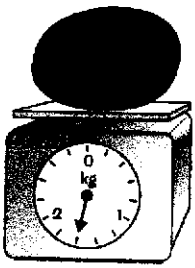


# Units and Measures



## Question 1

A grocer weighs a watermelon. The scales are marked in kg. What is the mass of the watermelon in grams?

1 Find how much each 'jump' on the scale is worth.

2 Work out the mass of the watermelon in kilograms.

3 Convert the kilogram mass into grams to answer the question.

There are 5 jumps between two numbered marks, so you know that each jump is:  $1 \text{ kg} \div 5 = 0.2 \text{ kg}$   
(or  $1000\text{g} \div 5 = 200\text{g}$ )

The arrow is 3 jumps on from 1 kg.  
 $1 \text{ kg} + 3 \times 0.2 \text{ kg}$   
 $= 1 + 0.6 = 1.6 \text{ kg}$

Multiply by 1000 to get the mass in g.  
 $1.6 \times 1000 = 1600 \text{ grams}$

## Question 2

The lengths of three snakes are given below. Put the lengths in order from smallest to largest.

20.1 cm    1.8 m    1500 mm

1 You need to convert all the lengths to the same unit, say mm.

2 Now put the lengths in mm in order.

3 Now change each length back to the unit it was to begin with.

$1 \text{ cm} = 10 \text{ mm}$

So 20.1 cm =  $20.1 \times 10 \text{ mm} = \underline{201 \text{ mm}}$

$1 \text{ m} = 100 \text{ cm}$

So 1.8 m =  $1.8 \times 100 \text{ cm} = 180 \text{ cm}$

$1 \text{ cm} = 10 \text{ mm}$

So  $180 \text{ cm} = 180 \times 10 \text{ mm} = \underline{1800 \text{ mm}}$

The three lengths are:

201 mm    1800 mm    1500 mm

In order, they are:

201 mm    1500 mm    1800 mm

So,    20.1 cm    1500 mm    1.8 m

## Weighing scales don't stop at fish...

If you have to put some measurements in order, make sure that they're all in the same unit first. Just convert all the measurements to the smallest unit by multiplying.