St Mary's Fields Primary School

How can I help my child with their maths learning at home?

A collection of ideas **by parents for parents** focused on helping children to apply their maths skills in the real world.

It is important that children recognise the many ways in which maths is relevant to the world around us. Otherwise they will struggle to see the purpose of what they are learning in lessons.

This is a collection of activities to support you with showing your children how maths is used in real life. We have also included some notes about how you can talk about the different operations (addition, subtraction, multiplication and division) whilst doing them.

Good luck with these activities – we would love to hear any feedback you may have once you have tried them.

Shopping	
 **Addition**	Whenever you are shopping with your child, ask them to help you add prices. You could practise 'estimating' (by rounding to the nearest £ before adding). You could make a play shop at home, making prices that are appropriate for your child's level, so that they can continue adding prices. Practise adding the number of objects you have bought, e.g. we have 4 bananas. We have bought 5 more. How many do we have now?
 **Subtraction**	Work out change from increasingly larger amounts as you pay for items.
 **Multiplication**	When buying several of the same item, multiply to work out the total price e.g. 4 cans of soup is 4 x 60p.
 **Division**	Split the bill with someone – usually at a restaurant. Compare single packs to multipacks to decide which is cheaper (multipacks need to be divided to work out how much they cost per pack).

Baking	
 **Addition**	Add weights as you prepare ingredients when baking.
 **Subtraction**	Often subtraction is needed when pouring liquids e.g. when the recipe asks for 300ml of water, and you have to add 100ml first of all. How much water will I have left when I have poured out 100ml?
 **Multiplication**	Sometimes we need to double or triple the ingredients to feed more children. Ask your child to help you to do this with each ingredient.
 **Division**	To feed fewer people, sometimes we need to work out 1/2 or 1/3 of each ingredient.

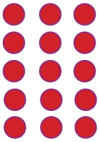
Time	
 **Addition**	Add time ‘intervals’, e.g. when planning a day out, adding the time you will spend at different places. Parking meter – if you paid for 3 hours at 2:30pm, when do you need to return to the car?
 **Subtraction**	How much longer until…? E.g. “It’s 3:20pm now. How much longer until play time at 4 o’clock?”
 **Multiplication**	When watching television, how long does it take to watch 3 episodes?
 **Division**	“How many 10-minute episodes can I watch in my 30 minutes of screen time?”

DIY	
 **Addition**	Children love to 'help' us when we do DIY. Let them help you to measure objects, then add distances to work out how long things will be when pushed together.
 **Subtraction**	"How much do I need to cut off so that I only have 50cm left?"
 **Multiplication**	Work out the area of a wall when we are working out which tins of paint or rolls of wallpaper we need to buy.
 **Division**	When putting up shelves in IKEA bookcases – if I want to space the shelves equally, how many holes do I need to leave between each? If my wall is $30m^2$, how many tins of paint/rolls of wallpaper do I need to buy?

Lego	
 **Addition**	Encourage your child to count the bumps on the top of Lego pieces and add them to see how many they have altogether as they build with more and more pieces.
 **Multiplication**	Lego bricks are arranged in arrays (see below) e.g. there are 4 rows of bumps, with 2 bumps in each row. 4 x 2 = 8 bumps in total.
 **Division**	Lego can be used to demonstrate fractions (which are related to division). Try Googling 'Lego fractions' for ideas.

Playing board games	
 **Addition**	Lots of board games are great for simple adding – e.g. snakes and ladders. You are currently on 54 and roll a 5. Where do you land? Some board games contain two dice which need to be added.
 **Subtraction**	Lots of simple games involve subtraction e.g. Uno (counting down by 1 until you have no cards left) and Monopoly, which involves lots of subtraction as you buy things or pay for services.
 **Division**	When sharing cards or pieces between people. Which space is 1/2 way round the board?

Playing darts	
 **Addition**	Darts uses lots of maths! You add when combining the total you have scored with your 3 darts.
 **Subtraction**	When you play darts, you start on 501 points and subtract your score each turn until you reach 0. You could start on a smaller number for younger children.
 **Multiplication**	When you hit a ‘double’ or ‘treble’, you need to multiply the number by 2 or 3.

Seeing maths everywhere!	
Arrays 	Arrays are everywhere! Egg boxes, muffin trays, tiled floors, ceiling tiles, Lego bricks and so on. Just count the number of rows and the number of columns, then multiply together to work out the total. To use these for division, you need to count the total number then divide by the number of rows to work out columns or vice-versa e.g. when using a normal egg box, there are 6 eggs with 2 rows and 3 columns, so 6 ÷ 3 = 2 and 6 ÷ 2 = 3.
Shapes 	Look out for shapes around you everywhere you go. Name them; count their sides and corners; look for parallel and perpendicular lines and discuss the angles.
Telling the time 	It is really important (and difficult) for children to learn to tell the time, so take the opportunity whenever it arises to practise reading clocks and watches together.