Y3 Maths
What they need to know...

This document will support children with their understanding of **length and perimeter**. They will be introduced to millimetres for the first time and build on their knowledge of centimetres and metres. Children are expected to know that 100cm is equivalent to 1m and that 10mm is equivalent to 1cm. Once they are secure with this, they can start to convert between these measures by partitioning. They will also compare and order lengths based on measurements in mm, cm and m, using their knowledge of converting between units of measurement to help them. Children will add and subtract lengths, including examples where there are mixed units which require them to convert first. They will be encouraged to look for the most efficient way to do this and develop their mental calculation strategies. Children will then be introduced to perimeter, exploring what it is and what it isn't. They will measure the perimeter of simple 2D shapes, using their understanding of the properties of shape to do so. They will explore different methods for doing this, such as repeated addition or by making connections to multiplication. Children will also compare different 2D shapes which have the same perimeter.

Activities & Games!

✰✰ Ask a grown up to draw you some straight lines to measure as accurately as possible. They could then give you some measurements in cm and mm (e.g. 16cm and 3mm), so that you can practise using a ruler to draw them.

✰ Guess the measure! Ask an adult to measure the length of a particular item/object/container. You must then try to guess what the length is in the appropriate unit. You could even create a scoring system that awards you more points, the closer you are to the correct value.

✰ Measure the height of everyone in your family and write them down in order from tallest to shortest. Can you add all of these measurements together to find out the combined height of your family?

✰✰ Collect some toy cars and create a slope for them somewhere in your house. You are going to see how far they travel by measuring the distance they reach from the bottom of the slope. Which one went the furthest? Do you get the same result if you do it again?

✰✰✰ Can you put these measurements in order from the longest to the shortest? You may need to convert some of them first.

| 156cm | 400mm | 1m 38cm | 139cm | 1m 40mm |

✰✰ Have a go at solving these problems. Perhaps a grown up could then make up some more for you?
- Alice builds a tower that is 6cm and 8mm tall. She adds another block that is 32mm. How tall is her tower now?
- Mrs Brook's ball of wool was 10m long. She used 4m and 28cm to knit a scarf. How much does she have left?
- A roll of tape is 3m long. If I use 68cm of it wrapping presents, how much will I have left?

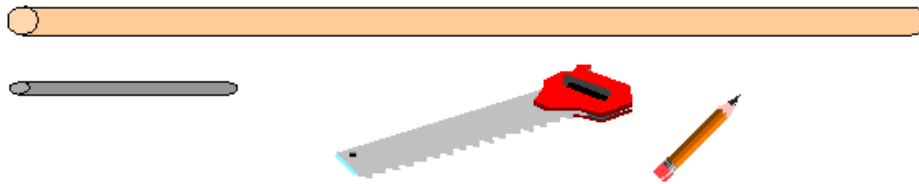✰✰✰ How many different rectangles can you draw with a perimeter of 20 cm?

A Rod and a Pole

A lady has a steel rod that she knows to be exactly 3 units long, and a wooden pole that she knows is exactly 13 units long. Her only tools are a pencil and a saw.

She needs an 8 unit long wooden pole. She finds that is not possible to mark the steel rod, but she can draw on the wooden pole.

How can she measure out the 8 unit pole?

My Maths

Use our school login (Username: **coleridge1,** Password: **success74**), and then your own log in details to access activities related to our current topic on the MyMaths website. Ask your class teacher to print you a new letter if you have lost your log in details.

This half term, our MyMaths activities are all to do with measurement. Have a go at as many as you can, but don't worry if you find some of them a bit too tricky!

Wonderful websites

Coconut Ordering - select the **length** version of this game, but avoid the decimal (dp) examples!

Measuring in cms

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practise of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant 'homework' experience for you and your child!