



EYFS Mathematics information for parents

2022



Introduction

- In the Early Years Foundation Stage we teach using the DFE Statutory Framework for the Early Years Foundation Stage and the Development Matters Guidance.
- The teaching of Mathematics in the Early Years Foundation Stage (EYFS) is split into 2 areas:
 - Number
 - Numerical Patterns

Number

By the end of the Reception year it is expected that *most* children will be able to achieve *most* of the following:

- Have a deep understanding of number to 10, including the composition of each number
- Subitise (recognise quantities without counting) up to 5
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns

By the end of the Reception year it is expected that *most* children will be able to achieve *most* of the following:

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Numbers

Basic Key Skills:

- Reciting numbers in sequence.
- Can use one-to-one correspondence
- Realises that anything can be counted (steps, claps, jumps).
- Understands that the number of objects stays the same even if they are moved around or grouped in different ways.
- The importance of zero.

Number Words and Numerals

Look out for numerals and number words in everyday situations.



Extended Counting

Forwards

- 3, 4, 5, 6, 7...
- 6, 7, 8, 9, 10...
- 8, 9, 10, 11, 12...

Backwards

- 11, 10, 9, 8, 7...
- 6, 5, 4, 3, 2...
- This skill prepares children for addition and subtraction.

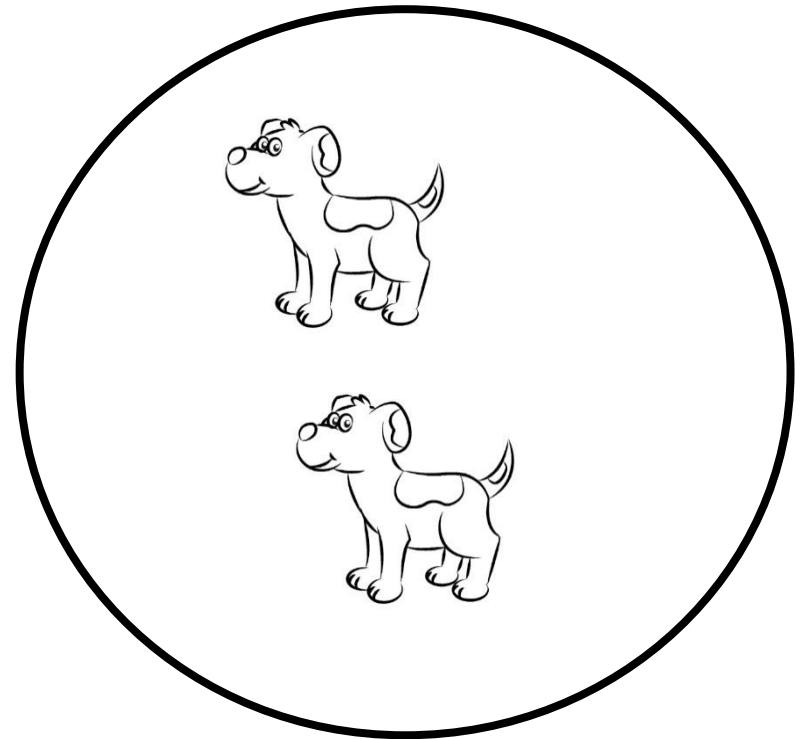
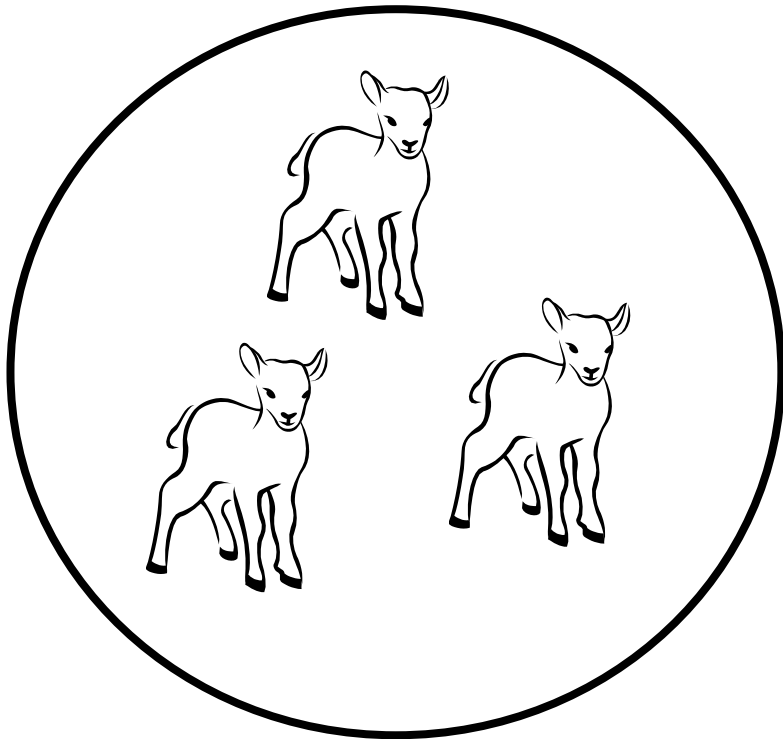
- Counting objects that cannot be moved or touched
- Counting actions or sounds
- Move around, or partition and recombine small groups of objects, and recognise that the total is still the same (pre-step to learning number bonds).
- Counting up to 10 objects in any arrangement, not just when they are in a straight line

Addition skills

- Use practical materials.
- Find the total number of items in 2 groups by counting all of them.
- Varied language – ‘adding’ ‘total’ ‘how many altogether’ ‘makes’ ‘equals’
- Recognise that addition can be done in any order. E.g. $5 + 3 = 8$ AND $3 + 5$ also = 8, $8=5+3$.

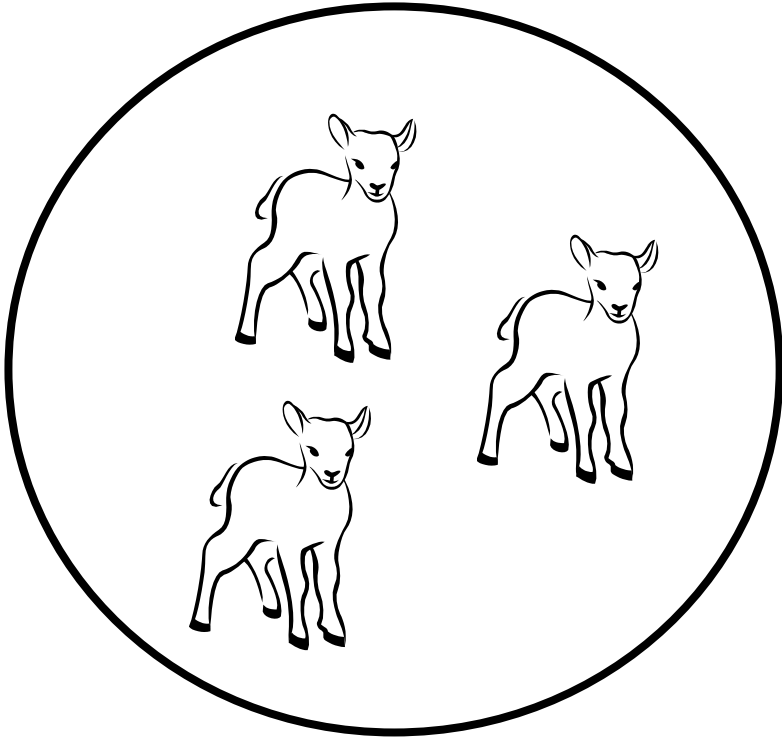
Stages in Teaching Addition

Step 1

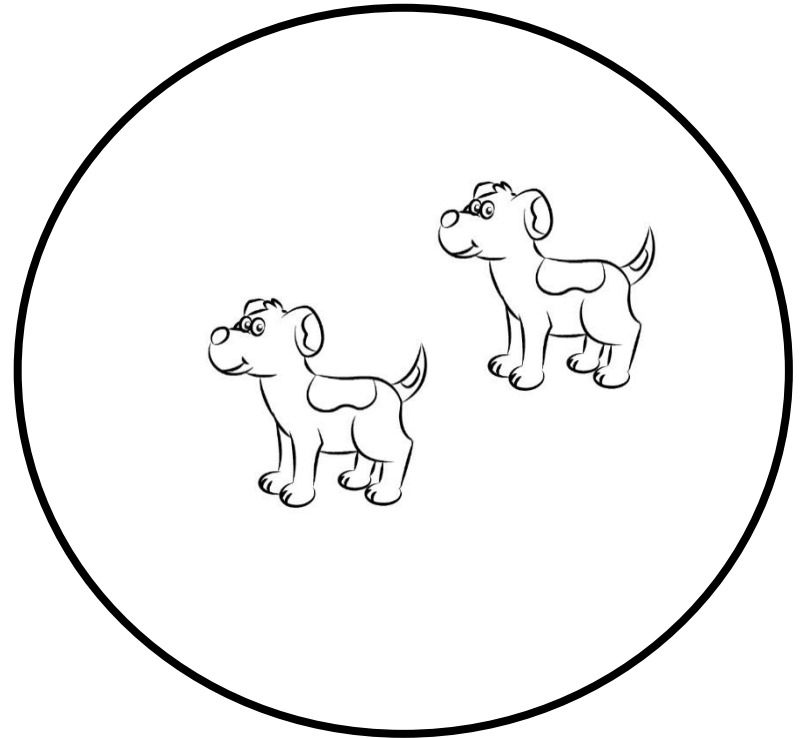


Adding 2 groups of pictures/objects

Step 2



3



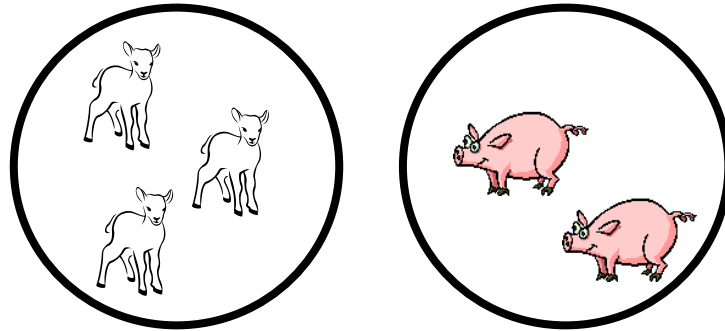
2

5

Pictures with the corresponding numbers underneath

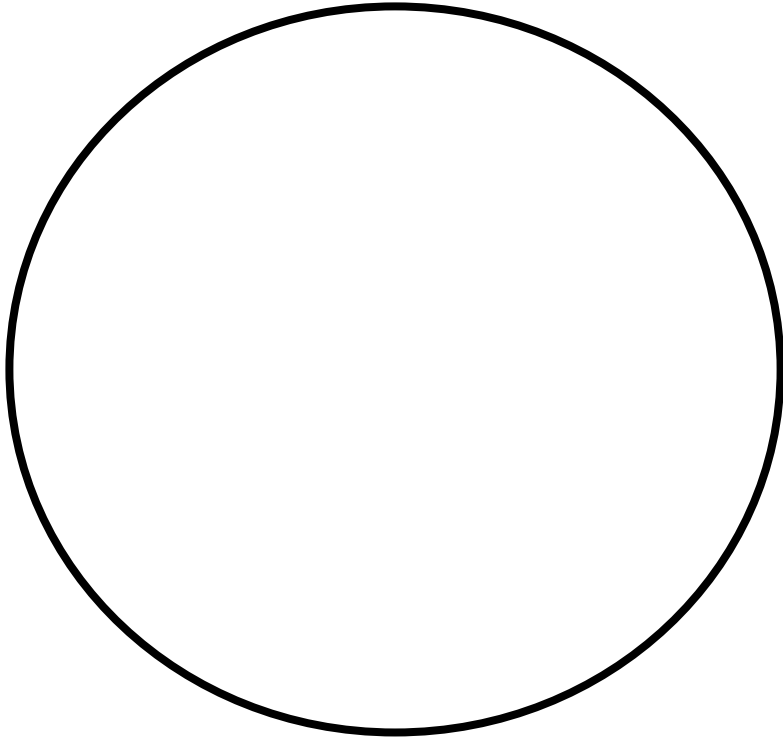
Step 3

Using symbols + =



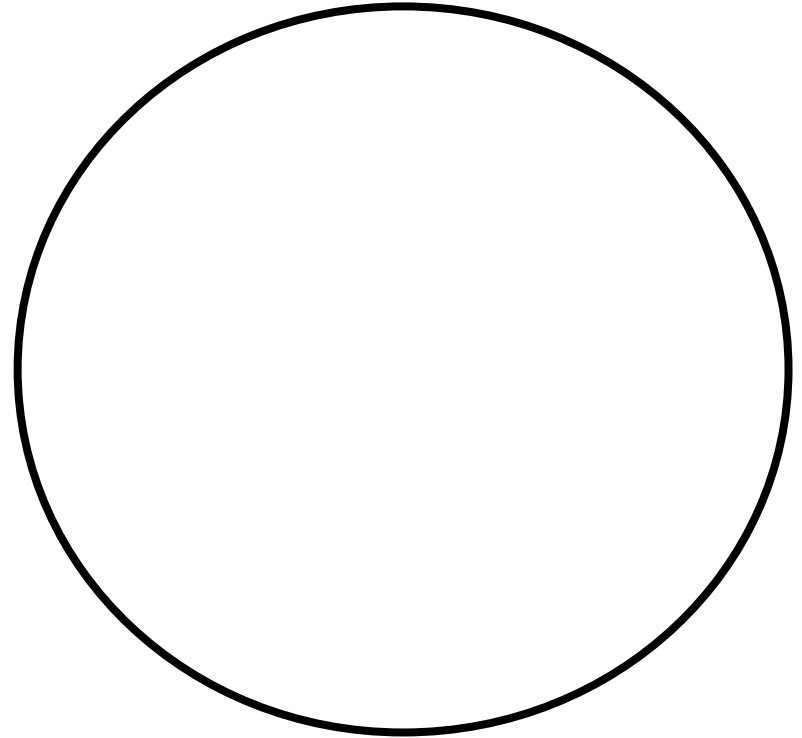
$$3 + 2 = 5$$

Step 4



3

+



2

=

5

Children shown a number sentence and asked to work it out using objects, drawings or fingers.

Step 5

$$3 + 2 =$$

Present children with a number sentence and they should use the skills they have learned to work this out (*they may still use their fingers or objects*).

Step 6

'Put the first number in your head'

$$5 + 3 =$$

Child says '5 6, 7, 8'

Not '1, 2, 3, 4, 5.....6, 7, 8

This takes time and needs a secure knowledge of the number system and what number comes next.

This needs lots of practise.

Subtraction

- Remember counting backwards practise
- Count a set of objects then remove some. Ask, *“How many are left?”*
- Varied vocabulary – take away, minus, subtract, how many are left?

Subtraction



- How many apples are there?
- Take away 2 apples.
- How many do you have left?
- To extend this add numerals and calculation symbols (- and =).

Subtraction

- Eventually take the objects/pictures away and display the number sentence. Allow your child to use objects, drawings and fingers to work this out.

$$5 - 2 = \underline{\quad}$$

Applying their Knowledge Through Problem Solving

- Explore and solve problems in practical contexts
- Use meaningful examples that will be motivate your child to use their mathematical skills.
- Encourage critical thinking and a ‘have a go’ attitude. Asking questions such as ‘*What could we do next?*’ and ‘*How shall we do it?*’

Keep maths practical and have fun!

- Bath-time (filling and emptying containers, counting, timing how long it takes to fill the bath)
- Counting rhymes
- Talk about numbers in the environment (front door numbers, number plates, road signs etc)
- Help with the 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?)
- Shopping – helping to count out varying amounts of fruit and vegetables

Maths Through Stories

Title and Author	Mathematical Concept
The Shopping Basket by John Burningham	Counting, subtracting, concept of 1 less
Six Dinner Sid by Inga Moore	Counting, sharing
Goldilocks and the 3 Bears (traditional tale)	Counting, size, ordering
Ten Little Dinosaurs by Mike Brownlow	Counting through rhyme
Kippers Toybox by Mick Inkpen	Counting
Handas Surprise by Eileen Browne	Ordinal numbers, subtraction
The Very Hungry Caterpillar by Eric Carle	Numbers, counting, days of the week
The Bad Tempered Ladybird by Eric Carle	Size, Time
Bear in a Square by Stella Blackstone and Debbie Harter	Shapes

Any Questions?