

Mathematics Workshop for
Early Years parents
September 2017

What is mathematics?

- *Numbers
- *Shape
- *Space
- *Measure

Number skills

- * Children count reliably with numbers from 1 to 20, place them in order and say which number is 1 more or 1 less than a given number.
- * Using quantities and objects, they add and subtract 2 single-digit numbers and count on and back to find the answer
- * They solve problems, including doubling, halving and sharing.

How to develop number skills at home

- * When counting, don't always begin at 0 or 1. You say a number and your child counts on from there. Count backwards from any number.
- * How many sausages do you want for dinner? I would like 2. I wonder if we have enough?

How to develop number skills at home

- * Counting EVERYTHING i.e. items when out shopping.
- * Children find it particularly hard to go from 29 to 30, 39 to 40 etc.
- * 1 more and 1 less, with biscuits etc.
- * There are 4 cows in the field and 3 sheep in the other field, how many animals altogether?

How to develop number skills at home

- * Can you lay the table? There are 4 of us. How many forks do we need? Can you count them as you put them out? How many would we need if 4 more people were having dinner too?
- * If I have 6 cherries and I am going to share them with you, how many would we have each? What if I had 7 cherries?

How to develop number skills at home

- * How many skittles have you knocked over? How could you check? How many does that leave standing?
- * You have made a long roll of plasticine. Show me how we can turn it into a number 3?
- * Look at numbers in the environment, door numbers, buses, number plates, birthday cards.
- * Have a set of number cards, initially from 0 to 10 and then onto 20 and put them in order. Forwards and backwards.

Shape Space and Measure

- * Children use 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.

Shape Space and Measure at home

- * Water play, full, empty, half full, how many cups will it take to fill the jug? Will the big jug fill more or less cups?
- * Looking at the times of day and periods of time.
- * Looking at shapes at home and in the environment, using the correct mathematical names.
- * Comparing the weight of items are they heavier or lighter? Are big things always heavy?
- * Making patterns with Lego, finger painting, fruit!
- * Understanding the difference between a long distance and a short distance.

Numicon
is a maths resource that uses a
series of structured images to
represent numbers.



Numicon

It is quite difficult to explain to a child the mathematical concept of 'five'

But the Numicon shape for 'five' looks like 'one less' than six and 'one more' than four.



Numicon

Shapes are designed to exploit three of young children's key strengths in order to help them understand number:

- * Learning from doing
- * Learning from seeing
- * Children's strong sense of pattern.



Rationale for using Numicon

- * Quality first learning
- * Inclusive
- * Progressive
- * Children can understand number relationships
- * Children can do calculating without counting
- * Children learn mathematical language
- * Children learn to make connections and to use and apply their understanding.

Firm Foundations for all learners

- * Ordering Numicon Shapes, giving them number names and attaching numerals
- * Grouping objects into Numicon patterns without counting
- * Combining Numicon in addition
- * Comparing Numicon shapes in subtraction
- * Confidently using the language of addition and subtraction.

Addition

- * Children can calculate using Numicon, **without relying on counting.**
- * Using Feely bag, 2 sets of Numicon shapes 1-10, numeral cards 1-10.

Subtraction

Taught first as “take away”
Children learn to use the action for the sign before needing to write the symbol
.
Use 1 set of numeral shapes 1-10, spinners, dice and can also use subtraction covers.
(Black card or grey shapes)

Websites

- * www.busythings.co.uk
- * www.ictgames.co.uk
- * BBC Website
- * Songs!

Any questions?

Please feel free to look at the resources at the back of the hall that the children use in their classroom everyday.