

## Helping your child learn at home in



While you are waiting please get 6 items from around the house that are different lengths

## Why we ask for parents to help...

- the main reason for parents not helping
- attitudes to maths
"I'm no good at maths..."



## - Mathletics <br> - Objects <br> - Dice <br> - Vocabulary

All in the mind $5.42 \mathrm{~m} 2^{\text {nd }}$ June 2020 All in the Mind - How children think about maths and time - BBC Sounds

# Learning Objectives in Maths 40-60 Months 

## Numbers

Recognise some numerals of personal significance.
Recognises numerals 1 to 5 .
Counts up to three or four objects by saying one number name for each|item. Counts actions or objects which cannot be moved.

Counts objects to 10 , and beginning to count beyond 10 .
Counts out up to six objects from a larger group.
Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects.
Counts an irregular arrangement of up to ten objects.
Estimates how many objects they can see and checks by counting them.
Uses the language of 'more' and 'fewer' to compare two sets of objects.
Finds the total number of items in two groups by counting all of them.
Says the number that is one more than a given number.
Finds 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.
Records, using marks that they can interpret and explain.
Begins to identify own mathematical problems based on own interests and fascinations.

## Shape, Space $\varepsilon$ Measure

Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.

## Selects a particular named shape.

Can describe their relative position, such as 'behind' or 'next to'.
Orders two or three items by length or height.
Orders two items by weight or capacity.
Uses familiar objects and common shapes to create and recreate patterns and build models.
Uses everyday language related to time.
Beginning to use everyday language related to money.
Orders and sequences familiar events.
Measures short periods of time in simple ways.

## Learning Objectives in Maths

## EYFS Early Learning Goals

| Number | Children count reliably with numbers from one to 20, place them in order and say which number is one more or one <br> less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count <br> on or back to find the answer. They solve problems, including doubling, halving and sharing. |
| :--- | :--- |
| Shape, Space <br> and Measure | Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare <br> quantities and objects and to solve problems. They recognise, create and describe pattems. Theyexplore characteristics <br> of everyday objects and shapes and use mathematical language to describe them. |

## Our approach in Reception...

'Early Number Sense' and using Numicon


## A comparison activity involves so

 much mathematical talk...

## We do lots of sorting!




## Numberblocks




Pictorial

$3+1=4$


Concrete representation - a pupil is first introduced to an idea or skill by acting it out with real objects. This is a 'hands on' component using real objects and is a foundation for conceptual understanding.

Pictorial representation - a pupil has sufficiently understood the 'hands on' experiences performed and can now relate them to representations, such as a diagram or picture of the problem.

Abstract representation - a pupil is now capable of representing problems by using mathematical notation, for example $12 \times 2=24$.

## Subitising



## Progression in Maths

## Reception and Year 1

- Very practical and mental
- Lots of counting, songs and games
- Based in play, especially in Reception
- Reception is based on numbers $1-20$ and understanding the concept of these (can go beyond this)
- Year 1 - working with numbers to 20 , moving on to 100
Resources: objects, number lines, games, 100 squares, computers, songs - anything that grabs attention



## Hundred Square

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## What maths could come out of mealtimes?



## Incidental Maths



## Examples of incidental numeracy

- counting their toys/items (number)
- discussing shape, size and measure of toys/itemsincluding non-standard forms (shape space and measure)
- fairness with siblings (fractions, equivalents)
- toy shop (money, counting, addition \& subtraction)
- toy kitchen or actually cooking together (measuring, fractions)




## Games with maths in

## Cards - three blind rats - Newmarket - snap 7s



Mancala


## Activities you can do at home!

Lego or Duplo!
There are lots of opportunities for maths when planning with Lego.
Can you ask your child:

How many blocks do you have?
How many would you have if I give you one more?
Can you make a taller tower than mine?
Can you make a repeating pattern using different colours?
How many 'Legos' long is .... (Ask your child to guess
 how many pieces of Lego it would take to measure something, then get them to measure it by making a Lego tower)

## Cooking!

Cooking is a great (and messy!) way of incorporating maths in a fun and exciting way.

Ask your child:
Can you count how many ingredients

we need? (From the recipe list)
Can you spot the number 2 on the scales? (For example, when weighing 200 g of flour)
Do think that is enough or do we need more?
We need 4 eggs, I've got to so far, how many more do we need?

## When you are out and about

Going to the shops: Get your child involved with paying as much as possible. Understanding money and coin value happens best when children have real life experiences of what it is and how it is used.

Number hunt: Numbers are everywhere! Speed signs, house doors, bus stops, number plates, football tops, soup tins etc. Give your child a focus number and see how many they can spot during the day.


## Mathletics

## Congratulations



Emscote Infant School

You have earned a bronze certificate this week.

## Any Questions?



