

Mathematical adventures

Everyday experiences can become mathematical adventures! When children are playing or exploring something that they have a particular interest in, they will be learning lots of new things – and some of those things will be about maths.



Understanding how children learn about early maths through everyday activities can help you to provide opportunities for your child to explore and begin to learn about maths in playful ways.

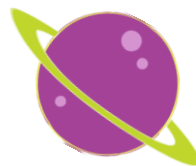
Children are more likely to enjoy maths when they are having fun!

What does your child find fascinating?

Young children often have many things that they find interesting and sometimes they have one thing in particular that fascinates them.

This might be:

- dinosaurs
- outer space – planets, stars and astronauts
- minibeasts – bugs, insects and wiggly things
- vehicles – trucks and diggers, or cars
- fairies and princesses or ogres and witches
- superheroes
- a character in a favourite film, television show or book



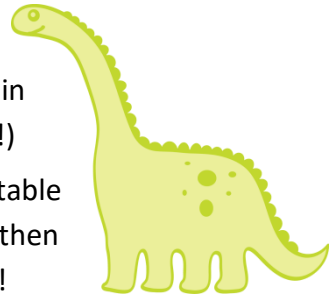
Your child's interests are a great starting point for a mathematical adventure!

Children learn best when they are involved in something that interests them, and which they enjoy. Knowing what fascinates your child provides opportunities for you to build on their interests to explore maths ideas in playful ways.

All aboard the mathematical mystery ride!

Mathematical adventures can be very simple - perhaps:

- a superhero on a trip to the shops
- a teddy bears picnic
- an explorer going on a 'beast hunt' in the back garden (minibeasts that is!)
- building a time machine under the table or outside using the washing line – then going back in time to see dinosaurs!



Maths ideas will naturally be a part of these adventures and it's not too hard to find them once you know what you are looking for.

Try giving your child a large cardboard box for them to use as a spaceship, train carriage or safari vehicle for an imaginary mathematical mystery ride. Decorate the box together to suit your adventure – and don't forget to pack a picnic! A lot of children's learning about maths comes from chatting with you about what they are doing while they are having fun. Here are some ideas:

Size, weight and length

- discussing which things will fit into the box – are they too big, heavy, long etc. to go through the window or the door?
- *“Shall we use the large pillows or the smaller cushions?”*
- *“That bag looks really heavy – would you like some help?”*

Numbers and counting

- writing numbers on dials to show how fast you are going, or what year you are travelling back to
- “5, 4, 3, 2, 1.... Blast off!”



Shapes

- deciding whether to have a round window or a square one
- “Let’s use the square plates with the edges – then the food won’t roll off if it’s a bumpy ride!”

Sorting and matching

- sorting coloured pens or pencils for decorating the box into blues, reds, greens etc.
- “Shall we give the big dinosaur a big leaf to eat?”

Problem solving and reasoning skills

- discussing how to make a door, a window or attach a dial... and how to change it if it doesn’t work
- “What can we use as a roof so we don’t get wet if it rains?”

On their adventure, your child will also be:

- exploring the space around them – how their bodies move and what they can fit them into!
- developing a sense of order through knowing what they need to do next, e.g. make a door before they can climb in
 - recognising patterns – perhaps on fabric, or patterns they make themselves when decorating.



**Adventures are wonderful opportunities
for discovering maths ideas!**

The language of mathematical adventures

Maths ideas and maths language are part of everyday life. Being aware of these and chatting to your child about them can turn an ordinary adventure into a maths adventure!

Think about using language that:

- accompanies sequencing, such as *next*, *and then*, *before*, *after*, *when*, *then* etc.
- is used to describe the position, order, movement or direction of things, e.g. *under*, *next to*, *middle*, *top*, *up*, *backwards*, *right*, *north*, etc.
- describes and compares size, weight, height or length, e.g. *tiny*, *smaller*, *heavy*, *lighter*, *small*, *tallest*, *short*, *longer* etc.
- is about amounts or quantities, e.g. *full* and *empty* or *more* and *less* etc.

When these conversations happen at the same time that your child is doing or seeing what is being spoken about, it will help them to understand the maths ideas, as well as become familiar with the words used to describe them.

Mathematical adventures are rich in mathematical language!

