

Guide to early Mathematics in P1

PATTERNS: Many mathematical concepts are based on an understanding of and proficiency in patterning, such as times tables, addition and skip counting.

A pattern is only a pattern if it is repeated twice. The easiest patterns are those involving 2 colours or variables but can be extended to a 3 or 4 repeating pattern.

At home - you could try using a range of household objects such as cutlery, ie knife, spoon, knife, spoon etc. Creating patterns with beads and pegs is just the beginning!!

SHAPE: Although recognising shapes as circles or squares might seem easy, it helps set the stage for many concepts such as sorting and patterning to geometry, and beyond! At the start, children will use flat 2D shapes to create pictures, in order to help them name and recognise the shapes. By the end of P1, they should be able to describe the features, such as number of sides, corners etc and begin to name some of the 3D shapes.



NUMBER: this will involve areas such as counting, number recognition and one-to-one correspondence. In the first term we work on numbers 1-5, then numbers 6-10 will be covered in the second term; therefore, leaving us ready to start addition in the third term. Addition will be introduced through play-based activities and practical lessons, with a big emphasis being placed on *mental recall* of simple addition facts.

Counting - learning number rhymes eg, 1,2, Buckle my shoe; 10 in the Bed; This Old Man. Mental maths games and counting activities form a major part of the P1 maths lesson, and these will be sent home regularly for you to reinforce as part of their homework.

Number recognition - recognising and naming numbers. A calculator is a good tool for your child to play with, to aid number recognition. When children want to start to write numbers, remember to encourage the correct formation.

One-to-One Correspondence - match one number to one object when counting. Encourage them to "touch" objects as they count and be able to answer the question "How many are there?" - by giving the last number they said. There will be lots of opportunities at home to practice this, eg, doing a count to check you have enough sweets to give out to your friends.



Parents often ask how they can help at home with maths. This guide explains the thinking behind early mathematical development and offers some practical ideas to try out at home.

Children need to become confident and competent in learning and using some key skills.

These include:

- *Sorting.*
- *Completing, creating and describing patterns.*
- *Exploring and comparing quantities, shapes and measures.*
- *Using mathematical language, eg, more, less, shorter, empty.*
- *Number.*
- *Finding solutions to mathematical problems, eg, How many sweets are there? Are there enough for everyone?*

Children experience maths as part of their everyday environment. They need to touch and do in order to learn, so their early maths is based on practical activities that can be incorporated into their play.

Everyday examples:



- **Role play shopping** - counting money (keep to pennies in P1), recognising and writing numbers.
- **Setting the dinner table** - counting spoons, matching knife and fork to each place, order cutlery according to size.
- **Water play** - comparing volume, capacity, height and depth of various containers.
- **Climbing frame** - whole body experiences of height, weight and direction.
- **Outdoor walk down the street** - counting, recognising numbers, experimenting with big numbers, looking for shapes.

What are these skills leading to?

SORTING: Classifying and ordering are natural and interesting to children. Sorting objects helps children begin to notice how items are alike and different and creates an awareness that is vital for maths learning. It helps promote logical thinking and teaches children about attributes and relationships, providing a foundation for algebra. The sorting which takes place in P1 is based on observable characteristics such as size, shape, colour or number.

Sorting Socks:

These could be sorted by size or family member, then by colour/pattern. Matching up pairs is also an excellent way to practice visual discrimination skills. Visual discrimination is the ability to see the differences in similar objects and is a useful skill as children begin to discriminate letters/words when learning to read.

