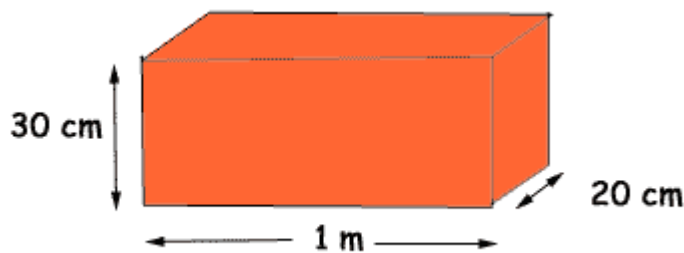# Practical examples of working out volume

The most important thing to remember when you're working out practical examples of volume or capacity is that **all measurements must be in the same units.**

You'll often have measurements in both metres and centimetres. You'll need to change them all into the same units before you begin your calculation.

Example 1

Vijay's window box is a cuboid of length 1 m, width 20 cm and height 30 cm. Work out its volume.

First of all make all the units centimetres.
1 m = 100 cm, so the volume is 100 × 20 × 30 = 60,000 cm³
The volume of the window box is 60,000 cm³

Example 2
Igor's working out how many cubic metres of concrete he'll need for his patio. It will be 2 metres wide and 8 metres long and he needs to make it 10 cm deep. How much concrete will he need?

First of all make all the units metres.
10 cm = 0.1 m, so the volume is 8 × 2 × 0.1 = 16 × 0.1 = 1.6 m³
Igor will need 1.6 m³ of concrete.

Example 3
Bonny has a rectangular garden pond 2 m long and 1 m wide. She wants to fill it to a depth of 30 cm. How many litres of water will she need?

First of all make all the units centimetres.
200 × 100 × 30 = 600,000 cm³
Remember that 1 litre = 1,000 cm³
600,000 ÷ 1 000 = 600
Bonny will need 600 litres of water.