

Nurturing Numeracy

Summer is the ideal time to harness the natural curiosity of children and nurture their emergent numeracy skills. Maths is all around us and however much we ourselves might have hated our maths lessons at school, young children love counting, sequencing, finding shapes and sizes, measuring and problem solving. They will regard it as a game to find shapes on a walk; to count the number of paving stones they cross or the steps they go up or down.

You will have lots of fun exploring maths with them too if you think outside the classroom. Look at the opportunities that present themselves on a daily basis to bring mathematical vocabulary into their lives.

Cutting up fruit is an ideal time to mention shape and fractions. Involve the children by asking them what shapes they would like the fruit cut into or even better as they get older, let them do it themselves. The apples can easily be cut into circles, semi-circles, triangles, rectangles and squares. As apples come in different sizes, some shapes will be larger than others, enabling children to sort them into size order too. As you cut up an apple or a pizza, you could talk about fractions by saying, 'Look, I'm going to cut this into two pieces which are the same size. See, I've cut this in half. You have one half and I'll have the other.'

Once you start thinking along these lines, there will be no stopping you and your children will have the benefit of a fun introduction to maths which will make them eager for more.

I wrote this article just before Easter as the children in my nursery school were eagerly discussing how many Easter eggs they had found on their Easter egg hunt.

"Look! I've found one **under** the flowerpot."

"I can see one **on** the grass."

"There's one **behind** the tree."

"Here's one **in** the tree."

"I've found **four**."

"I've found **more** than you. I've found **six**."

Without realising it, the children are counting and using positional mathematical language excitedly in their conversation.

Babies are introduced to numeracy with songs and rhymes. I expect one of your earliest memories with your children is sitting with your baby on your lap and singing traditional songs and rhymes such as:

'One two three four five
Once I caught a fish alive,
Six seven eight nine ten
Then I let it go again
Why did you let it go
Because it bit my finger so
Which finger did it bite

This little finger on the right.'

'One two, buckle my shoe'.....'Baa baa black sheep' or 'This little piggy went to market' as you dry their toes after a bath.

Lots of action songs include mathematical language too. 'Here we go Looby Loo' introduces the concept of left and right. 'Heads, shoulders, knees and toes' introduces sequencing. 'The Hokey Cokey' introduces positional language and I am sure that you can think of many more.

We are taking our nursery school children to the theatre in July to see a children's production. I feel sure that there will be the opportunity for audience participation, particularly when the presenter is looking for something or someone. I expect the children will be shouting out, "He's behind you," or "He's over there." Children love it and their enthusiasm is infectious.

And that is why maths is so much fun and easy for children to grasp because maths is all around us: and we certainly don't have to look very far to find it!

No matter what we do or where we go numbers will almost certainly be featured and so it makes it relatively easy to introduce and weave numeracy into your children's everyday life.

Let's look at the clock face. We see numbers to twelve. We can teach our children that it is o'clock when the big hand reaches the twelve at the top. When you are out and about try going on a clock hunt and see how many times you can see an o'clock. Another idea is to read the registration numbers on cars to find numbers and look at house numbers too. Why not play I spy. 'I spy a number 2. Can you see it too?'

Using the twenty four hour clock, we find numbers to 24. The next time that you are at the airport, you could try going on a number hunt there too. Looking at the arrival and departure time boards might be a good place to start.

Try making an outing to the supermarket more enjoyable by having a theme. We're going to look for the number 2 today for example or let's look for big boxes. Let's see how many we can find! With any luck it will turn what could be a chore into a pleasure.

Summertime lends itself to lazy days on the beach. What an abundance of opportunities you will find here to nurture numeracy as you search in rock pools for creatures of different shapes and sizes, shells and seaweed. Look on the beach for pebbles and dig big holes and small holes in the sand as you make boats and cars and build sandcastles.

A walk through the woods will also prove a wonderland of numeracy with opportunities to find leaves, plants and minibeasts of all shapes and sizes.

You can hunt for things behind the trees or under the leaves. Children love exploring and having time to do so. Your children will probably want to make a collection of twigs or shells that they find and this can lead into sorting games when they get home which will keep them happily engaged.

As I was thinking about this article, the children in my nursery school were playing hopscotch outside.

"I'm going to throw it on the two now," I heard one of them say. But it was not to be. It landed on the three. All the children chorused, "It's on the three. It's my turn now, I'm next."

The children can't help themselves. They use mathematical language all the time without realising it and we as parents and educators can harness that enthusiasm and natural interest to move them forward.

Janet Irwin runs maths workshops for young children. For full details please contact her on 01444 45081. Janet's CD called 'Let's learn maths tables' is available on iTunes or directly from Janet.