



Arlesdene

Nursery School and Pre-school

Fun with Mathematics for Parents and Children

Did you know?

- Children begin to learn the sequence of numbers through rhymes, songs and play.
- If you can establish a few familiar routines you will give your child a sense of order, security and time.
- Children learn the names of numbers when they hear them over and over again - counting the stairs; cups on the table; bowls for breakfast; sharing biscuits
- Playing with and talking about number, shape and size will help children to learn more about the world around them.
- Children need to be given time to ask and answer questions.
- Traditional stories are often based on patterns of size, strength or time: such as 'Goldilocks and the Three Bears and The Three Little Pigs
- Young children love to join in with counting or repeating rhymes built into the story. In this way they learn the patterns and rhythms of language and counting.
- Children learn the names of shapes, colours and numbers when they hear them again and again in everyday situations.
- Pointing out and talking about shape, size, colour and numbers all around you helps prepare your child for activities in school.
- Playing games with your children will help them to learn about shape, size, colour and number.

The Early Years Foundation Stage (EYFS)

The Early Years Foundation Stage sets the standards for learning, development and care for children from birth to five.

The section on mathematics emphasises that babies and young children must be given opportunities to learn through play and first hand, meaningful experiences.

The area of mathematical learning is in two sections;

1. Numbers
2. Shape, space and measures

This is some mathematical language that we use with children to develop their understanding of mathematical concepts.

counting, numbers, 1,2,3,4,5,6,7,8,9,10, a thousand, a million, first, second, third, last, before, after more, less, few, altogether, too much, the same, different, add, take away, subtract, how many, share

in, on, under, above, below, between, behind, in front, next to,

full/empty, bigger/smaller, taller/shorter, higher/lower, longer/shorter, heavier/

*lighter, wider/narrower, deeper/shallower,
faster/slower*

*shape, square, circle, semi-circle, triangle,
rectangle, round, flat, cube*

Having fun with mathematics at home

Maths is not something that you have to sit down and do quietly with your child, but a fun practical activity.

Children learn maths through their daily life. Without experiencing mathematical play, your child will find it hard to understand mathematical words such as add, halve, takeaway and mathematical symbols such as 1, 2, and 3.

Let your child see you using maths whenever possible by thinking aloud when making calculations and encouraging them to join in as you count.

Ideas to try at home

Fun with songs and rhymes

- Sing number songs and rhymes together - rhymes involving counting and finger actions stimulate the connections in the brain between fingers and numbers
- Dance together - helps children to become aware of counting and develop a sense of rhythm
- Create silly versions, eg. 'Five Pink Elephants Sitting on The Wall.
- Introduce shakers with the rhymes

- Act out 'Five Currant Buns', 'Five Little Ducks' or 'Five Little Monkeys Jumping on the Bed'.
- Dressing - chat about what they like to wear; colours and size; order, eg. first, next, back to front, inside out; ten fingers, ten toes; who's got the biggest feet/ longest tongue, etc.

Fun in everyday routines

- Bath time - toys and containers that encourage filling and pouring; talking about things that are full and empty, the heaviness of containers when they are full of water; bubbles - compare big, small and tiny, use a timer for cleaning teeth
- Count stairs, buttons or toes
- Bedtime - talk about what they do first - undress, clean teeth; next pyjamas on; then - story time, goodnight and off to sleep.
- Use teddies/toys with cups and bowls for a teddy or toys party. Chat about the number of plates needed, colours, match one cup and bowl to each teddy. Role play the party and sing the rhyme, 'I'm a little tea pot'
- Make snacks together, such as, fruit, salad, sandwiches etc. talk about half, quarter etc. Count the pieces as you slice them or share them.

Fun in the kitchen

Let your child watch you in the kitchen and helps as much as possible in cooking and preparing meals. This might include:

- Helping to weigh ingredients
- Find the best size pot for cooking the carrots
- Talk about the temperature for cooking a cake
- Measuring the amount of water to add to soup
- Putting enough water in the kettle to make 2 cups of tea
- Matching the dish to the size and shape of the pizza
- Setting the oven timer and counting down to dinner time
- Ensuring everyone has a knife, fork and spoon or cup and plate

- Pouring glasses of water
- Filling plastic bowls and jugs with water

Fun out and about

When out and about use the time to talk about mathematical ideas. This might include:

- Letting children put shopping items in the trolley
- Drawing attention to numbers and shapes in shops, on packaging, on houses, or on road signs and buses
- Riding through puddles on bikes or buggies and looking at the length of the trail left behind
- Counting trees, lamp posts or yellow cars
- Exploring different kinds of movement - round and round, back and forth, up and down
- Go on a number, shape or colour hunt - point out and chat about numbers, shapes, colours etc. Sing number songs as you walk together or travel in the car. For young children talk about big lorries, small cars or blue cars and red buses. Older children might like to collect things, eg. leaves, twigs, stones, grasses, feathers to sort into heavy/light, long/short, etc. Look for numbers in the environment - at the shops, on road signs and door numbers.

Fun with books and stories

- Stories - share books that support children's understanding of mathematical language, such as, 'Dear Zoo', 'Where's Spot', 'Three Billy Goats Gruff', 'We're Going on a Bear Hunt', 'The Tiger Who Came to Tea' or 'The Three bears'. Use puppets or props that children can use to retell the story.

Fun with games

- Games - play games such as Simon says - make yourself tall, make yourself small, show me one finger, show me five, stand on the red mat; draw a circle in the air
- Games - for younger children make a treasure basket - a collection of round objects of different sizes; scarves, ribbons etc.
- Games - magnetic fishing with numbers, snap, sorting games, bricks for building and posting; jigsaws games with a dice and games where you have to move a counter along a track, such as snakes and ladders. Encourage counting and conversations about numbers. Help your child's understanding of 'more' or 'less' and moving backwards and forwards
- Games - make playdough in to a variety of lengths, shapes, weights

Fun cleaning and tidying

Make the most of mathematical conversations when cleaning and tidying with your child. This will:

- Enable you to ask questions - 'How many?' and 'How many more?'
- Give your child opportunities to match socks, sort shoes or put shopping and toys in the right place
- Developing children understanding of shape and space, for example, when dusting or making the beds