cuboid is length x width x height

We measured this in cm³ or cubic centimetres.

Volumes of bigger shapes can be measured in m³ or cubic metres. 1m³ is a cube with sides 1 metre long. There are 1,000,000 cm³ in 1m³![1]

(not to scale)

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[1] This is because 1m = 100cm long, so the all of the sides are 100cm. The volume of 1 cubic metre is 100cmx100cmx100cm = 1000000cm³!

Investigation

Can you find the volume of some of the rooms in your house?

To do this you will need to find the length, width and height of the rooms in metres.

To make it easier . . .

-Choose a room with a simple rectangular shape

-measure to the nearest whole metre.

-get an adult to help you (particularly with the height).

For more of a challenge . . .

-choose a room with an L shape if you have one (you will have to split it into two separate cuboids and add the two volumes together).

-measure to the nearest 1 decimal point (e.g. 3.5mx2.9mx1.4m)

Extension

$1 m^3$ = 1000 litres. This means you could fit 1000 litres of liquid in a cube that has sides of 1m.

So how many 2L bottles of lemonade would it take to fill one of your rooms?

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What maths will you have to do?