Y4 - Measures

The following outlines what children are expected to know with regards to **measurement** by the end of Year 4. Firstly, they should be able to estimate, calculate and compare different measures, including weight, distance, length, capacity, time and money. Where necessary, they must be able to convert between measures (e.g. kilometres to metres; grams to kilograms, and so on). With regards to time, they must be able to read both analogue and digital clocks, and convert between them. Children are also expected to convert from hours to minutes; minutes to seconds; years to months; and weeks to days. Finally, children are taught to measure and calculate the perimeter and area (by counting squares) of rectilinear figures (a shape with straight sides) in centimetres and metres.

Activities & Games:

☆ **Make a time diary.** Make a note of at least 10 things you do in a particular day. For each activity, record the time in both analogue and digital.

☆☆ **True or False?** Are the following statements true or false? Explain how you know and prove them with examples.
To convert hours to minutes, I multiply the number of hours by 60.
During a sponsored silence, if a I am silent for 5 hours at 10p per minute, I will raise £50.
4 minutes is shorter than 250 seconds.
Hamid says 'To convert kilometres to metres, add three zeros' on to the end of the number.' E.g 2km = 2000m.

☆ **Ordering time:** Put these times in order: 1 minute 32 seconds; 95 seconds; 1 minute 28 seconds; 89 seconds; 100 seconds. What is the difference between the fastest and the slowest time?

☆☆☆ **Convert your age!** Convert your age into months, weeks, days and even hours and minutes if you can!

☆ **What's the perimeter and area?** A rectangle measure 5 squares long and 3 squares wide. What is it's perimeter? What is it's area? Get a grown up to give you some more questions like this one.

☆☆☆ **Draw it:** A shape has an area of 8 and a perimeter of 14. Can you draw it? The width of another rectangle is 2cm less than the length. The perimeter is between 20 and 30cm. Can you work out its dimensions?

☆☆ **Shopping.** Hazel buys a teddy bear for £6.00, a board game for £4.00, a CD for 550p and a box of chocolates for 250p. She has some discount vouchers. She can either get £10.00 off or half price on her items. Which voucher would save her more? Explain your thinking.

☆ *Measure a distance:* Choose a throwing or jumping activity that a number of people can compete in. Measure each throw or jump using a ruler/tape measure/piece of string and record the distances. Who threw or jumped the furthest? By how much? What was the difference between the furthest and shortest throw or jump? Maybe you could present this information in a graph!

My Maths

Use our school log in (Username: **coleridge1,** Password: **success74**), and then your own log-in details to access activities related to our current topic on the MyMaths website. You can also have a look to see if there are some other fun games you would like to play.

Going deeper...

Investigation - How much did it cost? Dan bought a packet of crisps and an ice cream. The cost of both of them together is in one of the boxes below.

£1.85	75p	£1.74	£2.25	£1	£1.56
£2.10	80p	£1.80	£3.06	£1.44	£1.50
£1.60	£1.25	£1.20	90p	£1.45	£1.27

Use these clues to find out how much he paid:

1. You need more than three coins to make this amount.
2. There would be change when using most valuable coin to buy them.
3. The crisps cost more than 50p.
4. You could pay without using any copper coins.
5. The ice cream costs exactly twice as much as the crisps.

Wonderful websites

[Teaching Money](#) - This website has a selection of different activities and games linked to money.

[Measures](#) - a range of different games covering the area of measures.

[Supermarket Games](#)

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!