Manorfield Primary and Nursery School

Early Years Maths Meeting

2022

Aims

- Explain maths in the Early Years at Manorfield
- Explore skills and strategies
- Increase confidence and understanding in supporting your child

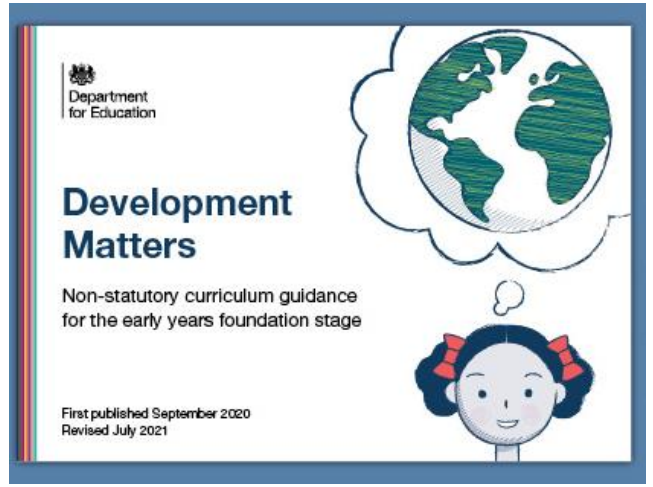
Maths in the Early Years

- Our curriculum includes:

- Number

- Shape, measure and spatial thinking

- We use curriculum guidance, such as Development Matters

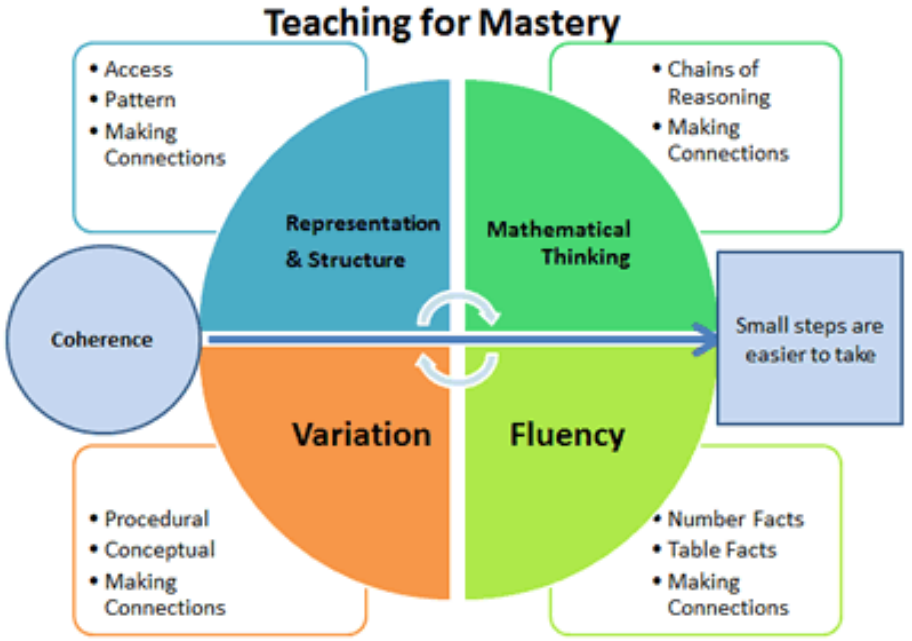


- We teach discrete adult-led maths sessions and children embed maths principles during play

- Helpful document for parents and carers https://foundationyears.org.uk/wp-content/uploads/2021/09/What-to-expect-in-the-EYFS-complete-FINAL-16.09-compressed.pdf

Mastery

- Mastery encourages deeper conceptual understanding
- We aim for children to develop a deep understanding of key skills



Questioning examples:

What do you notice?

Can you count backwards from 12?

What is 4 add 2? How do you know? Show me in another way? Prove it.

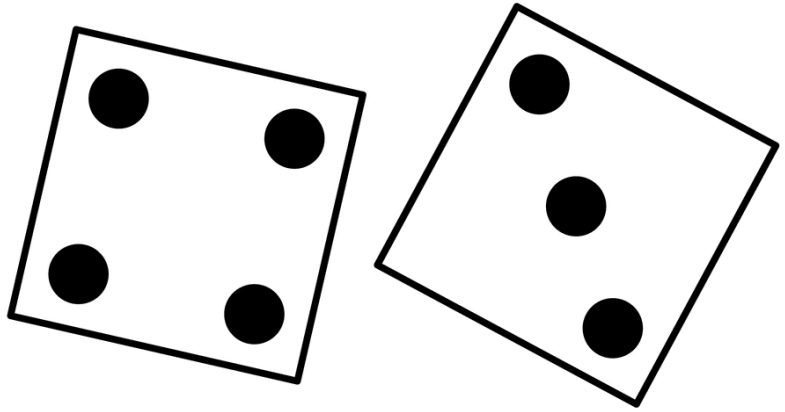
Can you explain to your partner?

Foundations of Number

- 1:1 correspondence – saying one number name for one item when counting
- 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 in a small group without counting

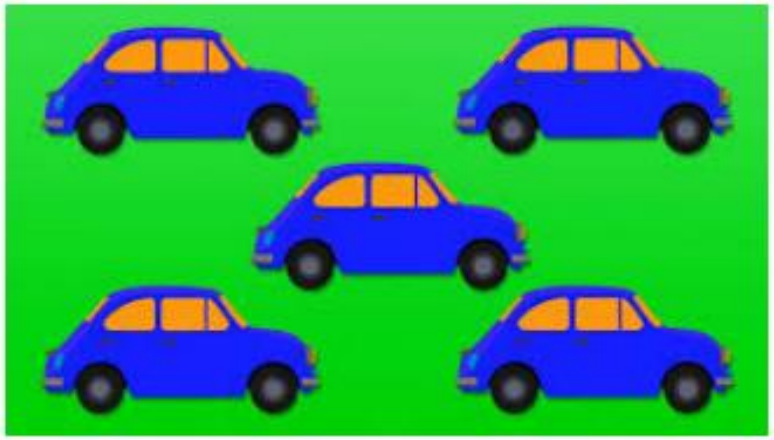
Subitising

- It is essential to number sense development
- Perceptual subitising – recognising very small quantities by just ‘seeing’ the numbers quickly e.g. dots on dice
- Conceptual subitising – identifying a whole quantity as a result of composing smaller quantities that make up the whole e.g. 3 leaves and 2 leaves, 5 leaves altogether
- Ask ‘What do you see?’ and ‘How do you see it?’
- Use nature e.g. spot acorns on a walk



Language

- Talk is crucial
- We support children to use full sentences e.g. ‘There are five cars altogether.’
- We use ‘my turn, your turn’ – adults modelling language, then children repeating
- Reasoning and explanation is encouraged through questions such as ‘Why do you think that?’
- Problem-solving is key



Vocabulary

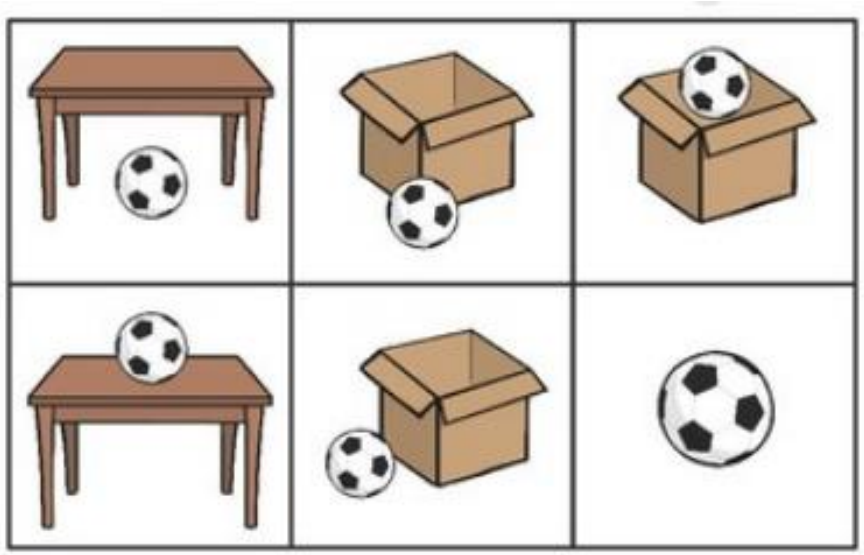
Number examples:

- same, different
- more, fewer
- greater, less
- altogether, total
- order
- is equal to
- add, addition, plus
- take away, minus, subtract
- left

Vocabulary

Shape, measure and spatial thinking examples:

- 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, edge, straight, curved



Practical Learning

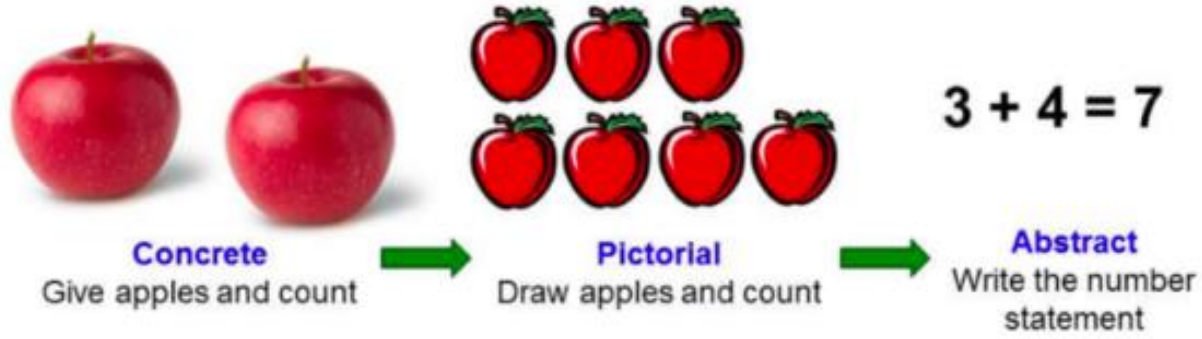
- ‘Hands-on’, active learning is fundamental
- Games enable playful teaching and learning



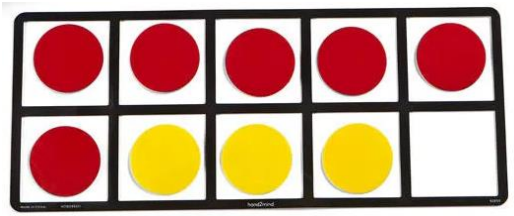

CPA Approach

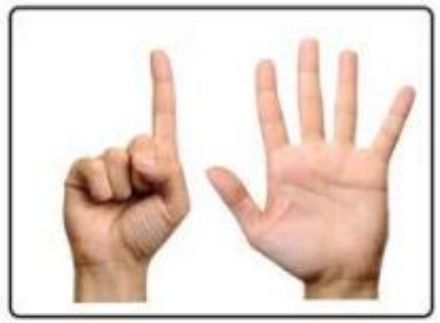
- It is essential that children first work with concrete objects

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 symbols that pupils write.



Resources used in School





Example Skills

3 and 4 Year Olds	Reception
Match numerals and quantity up to 5 Subitise up to 3 Compare quantities using language, such as ‘more than’ and ‘fewer than’ Talk about and explore 2D and 3D shapes, for example triangles and cuboids, using informal and mathematical language Extend and create AB patterns, for example stick, leaf, stick, leaf	Match numerals and quantity up to 10 Subitise up to 5 Understand the ‘one more than/one less than’ relationship between consecutive numbers Explore the composition of numbers to 10 Automatically recall number bonds to 5, and some to 10 Create and recreate repeating patterns beyond AB patterns Compare length, weight and capacity

Early Learning Goals (ELGs)

- There are new statutory ELGs this academic year
- At the end of Reception children at the expected level of development will:

Number

- 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

- 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.

Supporting Learning at Home

- Use everyday opportunities to count and recognise numerals
- Support the use of comparative language
- Play games
- Set challenges
- Talk about every day maths that you use and encourage your child to help you solve problems

Number

Activity suggestions:

- Hide and seek
- Counting concrete objects e.g. treasure
- Number splat
- Squirting numbers
- Number puzzles
- Number songs e.g. ten fat sausages
- Teddy bears picnic – sharing food
- Counting forwards and backwards
- Board games

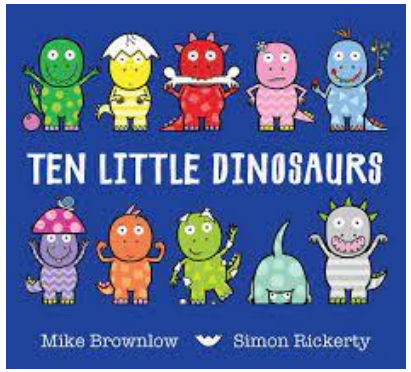
Shape, Measure and Spatial Thinking

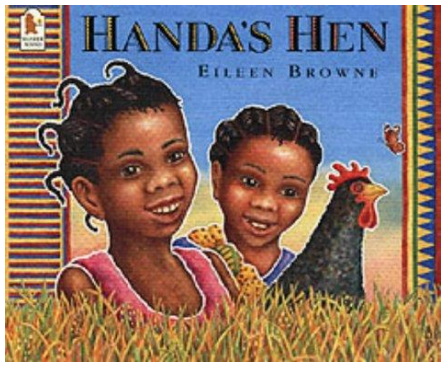
Activity suggestions:

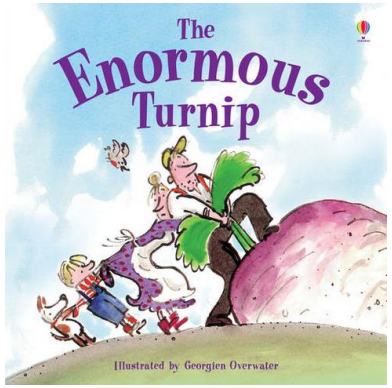
- Shape splat
- Shape hunt
- Shape pictures
- Shopping
- Comparing tower heights
- Sorting washing
- Natural art
- Cooking
- Puzzles – problem solving

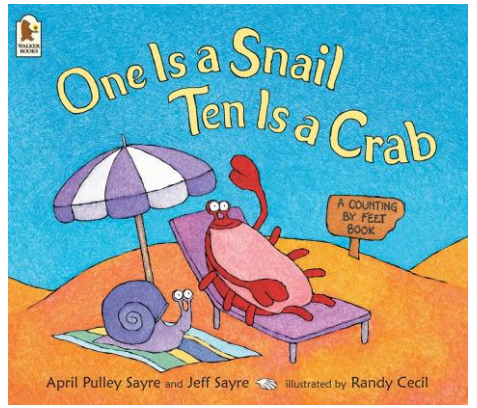
Books

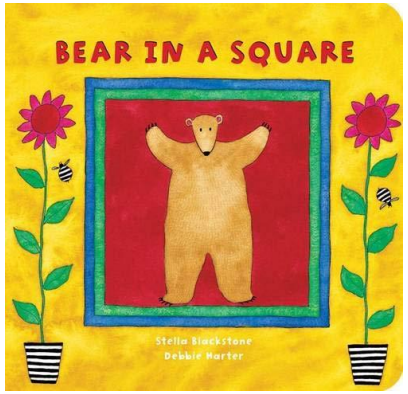
- We encourage maths through stories

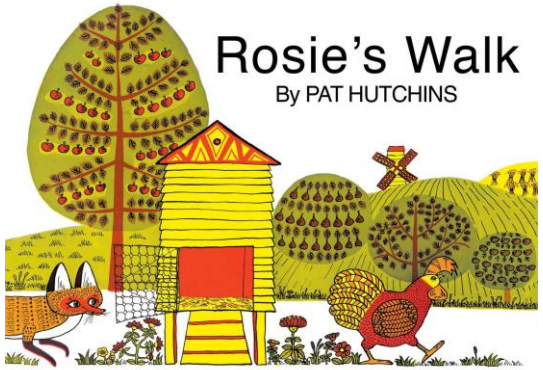


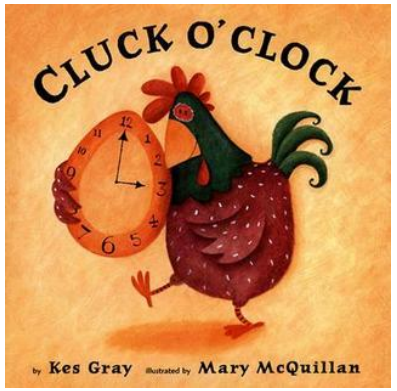












Links

- Numberblocks https://www.bbc.co.uk/cbeebies/shows/numberblocks
- Topmarks https://www.topmarks.co.uk/maths-games/5-7-years/counting
- NRICH https://nrich.maths.org/early-years
- Busy Things https://www.busythings.co.uk/families
- Twinkl – printable resources https://www.twinkl.co.uk/

Questions