

EYFS Early Number - How to support your child

We would like all children to leave Foundation confident with numbers and counting. Children's early experience of number is essential in creating that confidence. In this document, we will share ways to develop counting that will support your children, as they become confident mathematicians.

COUNTING

Cardinality and Counting: understanding that when you count a number of things, the number that you finish with is the total (the cardinal value). This number refers to the quantity, or 'how-many-ness' of the things it represents.

Learning the number names: Encourage your children to learn the numbers in order through counting songs and games. Make sure they experience the numbers going forwards and backwards. Use counting down for blast off with rockets; hide & seek; and just as a countdown for an event so that children are fluent at counting both forwards and backwards. Start with 0-5, and move on to 0-10 and then up to 20 (it is important to start at zero).

When and only when, your child is confident at counting forwards and backwards up to 10, get them to start at any number and count forwards /backwards. This will help you to understand whether your child fully understands the pattern.

Counting objects and actions: Children need to have lots of experience of counting objects and actions. All counting develops children's confidence and we want children to leave Foundation with 1:1 correspondence. This means that they recognise that the one, they are counting, refers to an individual object and makes children less likely to over-count and come to the wrong answer.



Develop children's 1:1 correspondence by talking about 'touch counting' - children must touch each object as they count it. When children are developing this skill, arrange the objects in a line to make this easier. As they grow in confidence, get them to start from different objects and see if the total changes. Children also need to count objects that do not match in terms of colour, size and texture.

Counting actions also develops children's 1:1 correspondence because each action counts as one thing.



'Counting Crazy'
Rose Griffiths, 2018



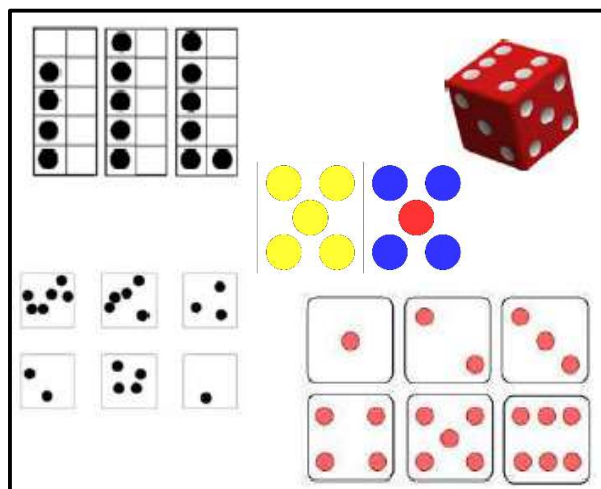
When and only when, your child has strong 1:1 correspondence and is very confident at counting in ones, move on to counting groups. E.g. when playing pairs, at the end to decide who has won, count the number of pairs that each person has. Each pair is one group. This develops children's ability to recognise that units vary. Counting hands, packets of things and other units of more than one develops this unitising skill, which children will need as they grow older.

Understanding, recognising and representing numbers: Children need to see and represent (make/show) numbers in different ways.

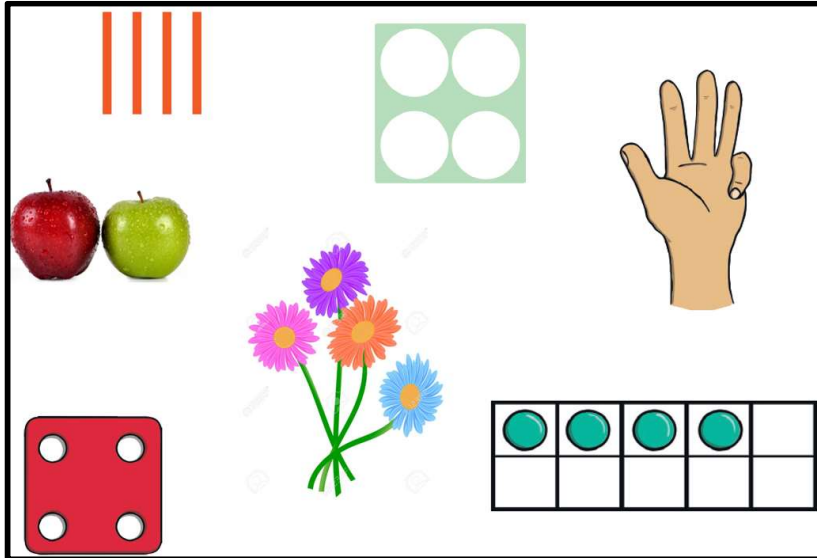
Initially this may be through using their fingers to represent the different numbers. You can support your child with this by teaching them that a hand with all the fingers up represents five. Playing a game where children have to say how many fingers you are showing makes this fun. Variation: the child says a number, you represent it using your fingers and they decide if you are right or wrong.

Subitising (recognising small numbers without counting them):

Children need to recognise small amounts without counting them e.g. dot patterns on dice, dots on tens frames, dominoes and playing cards as well as small groups of randomly arranged shapes stuck on cards.



During maths sessions in EYFS, children will use point boards. On these, there are a range of different representations of a number. Children have to identify representations that show this number and those that do not.



Questions:

Which number can you see?

How do you know?

Which representation does not show four?

Are any representations new to you?

Pre-counting ideas

Provide children with opportunities to sort groups of objects explicitly using the language of **more** and **less**.



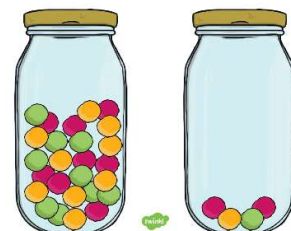
Which group of apples has the most?
Which group of apples has the least?

Comparison: understanding that comparing numbers involves knowing which numbers are worth more or less than each other. Children need to understand the relative size of amounts so that they understand ideas around value.

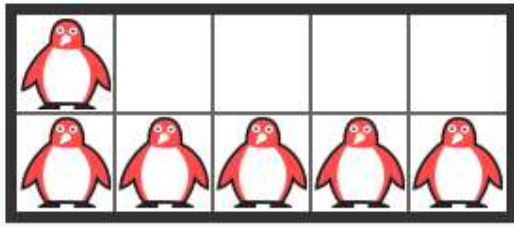
Tip 1: Children might need to place the objects next to each other to compare amounts. This is easier when the size of the objects is similar.



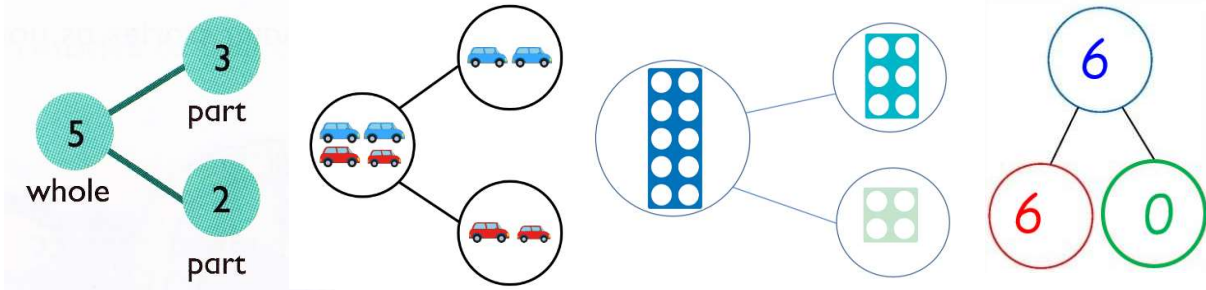
More or Fewer?



Tip 2: Children need to understand that although the tigers are bigger, there are more penguins.

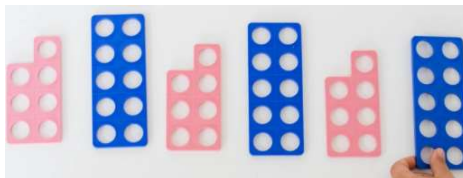


Composition (understanding that one number can be made up from (composed from) two or more smaller numbers): Four can be four fingers on one hand; two fingers on each hand or three on one hand and one on the other. Children need to recognise all of these as representations of four. At school, children will learn that this is a part, part, whole (PPW) relationship e.g.

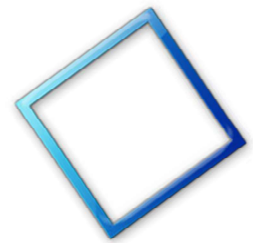
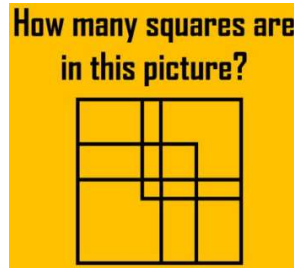
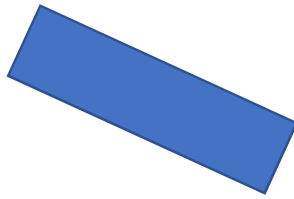
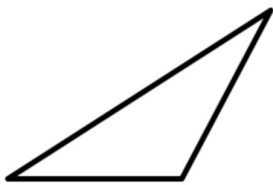


Ask your children to describe the PPW relationships above, e.g. 6 is the whole; 6 is a part and 0 is the other part.

Pattern: looking for and finding patterns helps children notice and understand mathematical relationships. Look for these in nature and in your home. Make them yourselves using a variety of objects, colours, shapes and sizes.



Shape and Space: understanding what happens when shapes move or combine with other shapes, helps children to develop wider mathematical thinking. Make sure that your children see unusual versions of the main shapes so that they have a broad idea of what each shape can look like e.g.



Measures: comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later. Our children are natural scientists keen to compare and explore measure; encourage this by getting children to use weighing scales and to estimate and check different measurements.

Abstraction: you can count anything - visible, hidden, imaginary objects, sounds etc. Children find it harder to count things they cannot move (because the objects are fixed), touch (they are at a distance), or see (that move around). Children also find it different to count a mix of different objects, or similar objects of very different sizes, as discussed earlier. You can help your child by regularly giving them a range of different counting opportunities.



How many pigs are in this picture?

Provide children with a variety of objects to count.



WHAT WILL MATHS LOOK LIKE IN FOUNDATION?

Every day in school, your child will have a 20 minutes maths session that we call 'Snappy Maths'. This session is taught in a mastery approach. We focus on one number for two weeks with numbers from 0-10. You may wonder why we do this when your child may already start school being able to count to 10. As mentioned previously, we want children to have a deep understanding of each number they learn. Children master numbers to 10, knowing the bonds for each number as addition, subtraction or a double. Children know different ways of representing each number; they know what one more and one less than each number is without using manipulatives; they can write all the numerals accurately; use them in their learning and so much more. This then creates a strong foundation for the rest of their number learning, when we move on to teen numbers your child will quickly recognise the number patterns.

ONLINE COUNTING RESOURCES



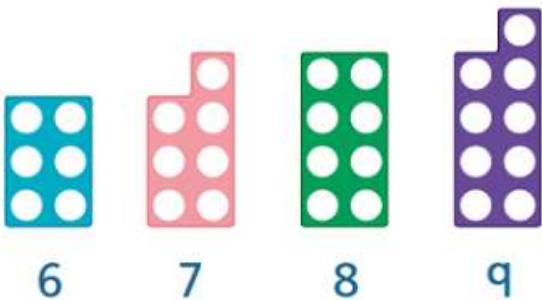
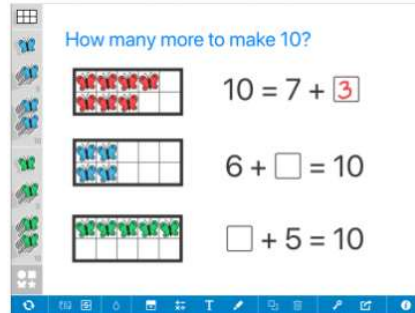
<https://www.oxfordowl.co.uk/welcome-back/for-school-back/default/series-landing-pages/pd-books/making-numbers>

Register for the Oxford Owl website for free to access these fantastic counting videos.

Number frames app

Lots of different ways to represent numbers in 10s and 20 frames.

<https://www.mathlearningcenter.org/resources/apps/number-frames>

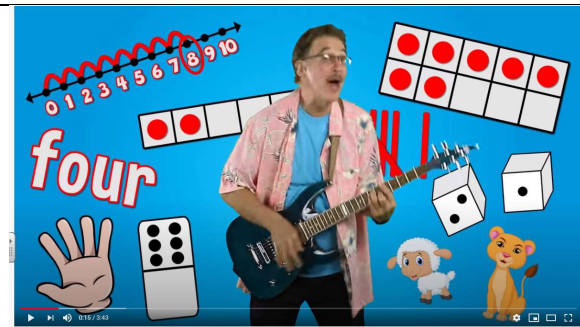


<https://home.oxfordowl.co.uk/maths/numicon-guide-for-parents/>

Numicon guide for parents

<https://www.youtube.com/channel/UCVcQH8A634mauPrGbWs7QLQ>

Jack Hartman's music channel. Cheesy but fabulous counting songs.



<https://www.bbc.co.uk/iplayer/episodes/b08bzfnh/numberblocks>

Numberblocks are an amazing resource to use to develop your child's understanding of number.