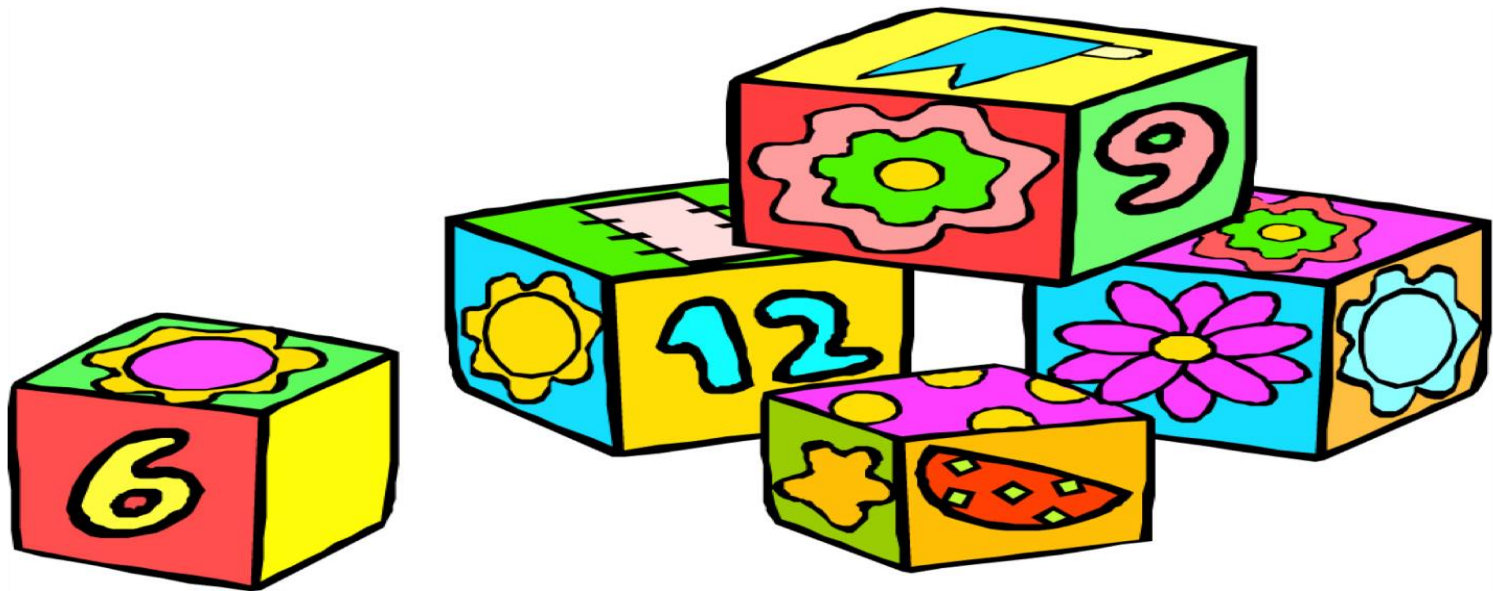


# Learning Numbers in the Early Years Foundation Stage



# Introduction

- The teaching of Mathematics in the Early Years Foundation Stage (EYFS) is split into 3 areas:
- Number
- Numerical patterns
- Shape, space and measures.



# Mathematics

Children need to engage with numbers and to see how to use them in their everyday environment for labelling, quantifying and calculating.

Counting is a significant aspect of children's early understanding of number and is the foundation on which quantifying and calculating are built.

When teaching number, there are 2 main parts:  
Numbers (amounts) and numerals (the written form)  
Counting sets

# Counting orally-beginning to understand the importance of numbers

Children need to be exposed to counting orally from an early age through number rhymes, counting steps up the stairs and counting aloud to your child.

Children then copy this and begin to use numbers in their play, imitating what they have seen and heard other people do.

## Range 5:

- Uses some number names and number language within play
- May enjoy counting verbally as far as they can go .

# Noticing numbers: recognising some and representing them

It is important to point out numbers within the environment: dates on the calendar, on the clock, prices, birthday cards and so on.

Children then begin to recognise numbers which are familiar to them such as their house number and age.

This also provides opportunities for children to start representing numbers by making marks, drawing pictures or holding up their fingers to show an amount.

## Range 5:

- Explores using a range of their own marks and signs to which they ascribe mathematical meanings

# Beginning to count objects and comparing quantities

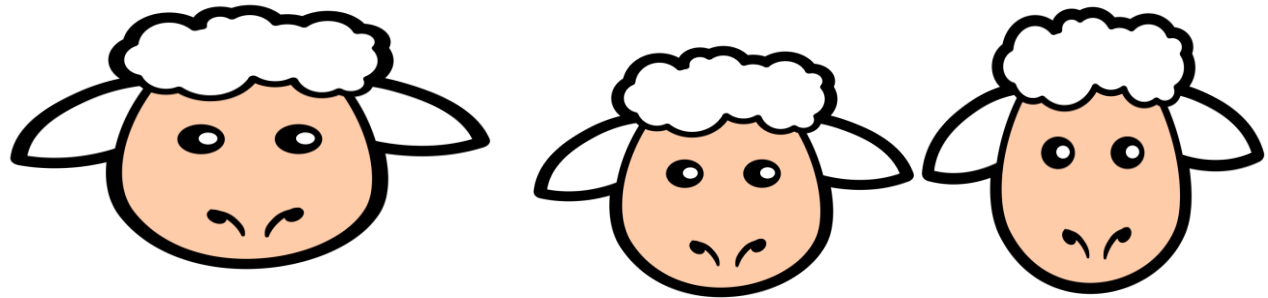
Once children begin to understand that numbers tell you 'how many' they soon begin to understand the importance of comparing quantities and begin to use the language of 'more' and 'less' to compare. This is very important if you want 'more sweets', for example !

## Range 5:

Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two.  
Same!

# Early calculation

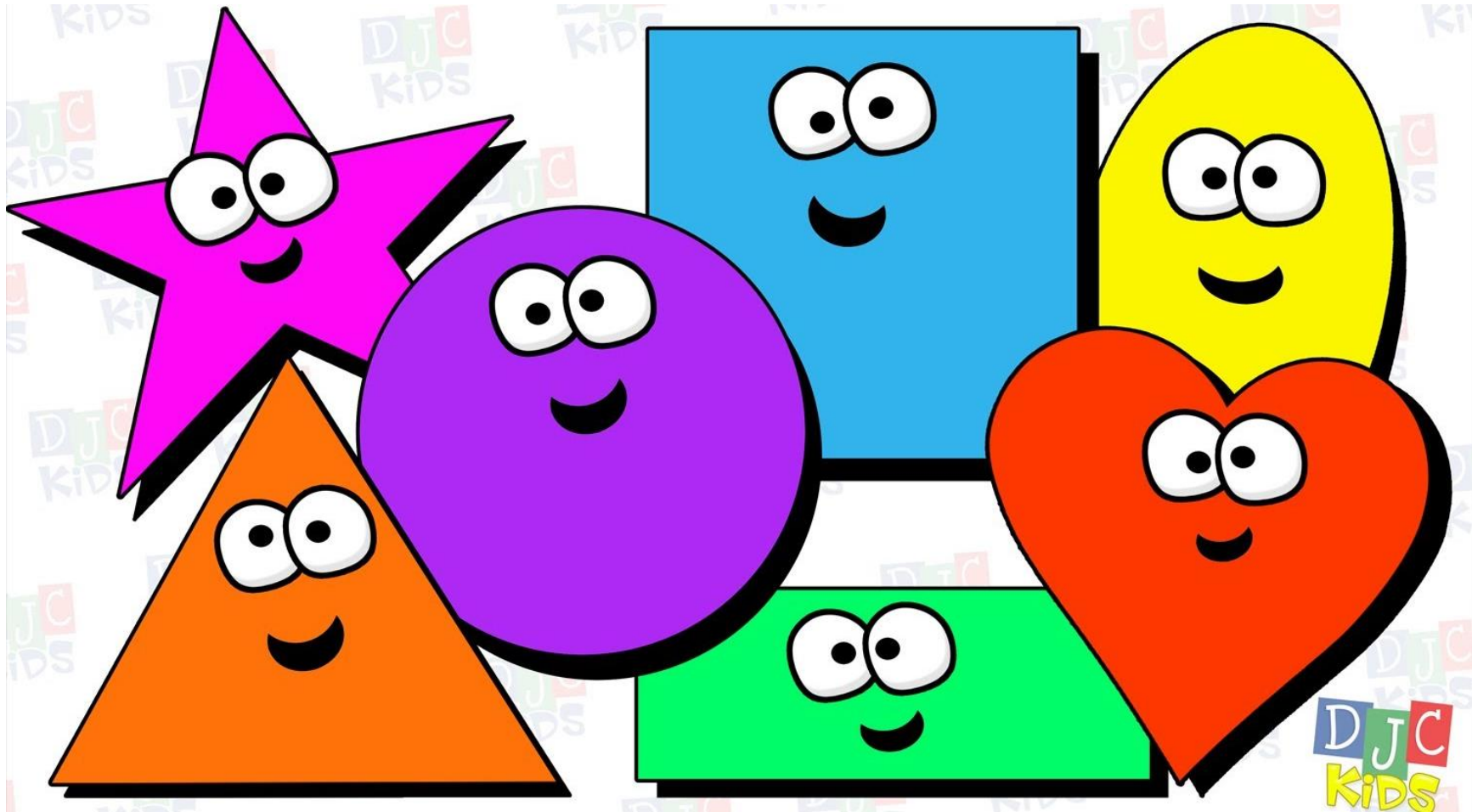
Once children have a secure understanding of numbers representing 'how many', that objects can be counted and they are able to count objects accurately, early addition and subtraction can be taught. For example finding out how many sheep are in the field if 1 runs away .



## Range 5:

- Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same.
- Compares two groups of objects, saying when they have the same.

# Shape, space and measure



# Shape, space and measure

## Range 5:

- Responds to both informal language and common shape names
- Responds to and uses language of position and direction. E.g. using prepositions.
- Predicts, moves and rotates objects to fit the space or create the shape they would like.
- Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next.
- In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items.
- Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.

# Shape, space and measure.

A child's daily life at home and at nursery offers many practical opportunities to learn about shape, space and measure, below are a few examples:

- Exploring jigsaw puzzles children can learn many skills from these, such as problem solving, logic and perseverance.
- Construction play can help children learn about spatial awareness and problem solving. It can also provide many opportunities to talk about size and shape, children love describing what they have made.
- Washing up can provide opportunities for children to look at different shapes and sizes.

# Keep maths practical and have fun!

- Bath-time (filling and emptying containers , counting)
- Counting rhymes
- Talk about numbers in the environment ( eg, front door numbers, number plates, road signs etc)
- Help with cooking (measuring, weighing, ordering the recipe)
- Setting table places (how many plates/cups etc)
- Paying in shops (including change)
- Estimating amounts (how many apples/sweets)

# Useful resources & websites

## Games:

- Board games like 'Snakes and ladders'
- Card games like snap
- Bingo
- Dominoes
- Timing children when doing jobs (egg timers)

## Websites:

- <http://www.topmarks.co.uk/learning-to-count/teddy-numbers>
- <http://www.crickweb.co.uk/Early-Years.html>