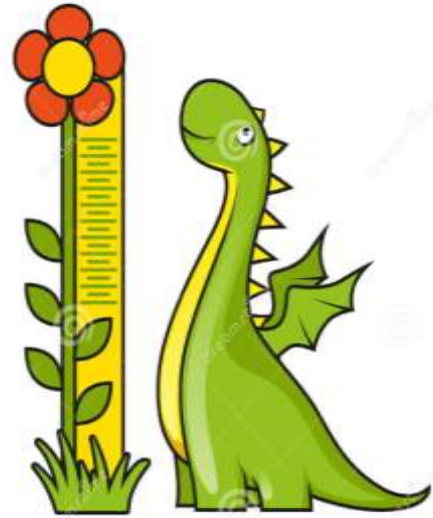# LENGTH and PERIMETER KNOWLEDGE ORGANISER

Overview

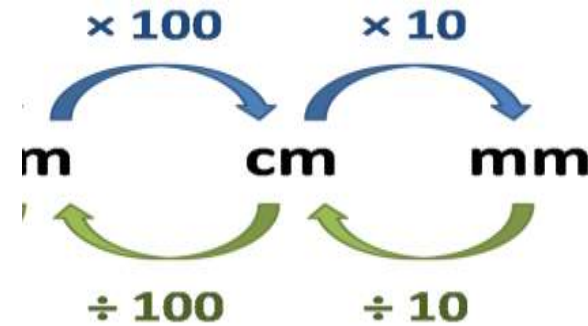**Length and Perimeter** we learn to:

- Measure Lengths (cm/m)
- Equivalent Lengths (m/cm)
- Equivalent Lengths (mm/cm)
- Compare Lengths
- Add Lengths
- Subtract Lengths
- Measure Perimeter
- Calculate Perimeter

This learning is important because it helps us to understand and measure the size of things in the world around us.

It helps us to grasp ideas such as where things will fit, what size items are in comparison to one another and distances that we need to travel.

Equivalent Lengths and Comparing Lengths

- There are 100 centimetres in 1 metre.

- There are 10 millimetres in 1 centimetre.

× 100   × 10

m   cm   mm

÷ 100   ÷ 10

- The crocodile is 3 metres and 10cm long.

- This is the same as 310cm long, or 3100mm long!

- We can compare lengths using these symbols:

< less than   > greater than   = equal to

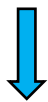We can also use comparison terms such as shorter and longer.

> 3m > 30cm
>
> 3m = 300 cm
>
> 3 metres is longer than 30cm

> 65mm < 8cm
>
> 8cm = 80 mm
>
> 8 centimetres is longer than 65 millimetres.

Measuring Lengths

- Centimetres (cm) are often used to measure shorter items. There are 100 centimetres in 1 metre.

- Millimetres (mm) are used to measure shorter items more precisely. There are 10 millimetres in a centimetre.

10mm

10cm

Where an exact length is needed, people often share the length of items in millimetres.

Remember that there are 100 centimetres in 1 metre.

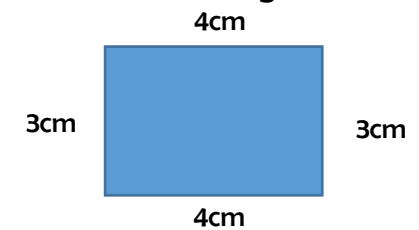The length of the pencil sharpener is 2cm and 8mm, or 28mm.

Remember that there are 1000 metres in 1 kilometre.

Perimeter

- Perimeter is the distance around the outside of a shape.

- We work out the perimeter by adding the length of all of the sides together.

- E.g. The perimeter of the shape on the right is:

- 3cm + 3cm + 4cm + 4cm = 14cm.

4cm
3cm   3cm
4cm

- We can use given information to work out the perimeter of shapes with missing lengths.

- E.g. The perimeter of this shape is 16cm.

- The lengths of the missing sides are 6cm and 2cm.

6cm
2cm

Key Vocabulary

| Length | Height | Width | Perimeter | Further | Longer | Higher | Shorter | Centimetre (cm) | Metre (m) |