

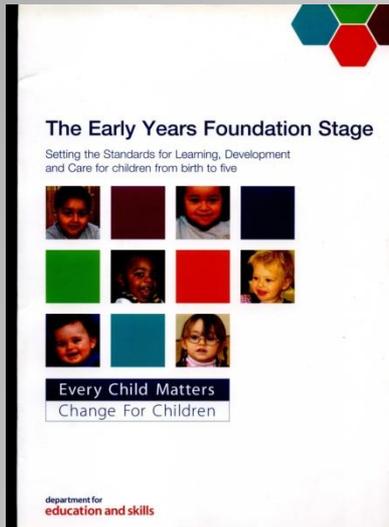
Developing Early Numeracy Skills

Dundonald Early Years



Overview

Early Years Foundation Stage (EYFS)



- Maths through play
- Teaching number skills
- Exploring shape, space and measure
- Supporting children at home



Maths through Play

Play is the natural way in which children learn. Young children are learning mathematical concepts all the time through a wide variety of play experiences. Teaching CONCEPT not right answers.

Children will begin to:

- know and understand early maths language of measurement, shapes, spaces, positions, early numbers, order and patterns
- know the sequence of numbers
- begin to understand positional words, e.g. in, on, outside
- show an awareness of time
- be aware of shapes in their environment
- be aware of 1-to-1 correspondence
- acquire new vocabulary
- learn number rhymes and songs, e.g. one, two, buckle my shoe etc.





Teaching Number in Reception

'Children 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'.





Concepts covered

- Say one, two, three, four... Up to 20.
- Count up to 20 objects.
- Recognise the written numbers 1, 2, 3, 4... Up to 20.
- Find one more or one less than any number from 1 to 20.
- Add two small groups of objects (with a total less than 20).
- Count how many objects are left when some are taken away.
- Solve problems including doubling, halving and sharing.





Shape, space & measure in Reception

'Children 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'.





Concepts covered

- Names shapes such as circle, square, triangle, rectangle, cube, cone, sphere.
- Use words to describe where things are, such as over, under, above, on, in, next to, beside.
- Use words to compare things, such as more than, less than, greater than, smaller than, heavier than, lighter than.
- Use everyday language to talk about size, weight, capacity, distance and money.
- Make simple patterns and talk about them.
- Uses everyday language related to time.
- Orders and sequences familiar events.
- Measures short periods of time in simple ways.



Maths at school

Learning through play – child initiated and adult led

Roleplay (money/time)

Small world (shape/space)

Maths specific toys

Turn taking games

Water/sand (capacity)

PE (ordinal number)

Puzzles (shape)

Cooking (weight)

ICT

Reception – daily maths input followed by group focus

Home school book – maths focus



Maths at home

Young children have many mathematical experiences in their home environment. For example:

- they learn about money as they go shopping with parents
- become aware of numbers as they count the stairs to bed
- start to understand the concept of time as they become familiar with the routine of their day – wash, dress, breakfast etc.

A child's daily life offers many practical opportunities to learn about number, shape, space, sorting and matching. For instance:

- setting places at the table – a cup for me, a cup for you
- playing with water
- steering the pram
- helping to sort the washing, matching socks, big shirt / small shirt
- tidying up – putting similar items together
- matching lids to saucepans

Supporting your child

Maths is not just about getting the right answers. It is about thinking things through and finding ways of solving problems. It does not matter if your child gets a wrong answer as long as they are able to explain their method of reasoning.

In the street

- Recognising bus numbers/number plate hunt. Who can find a 7? Add the numbers up.
- Comparing door numbers
- Counting – how many lampposts on the way to school?

Doing the washing

- Counting in 2s – matching shoes
- Sorting by colour and size.
- Matching/pairing up socks.

Time

- What day is it yesterday, today, tomorrow?
- Use timers, phones and clocks to measure short periods of time.
- Count down 10/ 20 seconds to get to the table/ into bed etc.
- Recognising numbers on the clock. If you cover a number, what number was missing?

Food

- Can you cut your toast into 4 pieces? Can you cut it into triangles?
- Setting the table. Counting plates. How many more do we need?
- Can you make shapes/ patterns out of the knives and forks. Can you put them in the right place in the drawers?
- Helping with the cooking by measuring and counting ingredients.
- Setting the timer.
- Positional language at dinner time: what is on the rice, where are the carrots etc?

Going shopping

- Reading price tags
- Counting items into the basket
- Finding and counting coins
- Comparing weights – which is heavier

Measuring

- Are you taller than a ...?
- Marking height on the wall.
- Cut hand shapes out of paper. How many hands long is the sofa? How long is the table? Which is longer?
- Who has the biggest hands in our family?
- How many steps from the gate to the front door?

Shapes

- Cut a potato into shapes (circles, triangle etc). Use with paint to make pictures and patterns.
- Cut out shapes from coloured paper/ newspaper and arrange into pictures.
- Shape hunt: Can you find a square in your house (windows etc), a circle ...

Games

- Putting cards into piles
- Jigsaws , Snap (matching pairs) or Happy Families (collect 4 of a kind)
- Snakes and ladders or other simple dice games.
- Adding numbers on two dice.
- Bingo, with numbers or shapes
- Hopscotch

