

A Parent's Guide to Numeracy

What is Numeracy?

Numeracy is the ability to apply mathematical concepts in all areas of life. Numeracy skills involve understanding numbers, counting, solving problems, measuring, sorting, noticing patterns, adding and subtracting numbers and so on. Your child's everyday experiences are full of learning opportunities which lay the foundations for numeracy. Mathematics is one of the specific areas of learning in which we support children's learning and development at Nursery. Please see our Parent Guide on Play-Based Learning in the Early Years Foundation Stage (EYFS) for more information on this.

Children start learning numeracy skills from the time they are born. This happens through everyday play and activities. If young children are provided with opportunities to explore maths through play and in personally meaningful ways, they have an amazing ability to understand mathematical concepts. It is through these meaningful play experiences such as baking, building, filling and emptying, both indoors and outdoors, that Nursery will help to develop your child's understanding of number, shapes, space and measure. Children who have fun and enjoy their first experiences with numbers are much more likely to develop a positive and confident attitude towards maths and numeracy.

What can I do at home to help develop my child's numeracy skills?

Babies – Your baby loves hearing your voice and enjoys stories and songs with repetition, rhyme and numbers. Some things you might already be doing, or could start doing with your baby to build numeracy skills include:

- ★ reading stories with numbers, for example, 'The Hungry Caterpillar'
- ★ counting (fingers and toes and toys)
- ★ singing number songs and rhymes
- ★ changing your tone of voice to describe concepts, for example, a big voice to describe something big or a little voice to describe something little
- ★ talking about everyday activities or food, and describing things in the environment, for example, "I'm going to fill up the bath" or "let's have two slices of apple" or "look at the big dog over there"

Toddlers and older children – Playing with your child helps them to develop communication, imagination and other skills that help build early numeracy skills. Some things you can do with your child to have fun and learn early numeracy skills are:

- ★ Make counting part of your everyday life, for example, count toys, shells at the beach, fruit at the supermarket or trees on the street.
- ★ Encourage your child to compare sizes of things: stones; bushes; trees; and describe shapes of leaves, colours of flowers or sizes of birds.
- ★ Point out and name the numbers on houses or in your phone number, or on clocks
- ★ When you're preparing food, talk about what you're doing, for example, "I'm cutting this orange in half", or "lets share these raisins – one for me and one for you".

- ★ Involve your child in cooking. Your child can help stir, pour, fill and mix. This will help your child learn to count, measure, add and estimate.
- ★ Use shape sorters and talk about the different shapes.
- ★ Cut out different shapes from paper and talk about the shapes by counting the sides and looking for other objects which are the same shape.
- ★ Help your child to arrange their favourite toys in order from shortest to tallest.
- ★ Gather a mixture of toys and help your child to sort them into groups based on size, colour shape or what they do.
- ★ Try simple board games, card games and puzzles with shapes and numbers like 'snap' or 'matching pairs' or 'dominoes'.
- ★ Play outside games like hopscotch, skittles or 'What's the Time Mr Wolf'.

In order to understand mathematical concepts, it is crucial for children to learn mathematical language which helps them to name, describe and talk about comparisons, explain relationships and estimate, predict and solve problems. Some mathematical language you can use to help your child are words like:

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|-------------------------|-----------------------|
| ★ more/less/fewer | ★ heavier/lighter |
| ★ bigger/smaller | ★ first/second/third |
| ★ longer/shorter/taller | ★ too much/too little |
| ★ full/empty | ★ same/different |

You can also encourage problem solving and mathematical thinking by asking questions such as:

- ★ Do you think this will fit?
- ★ Do we have enough?
- ★ What comes next/before?
- ★ Can you guess how many I have here?
- ★ Do you have enough to give me three?
- ★ How many cups do you think will fit on this shelf?
- ★ How many frogs will there be when one more jumps in the pool?
- ★ Is this bed big enough for your teddy?