

Why not try these at home?

"I-Spy" number, shape or pattern walks

Go on a shape, pattern or number walk. See how many examples your child can find. Take photographs of the shapes, patterns or numbers you find and make a scrap book to talk about.

Shopping List

Give your child a pen or pencil and a small pad. While they are sitting in a shopping trolley, encourage them to put a mark for each time an item is added to the trolley.

Sorting the Shopping

Involve your child in sorting the shopping at the end of a trip to the shops: (tins, packet, fruit, vegetables etc. Try sorting according to where they are stored - fridge, fruit bowl, cupboard)

Treasure Hunts

At the park or in the garden ask your child to find :

- A stick, then to find one that is longer and one that is shorter, one that is thicker and one that is thinner
- Find a very round stone
- Find 3 leaves that are the same
- Find 3 leaves that are different
- Find something that is very straight.

Washing Lines

Set up a small washing line with mini pegs and a variety of socks to peg up in pairs. Do the same with pieces of paper and with numbers 1-5 or to 10 or even 20 (old birthday cards are good for this activity) and see if your child can order them. Play games of taking a number away and see if they can work out which number is missing.

Baking with your Children

Use the language of weight and time. Draw their attention to numbers in recipes and on scales. Add ingredients with spoons and count how many you need.



Charnwood
Nursery School & Family Centre



It's Child's Play!

A Guide to Early Years Mathematical Development





What is Mathematical Development?

Developing mathematical understanding involves so much more than learning to count and recognise numbers. A good foundation for mathematical development includes learning to understand the early language of measurement, position, order, shape and space, patterns and sequencing.

Mathematics is an intrinsic part of everyday life and opportunities to develop skills in this area of learning are all around us. If young children are provided with opportunities to explore maths through play and in meaningful ways through real life problems both in nursery and at home they have an amazing ability to understand mathematical concepts. Everyday experiences like setting the table, sorting the washing, shopping, baking, building, filling, emptying and tidying up present opportunities to help develop your child's understanding of number, shapes, space and measures.

Young children are aware of numbers from a very early age, (before the age of 1 children develop an awareness of number names.) Number rhymes and songs are a fun way to familiarise your child with the names of number symbols and the concepts of adding and taking away.

Games are an ideal way to introduce your child to early number skills. Games involving dice, dominoes, playing cards, simple bingo games will all help to develop number skills.

Children who have fun and enjoy their first encounters with numbers will be much more likely to develop a positive and confident attitude towards maths. Making and looking at patterns will prepare your child for numbers at a later stage. Many children are able to recite numbers at an early age but this is not the same as being able to count, as they need to be able to match words to objects.

You can help your child by counting objects with them slowly and deliberately and by counting objects arranged in different ways (in lines, in patterns or randomly). Looking at numbers in the local environment (signs and prices) and around the home (telephones, door numbers, scales) will help your child to become aware of the importance of numbers in everyday life.



Crucial to the development of mathematical thinking and understanding mathematical concepts is the use of appropriate language, mathematical language which helps children to name, describe and talk about comparisons, explain relationships, question, estimate, predict and solve problems.

Some mathematical language to use:-

more/less/fewer

bigger/smaller

longer/shorter/taller

higher/lower

full/empty

heavier/lighter

round/flat/straight/curved

first/second/third

wider/narrower

too much/too little

same/different

add/take away

fits/doesn't fit

behind/in front

corner/line

in/out/on/under

beside/above

all together

share

check

balance

You can also encourage mathematical thinking and problem solving by asking the type of questions listed below:

- ◆ Are there enough?
- ◆ Is there another way you could do this?
- ◆ Do you think this will fit?
- ◆ Can you make this longer/bigger/shorter?
- ◆ What comes next/before?
- ◆ Who has more/less?
- ◆ What's different? What's the same?
- ◆ Can you guess how many I have here?
- ◆ How many frogs will there be when one more jumps in the pool?
- ◆ How many more do we need to make 5?
- ◆ How many cups do you think will fit on this shelf?
- ◆ Is this bed big enough for teddy?
- ◆ Do you have enough to give me three?
- ◆ What day is it today?
- ◆ What day will it be tomorrow?

