

Mathematics in the EYFS



Mathematics is one of the specific areas of learning

It involves providing opportunities to practise and improve children's skills in:

- Counting numbers
- Calculating simple addition and subtraction problems
- Describing shapes, space and measure

Two Early Learning Goals

1. Numbers

- Count reliably with numbers from 1-20
- Place them in order
- Say which number is one more or one less than a given number
- Using quantities and objects, add and subtract two single-digit numbers and count on or back to find the answer
- Solve problems, including doubling, halving and sharing

2. Shape, space and measures

- Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects
- Solve problems
- Recognise, create and describe patterns
- Explore characteristics of everyday objects and shapes and use mathematical language to describe them

What do we do in school?

- We make mathematics fun
- We call children 'mathematicians'
- We make activities as practical and interactive as possible
- We relate mathematics to real life situations
- We encourage children to solve problems
- We encourage children to explain their workings
- We explain that we can learn from our mistakes

Skills in early addition

- Counting all – a child doing $2 + 3$ counts out two bricks and then three bricks and then finds the total by counting all the bricks
- Counting on from the first number – a child finding $3 + 5$ counts on from the first number ‘four, five, six, seven, eight’
- Counting on from the larger number – a child chooses the larger number, even when it is not the first number, and counts on from there

Skills in early subtraction

- Counting out – a child finding $9 - 3$ holds up nine fingers and folds down three
- Counting back from – a child finding $9 - 3$ counts back three numbers from 9: ‘eight, seven, six’
- Counting back to – a child doing $11 - 7$ counts back from the first number to the second, keeping a tally using their fingers to count how many numbers have been said, ‘ten, nine, eight, seven’, holding up four fingers

Strategies for memorising

- **Kinaesthetic** - this involves memorising through movement, learning by matching facts to specific ways of moving, such as finger counting or action sequences
- **Visual** - some children have a good visual memory, and can 'see' facts on the page/board
- **Aural** - some children remember things by hearing them repeated. Chanting the sequence of numbers, matching facts to rhymes, songs or music

Strategies for memorising continued

- **Written** – writing something can help the facts travel from the ‘pen to the brain!’. Children can see how the facts connect together when they are presented in written form, $3+2=5$, $2+3=5$
- **Pattern** - some children find it easier to recall facts when they understand the structure of patterns in which they are embedded, e.g. dots on dominoes or dice