Summer term w/b 8th June 2020

Measurement

This week we are recapping our work on measurement. Children need to understand how to measure in millimetres (mm), centimetres (cm) and metre (m) and how to convert between the three.

| **Converting between cm and mm.** |
|---|
| 1cm is the same as 10mm (you can see this on a ruler).
 To convert (change) from cm to mm you have to x10.
 Example 1:
 To convert 4cm to mm you complete 4 x 10 = 40mm.
 To convert (change) from mm to cm you have to ÷10.
 Example 1:
 To convert 30mm to cm you complete 30 ÷ 10 = 3cm.
 This is easy if it is a multiple of 10 (like 40, 50, 60) but you don't always get this!
 Example 2:
 35mm to cm:

 35mm
 30mm 5mm
 3cm 5mm
 3cm 5mm
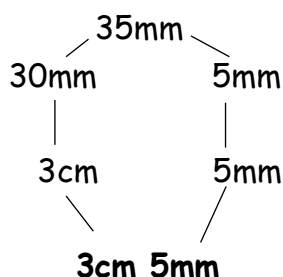
 (some children will know that 35mm ÷ 10 = 3.5cm but this is not something that we teach in year 3). |

Now have a go at these:

cm to mm	mm to cm
1) 5cm	1) 50mm
2) 6cm	2) 80mm
3) 8cm	3) 23mm
4) 10cm	4) 54mm
5) 15cm	5) 68mm

Converting from cm to m
There are 100cm in 1m.   **To convert from m to cm you have to x100.**

Example 1:
4m = 4 x 100 = 400cm
Example 2:
3m22cm

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              3m 22cm
         3m            22cm
          |             |
       300cm    +     22cm
                322cm
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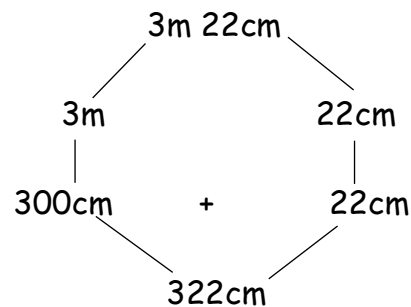
To convert from cm to m you have to ÷100.
Example 1:
500cm = 500 ÷ 100 = 5m
Example 2:
652cm
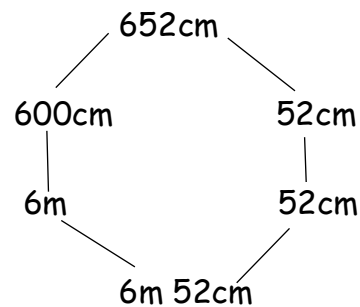
```
            652cm
      600cm        52cm
        |            |
       6m           52cm
            6m 52cm
```

Now have a go at these:

cm to m	m to cm
1) 600cm	1) 9m
2) 800cm	2) 11m
3) 450cm	3) 3m 30cm
4) 234cm	4) 5m 12cm
5) 167cm	5) 8m 6cm

Measuring:

To measure accurately:
1) Look at the object you are measuring and decide whether you need to measure in mm, cm or mm.
2) Line up the zero at the end of the object you are measuring.
3) Hold the ruler (or tape measure) along the line of the side you are measuring.

4) Read the measurement accurately at the other end of the object.

You can measure length (how long), width (how wide), depth (how deep), height (how high).

Now have a go at this:

Choose some objects at home to measure.

Measure them accurately and record on a table. Can you convert between measures? E.g.
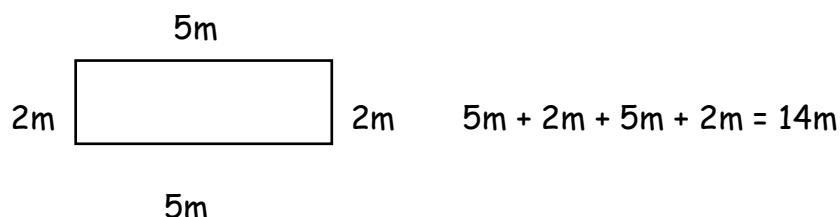
Object	Length (cm and mm)	Length (mm)

Object	Length (cm)	Length (m and cm)

Remember the measuring units you use will depend on the size of the object you are measuring!

Perimeter:

The perimeter of a shape (2D only) is the distance all the way around.

Example 1:

5m

2m ☐ 2m   5m + 2m + 5m + 2m = 14m

5m

In year 3 children should be able to measure and calculate the perimeter of a shape.

Sometimes when they are measuring then the numbers can be hard to add together. In this they can use their rounding skills (looking at the ruler and round to the nearest cm).

Example 2:

13cm 8mm   12cm 3mm
(14cm)   (12cm)

15cm 9mm (16cm)
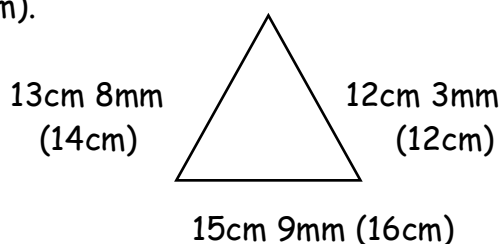
Then 14 + 16 + 12 = 42cm

Now have a go at these: (measure and calculate the perimeter)