

## Helping your child with maths

We would all agree I'm sure that maths is a very important part of primary schools. The early years of a child's life are where the foundations for this important life skill are laid so schools and their teachers work hard to help all children become confident, competent mathematicians. But parents can also be an excellent source of support for children's mathematical development.....all that is needed is enthusiasm!

If you are interested in practical ways of helping your child, whatever their age, read on!

There are 2 main ways in which parents can really support their children:

### **POSITIVE ATTITUDES**

In the UK, there is a fairly widespread cultural acceptance of people not liking, or not being good at, maths. This can be very damaging to children's progress as a positive attitude is needed to support their engagement, commitment and ultimately, attainment in primary maths.

Parents as positive role models can be very powerful in this sense; if you are confident with using maths, this will rub off on your child. If you're not.....*fake it until you make it!*

Playing games with your children and sharing in their enjoyment is an excellent step and praising children for effort rather than achievement gives a clear message that everyone can get better at maths!

### **REAL LIFE MATHS**

Parents come across all manner of everyday maths situations when they are with their children - much more so than teachers who are confined to classrooms. By doing maths in real life, meaningful situations, children are more likely to develop the idea that maths is important, maths has meaning and maths is do-able!

These two key ideas are completely intertwined as by having engaging in real life maths, positive attitudes are much more likely to develop. Below are some ideas that can be used on a Monday morning, a Wednesday tea-time or a Saturday afternoon!

The ideas have been divided into the Early Years, KS1 and KS2 - however, they are certainly not cut and dried! Play around, adapt and choose ones that interest and challenge your children - the results will soon start to show!

## EYFS

Talking about numbers and shapes that you see in the environment	<i>What number is Nanny's flat? What number is that bus? What shape is that window?</i>
Cooking	<i>How many eggs shall we put in?</i>
Time	<i>It's one o'clock now so let's have lunch. It's 7 o'clock now - time to get up!</i>
Money	<i>Can you give the lady the money? Can you take the change?</i>
Measures	<i>Are you taller or shorter than Sula? Which one is your longest toy car? Which teddy is the heaviest?</i>
Position	<i>Let's turn right here. Look, we're under the railway bridge! Can you build a Lego model with this blue block right on the top? In this picture book, where is the rabbit?</i>

## KS1

Talking about numbers and shapes in the environment	<i>What do you notice about these front door numbers? (i.e. all odd/even; going up in twos) Can you count out 6 knives and forks for the table please?</i>
Cooking	<i>How many grams of flour do we need?</i>
Time	<i>How long do you think it will take us to walk home? What time is your football practice going to finish?</i>
Money	<i>How much does that book cost? Can you choose from these coins to pay for the 55p juice carton?</i>
Measures	<i>How tall are you? Let's do some hand painting. Which finger is the longest? How long is it?</i>
Number calculation	<i>If you've got 3 t-shirts in this pile, and Theo has 7, how many more does he have? If we've got 7 pairs of socks here, how many socks altogether?</i>

## KS2

Talking about numbers and shapes that you see in the environment	<i>How much does Rooney earn each week?!</i> <i>How much money has that film taking at the box office?</i>
Cooking	<i>If it's 5.15pm now and the dinner needs 20 minutes in the oven, what time shall we get it out?</i> <i>If this recipe is for 4 people, but we only need to make it for 2 people, how much flour do we need?</i>
Time	<i>If your programme is 55 minutes long, what time is it going to end?</i> <i>We need to pick Auntie up at 5.20pm, it's going to take us half an hour to get there so what time should we leave?</i>
Money	<i>Let's add up as we go round the shop to see roughly how much it's going to cost. We can see if we're right at the till!</i> <i>How much change are we going to get from this £20 note?</i> <i>If the DVDs are 'buy 2, get 1 free', how much do we save?</i>
Measures	<i>If we're going to wallpaper this room, how much paper do we need? So, how many rolls do we need to buy?</i> <i>How much water do you think is in the dog's bowl?</i>
Number calculation	<i>Play '21'/'Pontoon' with a deck of cards.</i>

## Maths Games

Playing maths games with children is also a great idea! It develops positive attitudes, mental maths strategies (which are very important), and is a good way of keeping them away from the TV!

The games below are designed to be adapted and varied. Learn the basic rules and then change them up as you want – let the children decide what to do!

### BINGO

Draw one 3x3 grid for each player which they fill with numbers up to 20.

The caller calls out any number between 1 and 20. If the player has the 'number bond' to 20, they cross it off their grid.

i.e. If the caller says 14, any player can cross off 6 as  $14+6=20$

The first player with 3 in a line calls BINGO!

Playing against brothers, sisters, cousins, aunties, grandmas can be competitive and fun.

This can be played with lots of variations:

- Doubling numbers
- Halving numbers
- Number bonds to 10, 50, 100 etc.
- Throw two dice and add them
- Multiply by any single digit number
- Multiply by 10, 100, 1000

### DICE GAME

Put 7 counters/buttons/sweets/raisins in the middle of the table. Throw 2 dice. The first player to add them and call out the correct total takes one object. When all the objects are gone, the player with the most is the winner.

This can be played with lots of variations:

- Change the number of dice
- Change the type of dice (you can buy fraction dice, 10-sided dice etc.)
- Change the calculation i.e. work out the difference between the dice, just use one dice and double it, use 3 dice and call out the largest/smallest number

### TIMES TABLES

It is very useful for children to know their time tables fluently. Looking at number patterns and linking tables is a good idea, as well as learning them by rote. Have you noticed these things?

- *all the 5x table numbers end in a 5 or 0*
- *if you double the 2x table numbers, you have the 4x table*
- *in the 9x table, as the tens digit goes up by 1, the units digit goes down by 1*

Chanting and singing the tables when you're in the car, bath or park all help! Have a look for times table songs on YouTube.

### WHAT'S THE ANSWER?

Decide on the answer e.g. 30. Each player has think of as many questions as they can for which 30 is the answer e.g. half of 60;  $27+3$ , double 15.

After 1 minute, unique questions only get a point and the player with the highest point score wins.

## COUNTDOWN

Throw a dice 5 times to create 5 numbers. Decide upon a total (20 or 30 are often good). Players have to try to reach the total; they can use  $+$  $-$  $\times$  $\div$  as many times as they like, but they can only use each number once. The player nearest to the total wins that round.

To make it harder/easier, change the number of numbers, decide that every number has to be used once and only once, change the total, put players in pairs to play etc.

## FREE USEFUL LINKS

National Numeracy is a nationwide charity which is dedicated to improving everybody's numeracy skills. They have produced a Parents' Toolkit which has lots more great ideas for things to do to help your children. [Click here](#) to go to it.

The NRich website has got absolutely loads of investigations and games that will challenge parents and children alike. [Click here](#) to go to it and have a go at one together!