



Maths in the EYFS...  
and beyond





## Aims:

- To give you an idea of how maths is taught in the Early Years
- To share the expectations for the end of the year
- To explore how maths is taught further up the school
- To share games to play with your child

# M and M's

- ▶ Open the packet and explore the maths opportunities



Think about colours, addition, subtraction, language used- more, less, sharing and sorting



How do you feel about maths ...

As a child?

As an adult?



# Everyone can 'do Maths'

- No single person is born with the ability (or inability) to 'do maths'
- Every child has the potential to thrive in Maths
- How we are taught maths affects how we feel about our potential in maths
  - Set groups
  - Learning procedures but not understanding the reasoning behind doing them



# Maths in the EYFS

## ➤ Maths and play

‘Play is an effective vehicle for fostering Mathematical concepts and developing positive attitudes to mathematics...’





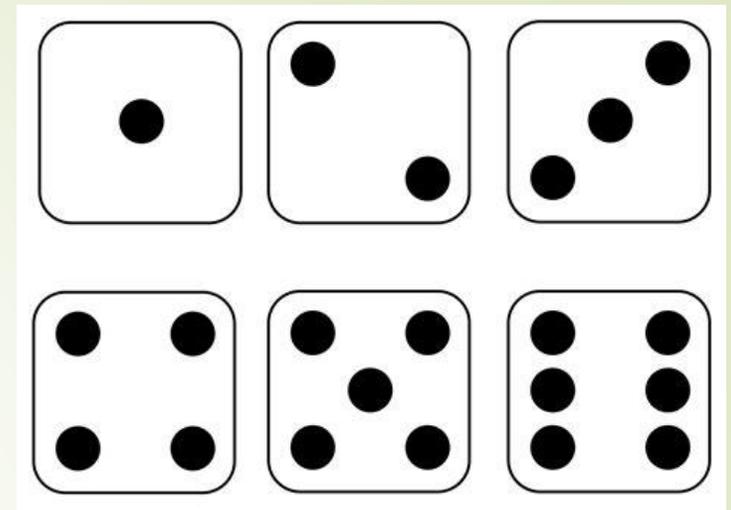
# Through play children will begin to:

- ▶ know and understand early Maths language of measurement, shapes, spaces, positions
- ▶ 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.
- ▶ be aware of conservation

Children need to come to know what the number system really means. They can be helped to do this through play.

# Teaching of Basic skills

- 1:1 correspondence
- Good understanding of 5 and then 10
- Subitising- knowing patterns of numbers i.e. dots, numicon shapes
- Counting out loud - forwards **and back wards**
- Teaching of language - more, less, fewer, add, take away, subtract, share, double, half,
- Being able to explain or talk about thinking



# Development matters: Mathematics Early Learning Goal

## ➤ End of year expectation: Numbers

- ‘Children count reliably with numbers from 1 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.’

## ➤ End of year expectation: Shape, space and measures

- ‘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.’



# Games:

- ▶ Dotsie - 6 dice.
- ▶ Card games
- ▶ 10 nice things
- ▶ Spot the difference game
- ▶ Pairs/snap - numbers matching with numerals, calculations with the total



- ▶ **Maths at home document - will be on our website**



# Maths in the National Curriculum...What's next?

- Maths teaching has changed dramatically over the last few years.
- **Mastery teaching**- mastery is an inclusive way of teaching that is grounded in the belief that all pupils can achieve in Maths. A concept is deemed mastered when learners can represent it in multiple ways, can communicate solutions using mathematical language and can independently apply the concept to new problems.
- Not necessarily teaching in set groups or ability groups. Children are set the same activities and stretched within those activities through questions, representing understanding in a different way or giving explanations

# Year 1 expectations:

## Numbers and place value:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.

## Addition and subtraction:

- read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = \square - 9$ .

# Year 1 expectations:

## Multiplication and division:

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

## Fractions:

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

## Geometry- properties of shapes:

- recognise and name common 2-D and 3-D shapes, including:
- 2-D shapes [for example, rectangles (including squares), circles and triangles]
- 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

## Geometry- position and direction

- describe position, direction and movement, including whole, half, quarter and three-quarter turns.

# Year 1 expectations:

## **Measurement:**

- compare, describe and solve practical problems for:
  - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
  - mass/weight [for example, heavy/light, heavier than, lighter than]
  - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
  - time [for example, quicker, slower, earlier, later]
  
- measure and begin to record the following:
  - lengths and heights
  - mass/weight
  - capacity and volume
  - time (hours, minutes, seconds)
  
- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times

# Number day! Raising money for the NSPCC

- Please see maths in action between 9-10am tomorrow
- Don't forget your sponsor forms!
- Bake sale after school



Thank you for coming!

➤ Please leave feedback for us!

