Manorfield Primary and Nursery School

Mathematics in Reception

Mathematics in the EYFS

Consists of 2 strands:

- Number
- Shape, Space and Measure

The Early Years Foundation Stage

We teach discrete adult-led mathematics sessions.

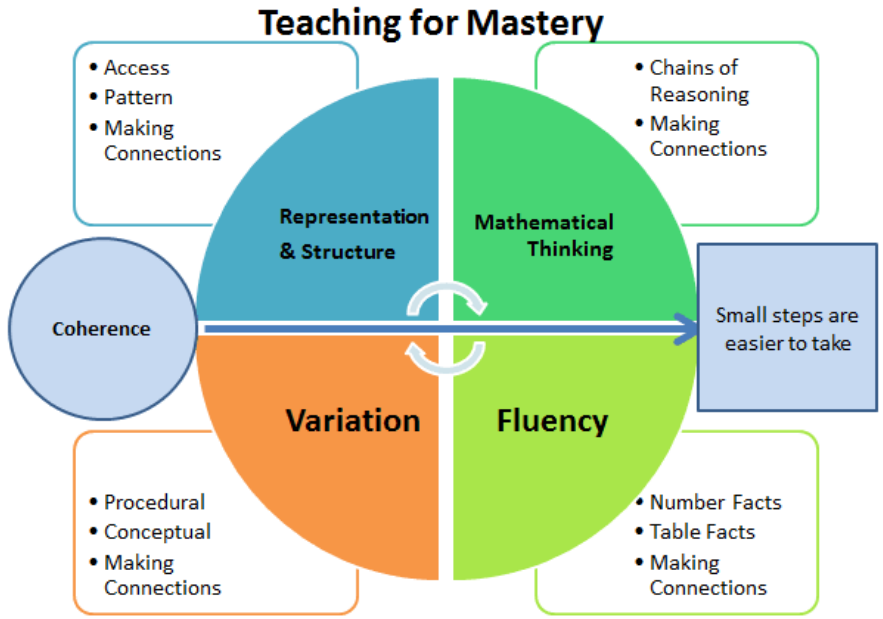
Children embed mathematics principles during play.

Mathematics Mastery - Depth

Encourages deeper conceptual understanding.

Questioning examples:

- Can you count backwards from 14?
- What numbers are hidden inside 5?
- What is 4 + 2? How do you know? Show me another way? Prove it.
- Can you explain to your partner?



Early Learning Goal - Number

By the end of Reception the expectation is that:

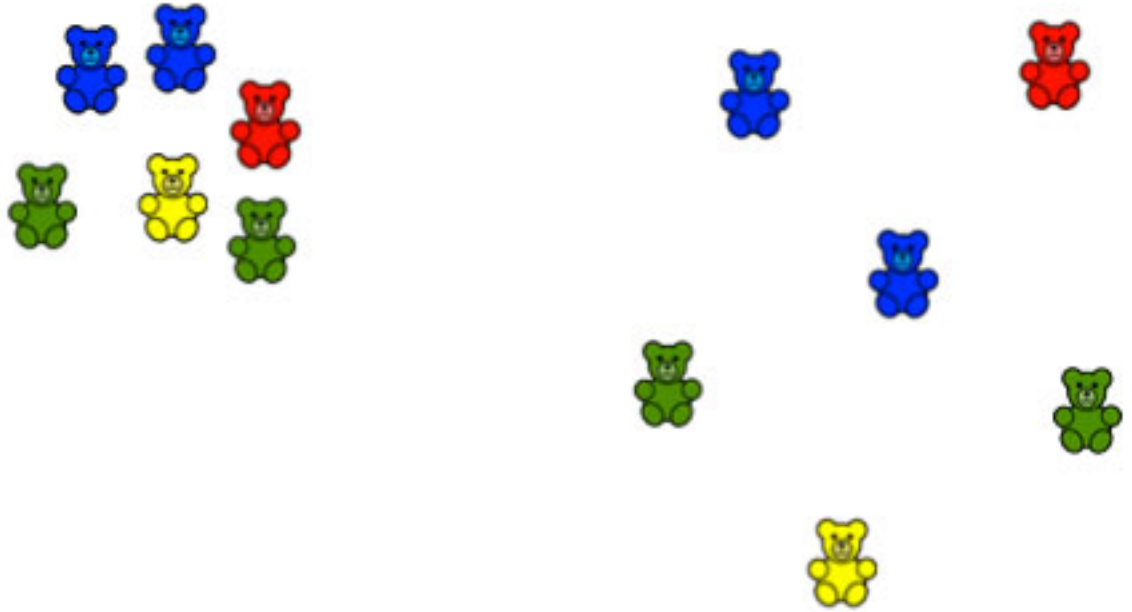
Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Foundations of Number

- 1:1 correspondence
- Cardinality – the last number counted in a set is the total
- Composition – what are numbers made up of?
- Comparing – language such as more/less
- Number sequence – staircase image
- Subitising – instantly recognising a number of objects without counting

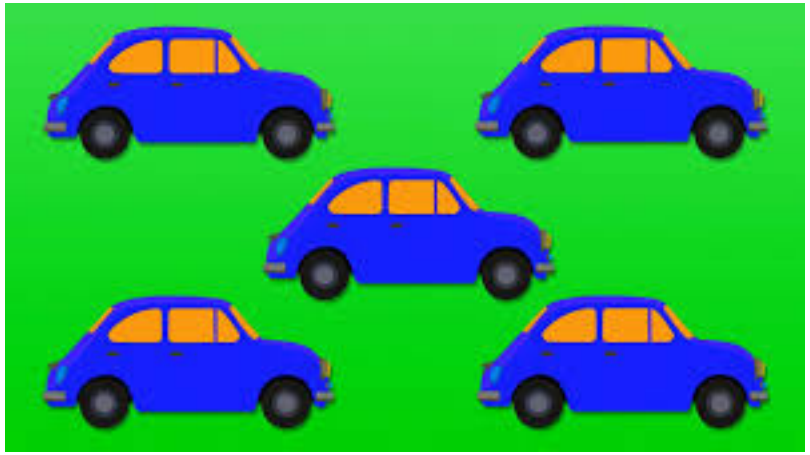
Conservation of Number

A number of objects can be arranged in a certain way and counted. The same objects can be moved around, and arranged differently, yet the number is the same because none have been removed or added.



Language

- Talk is crucial
- Full sentences, for example ‘There are five cars altogether.’
- My turn, your turn – adults modelling language, children repeating
- Reasoning and explanation, for example ‘Why do you think that?’
- Problem-solving is key



Vocabulary

- more/fewer
- greater/less
- altogether
- order
- is equal to
- add, addition, plus
- take away, minus, subtract

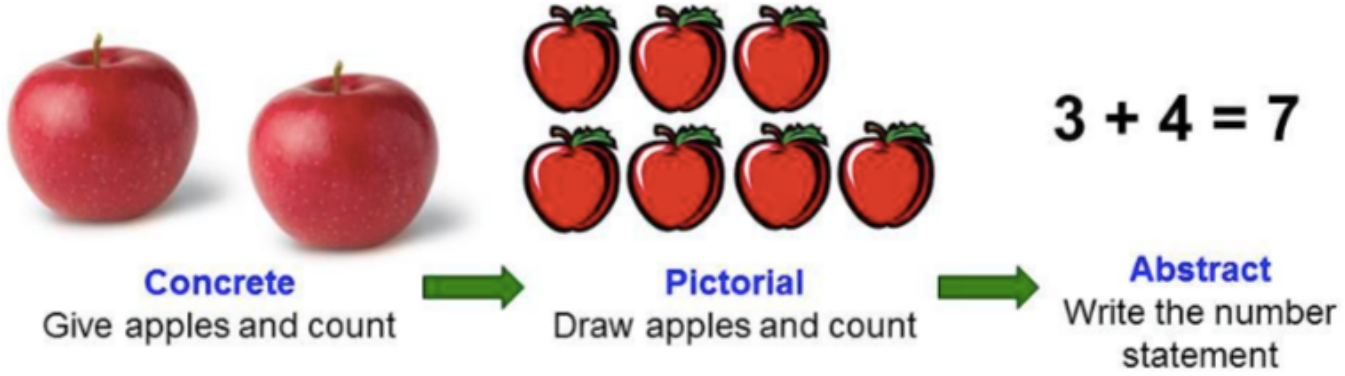
Addition

Key Words

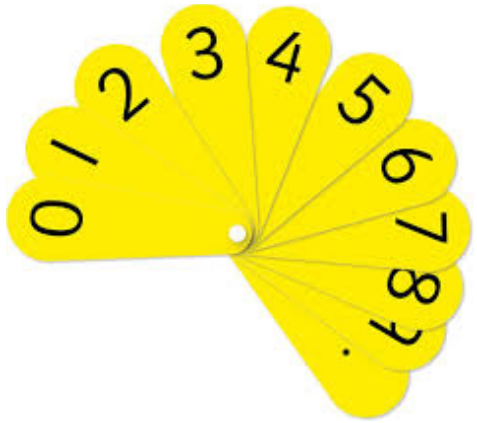
add, addition, plus, total, sum of, more, increase, altogether

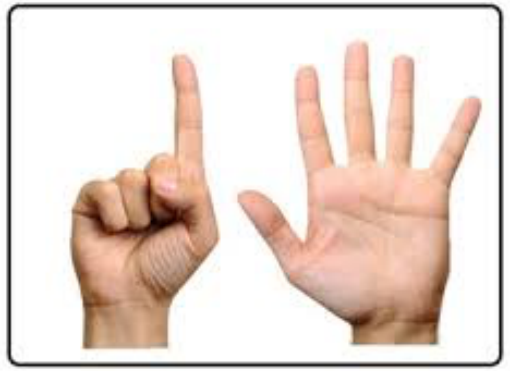
CPA Approach

Stage	Characteristics
Concrete	Refers to the use of manipulatives, measuring tools or objects that pupils handle.
Pictorial	Refers to the use of drawings, diagrams, charts or graphs that pupils draw.
Abstract	Refers to the abstract representations such as numbers and letters that pupils write.



Resources used at School

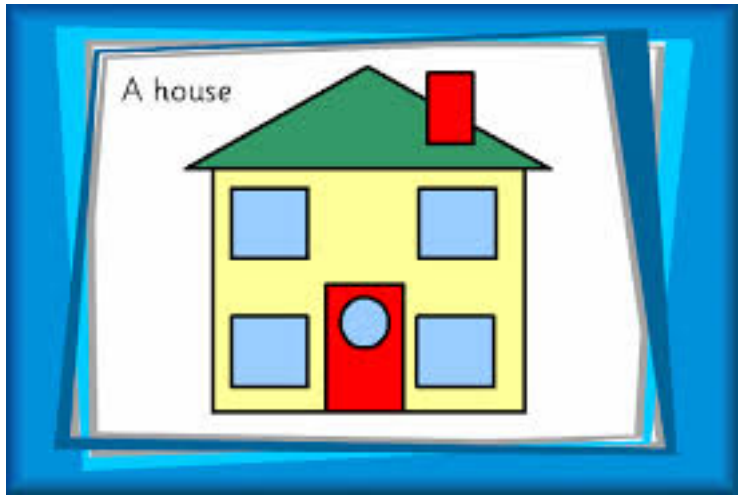




Early Learning Goal – Shape, Space and Measure

By the end of Reception the expectation is that:

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.

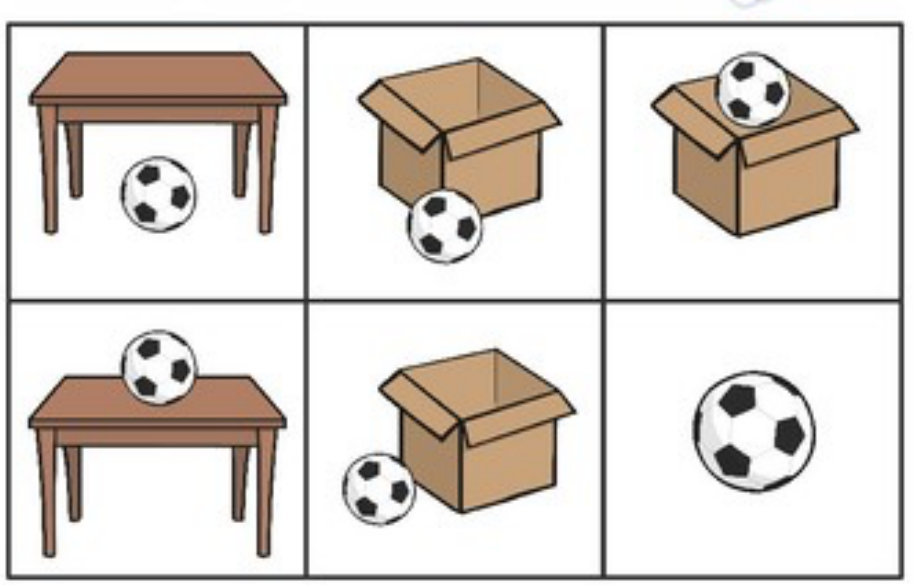


Practical Learning

- ‘Hands-on’ learning is essential
- Games enable playful teaching and learning

Vocabulary

- Positional language – in between, over, under, through, next to
- Weight – heavy/light
- Capacity – full/empty
- Length – tall/short
- Time – before/next/after
- Shapes – 2D and 3D shape names, corner/vertex/vertices, edge, straight/curved



Mathematics is Everywhere

You can support mathematics learning wherever you are!

For example, arranging and ordering shoes by size or recognising numbers on buses.