

Developing early numeracy skills (0-6 years)

What is numeracy?

Numeracy is the ability to apply maths concepts in all areas of life. Numeracy skills involve understanding numbers, counting, solving number problems, measuring, sorting, noticing patterns, adding and subtracting numbers, and so on.

Why is developing numeracy important?

We all need numeracy and maths skills to do everyday things like:

- solve problems – for example, which brand and size of tinned beans is the cheapest?
- analyse and make sense of information – for example, how many wins does my team need to get to the top of the competition?
- understand patterns – for example, what number would the next house in this street be?
- make choices – for example, which bike is the best value?

How children develop numeracy

Children start learning numeracy skills from the time they are born. This learning happens through everyday play and activities – for example, when you:

- sing songs with numbers.
- count your child's toes out loud to him.
- ask your child how many slices of apple he wants.

As your child gets older, he learns more numeracy and maths skills, including size and measurement – for example, when he starts to:

- fill a water bottle.
- divide food into equal shares.
- compare things of different sizes – 'big', 'small' and 'medium'.
- use words to describe where things are – 'over', 'under' and 'next to'.
- help with the shopping and use money to buy things.

You can help your child understand how and why maths is useful when you talk to him about maths concepts in your everyday activities, for example when you talk about:

- big and small (size).
- high and low (height).
- heavy and light (weight).
- fast and slow (speed).

- near and far (distance).
- first, second and last (order).

Tips to help your child develop numeracy

Your baby

Make everyday numeracy activities and experiences playful and relaxed so that they are fun for your child. Try these ideas:

- Read stories with numbers.
- Count and use numbers when you talk to your child – for example, ‘Let’s have two pieces of banana. One, two’.
- Use words to describe maths concepts such as size or order when you talk to him – for example ‘There’s a little bird on top of our car’ or ‘First: bath. Second: pyjamas’.
- Sing number songs and rhymes.
- Change your tone of voice to describe concepts – for example, a big voice to describe something big, or a little voice to describe something little.

Your toddler

Counting and using maths concepts are also good things to do with your toddler. Here are some other ideas for building numeracy through everyday activities and play:

- Help your child arrange his favourite toys in order from shortest to tallest.
- Go for a walk down your street and point out how each house or block has a number in a series. Read speed limits on road signs. Count the steps between one building and the next. Compare sizes of bushes and trees and describe shapes of leaves.
- Use a growth chart to measure your child’s growing height and describe to your child what you are doing.
- Cook with your child – he can help stir, pour, fill and mix. This will help him learn to count, measure, add and estimate.
- Talk about activities that happen at certain times of the day – for example, ‘We eat breakfast at 7 am’, or ‘7 pm – it’s past your bedtime’.

Your older child

Once your child goes to school, he will start learning maths in a more formal way. You can help – for example by showing an interest in what he is learning at school and being available to help him with maths revision.

You can also continue to highlight maths in daily life. For example:

- Ask maths questions involving everyday activities, such as ‘What’s the volume of the milk carton?’ or ‘How much money do you need for the canteen at school?’
- Look at maps and timetables on public transport to work out how many stops to your destination and how long it will take to get there.

- Compare prices of fruit and vegetables at the shops or markets. Guess how many pieces of fruit you get in a kilogram.
- Look for patterns, for example in tiles or bricks on buildings, or a pattern on shirt. Ask your child, 'Why is this a pattern? Which parts get repeated?'



Recommended Reads by the National Library Board

Recommended Reads

- [Animal counting: A lift-the-flap book](#)
- [My first numbers: Let's get counting!](#)
- [Race Car Count](#)

Engage your child with simple activities at home! Check out some of these things you can do together:

- [Ladybug](#)
- [Join the Dots](#)
- [Find the Sharks](#)
- [One, Two, Buckle My Shoes](#)
- [Five Little Ducks](#)