

Mathematics in EYFS (Nursery and Reception)

We work towards children reaching the Early Learning Goal for number. At the end of Reception your child should... 'count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.'

We work towards this using the progression of knowledge and skills according to their development.

Nursery class - Development Matters age 30-50 months

Generally speaking, this is 'Nursery' year but children in Nursery class may also be working at age-related expectations within the age band 22-36 months. We'll design maths activities so your child should be able to:

- Use some number names and number language spontaneously.
- Use some number names accurately in play.
- Recite numbers in order to 10.
- Know that numbers identify how many objects are in a set.
- Begin to represent numbers using fingers, marks on paper or pictures.
- Sometimes match numeral and quantity correctly.
- Show curiosity about numbers by offering comments or asking questions.
- Compare two groups of objects, saying when they have the same number.
- Show an interest in number problems.
- Separate a group of three or four objects in different ways, beginning to recognise that the total is still the same.
- Show an interest in numerals in the environment.
- Show an interest in representing numbers.
- Realise not only objects, but anything can be counted, including steps, claps or jumps.

Reception class - Development Matters age 40-60 months

Most children within a Reception class will be working within this age band but may be working at 30-50 months or below according to their development. We'll design maths activities so your child should be able to:

- Recognise some numerals of personal significance.
- Recognises numerals 1 to 5.
- Count up to three or four objects by saying one number name for each item.
- Count actions or objects which cannot be moved.
- Count objects to 10, and beginning to count beyond 10.
- Count out up to six objects from a larger group.
- Select the correct numeral to represent 1 to 5, then 1 to 10 objects.
- Count an irregular arrangement of up to ten objects.
- Estimate how many objects they can see and checks by counting them.
- Use the language of 'more' and 'fewer' to compare two sets of objects.
- Find the total number of items in two groups by counting all of them.
- Say the number that is one more than a given number.
- Find one more or one less from a group of up to five objects, then ten objects.
- In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
- Record, using marks that they can interpret and explain. (We will talk about and use + - and = in written calculations when the children are ready)
- Begin to identify own mathematical problems based on own interests and fascinations.

Early Learning Goal for Shape, Space and Measure: By the end of Reception your child should ‘use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.’

We work towards this using the progression of knowledge and skills according to their development.

Nursery class - Development Matters age 30-50 months

Generally speaking, this is ‘Nursery’ year but children in Nursery class may also be working at age-related expectations within the age band 22-36 months. We’ll design maths activities so your child should be able to:

- Shows an interest in shape and space by playing with shapes or making arrangements with objects.
- Shows awareness of similarities of shapes in the environment.
- Uses positional language.
- Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.
- Shows interest in shapes in the environment.
- Uses shapes appropriately for tasks.
- Beginning to talk about the shapes of everyday objects, e.g. ‘round’ and ‘tall’.

Reception class - Development Matters age 40-60 months

Most children within a Reception class will be working within this age band but may be working at 30-50 months or below according to their development. We’ll design maths activities so your child should be able to:

- Begin to use mathematical names for ‘solid’ 3D shapes and ‘flat’ 2D shapes, and mathematical terms to describe shapes.
- Select a particular named shape.
- Describe relative position such as ‘behind’ or ‘next to’.
- Order two or three items by length or height.
- Order two items by weight or capacity.
- Use familiar objects and common shapes to create and recreate patterns and build models.
- Use everyday language related to time.
- Begin to use everyday language related to money.
- Order and sequences familiar events.
- Measure short periods of times in simple ways

Fun things you can do at home to help:

- Practise counting – you can do this anywhere: count toys, books, how many buses you see when you go out, stairs...
- Play hide and seek – again, good practice for counting
- Save your cereal boxes and cardboard tubes for making models. Your child will think they’re making a castle; you’ll know they’re learning about shapes!
- Do a jigsaw together – a fun way to develop spatial awareness and matching skills. The smaller pieces the trickier they are
- Play card and dice games – even a simple game of snap helps to develop number recognition
- Have a teddy bears’ picnic: count out toys, place settings, and share out the cakes
- Put up a height chart and mark each member of the family’s height
- At bathtime, play with different-sized containers
- Cook together – it’s brilliant for comparing weights and times
- Look for numbers when you’re out and about – doors, car registrations, signs. Which is biggest / smallest...
- Read number stories. Try ‘The Very Hungry Caterpillar’ ‘One Mole Digging a Hole’ ‘Ten Terrible Dinosaurs’... There are lots of suggestions online if you google ‘Maths stories for EYFS’