

How to help your child with maths before they start school

Maths all around us!

Maths teachers always say that it is impossible to get through the day with a young child without doing just heaps of maths! But when my children were little, I used to look at them and think, 'well, we do lots of reading and singing and painting but we never do any maths!' In fact, it's true that many of our daily activities - especially those we do without really thinking - contain lots of maths if we only recognise it. Even simple things like tidying or eating can be an excuse for counting, sorting or looking for patterns. Watch out for the maths!

Lots of counting

Numbers - everyone thinks that maths is all about numbers, and of course, numbers are very important, especially in terms of the maths children will do in the nursery or at primary school. We can help young children learn to count by counting with them in all the little situations that arise in the course of daily life. Count as you go upstairs - and down again. Count as you do up buttons. Count as you walk along the street and as you feed them their dinner. Children need to learn to chant the numbers in order. Once they can do this, they can count how many, or recognise the order of numbers on a track. But counting is the basic skill required before we do anything else - so get counting!

Number spotting

As well as helping children to learn to count by chanting the numbers in order together, we can match spoken numbers to their written numerals. Numbers turn up in many different places so keep on the watch! Children are likely to spot their age first and will point it out to you, 'That's my number!' They can also be encouraged to recognise other numbers up to 6. Encourage them to spot their door number, the number of their favourite channel on the TV, and so on.

Finding out how many?

Finding 'how many of something' is another way we help children to use numbers. It is very important to demonstrate how we touch or even move an object as we count it. This prevents children saying the numbers in order but not matching the spoken numbers to the things they are counting. Children need to become good at counting accurately by touching or moving each object in turn as they say the number. Once they can do this confidently, we can move on to asking children more demanding questions like 'how many more...?'

Just knowing how many!

Many parents don't realise the importance of being able to say how many objects or dots there are in a small set without actually counting! Just knowing that we have thrown a six on a dice, without having to count the dots, is an important skill in

maths. Children can normally only do this if they are very familiar with the arrangements of dots on dice and dominoes. This gives an advantage to children who have played games with these, and have been encouraged to say how many each time. It is impossible to exaggerate the benefits of playing these games - and they are great fun too!

Learning about money

Children love playing with coins, and rapidly come to understand that not all coins will buy the same number of goodies! From very early on, children know that brown money isn't worth much because those are the coins mum gives them to play with! Silver money is a bit more important, and gold money, if you can get it, is the best! Help your child to recognise the British coins. Can they tell them apart? Say their names? And do they know which are worth the most! And the least!

Patterns and sequences

One of the most crucial skills children develop in their first four or five years is that of being able to sequence a pattern. This means that they can put three or four things in order, or that they can copy a pattern if you create it first. Sequencing several things is a skill which is necessary in reading, writing and also in maths. If they cannot identify which is the first, second and last sound or letter in a word, children cannot come to read or write. If they cannot recognise the pattern of numbers on a line, they cannot develop their number skills. Encourage children by creating small sequences for them to copy. Include sequences of actions and of sounds!

Sorting and organising

Sorting things into sets is another really important skill. It is impossible to exaggerate how much experience in this area can help a child's mathematical development. Support your child by encouraging them to sort things into different sets whenever possible. It is the talking about what they are doing as they decide in which set to place something that really makes the difference. Discuss why one thing goes in one set and not another. Talk about things which perhaps belong in two sets... Discuss which things are the same, and which are different? How would we classify them? Sorting not only helps your child's maths - it may help them tidy away their toys!

Shapes and patterns

Shapes and patterns are the very essence of mathematics - and they are all around us! Help your child by spotting and talking about any patterns you see. Encourage them to make comparisons and to identify shapes they recognise. They may notice a square, a circle, an oblong, or another shape. The correct names are not important at this stage. It is the pattern which counts! All pattern-making activity is not only helpful, it is one way of ensuring that your young child is a creative mathematician!