How do we teach Maths in Reception?

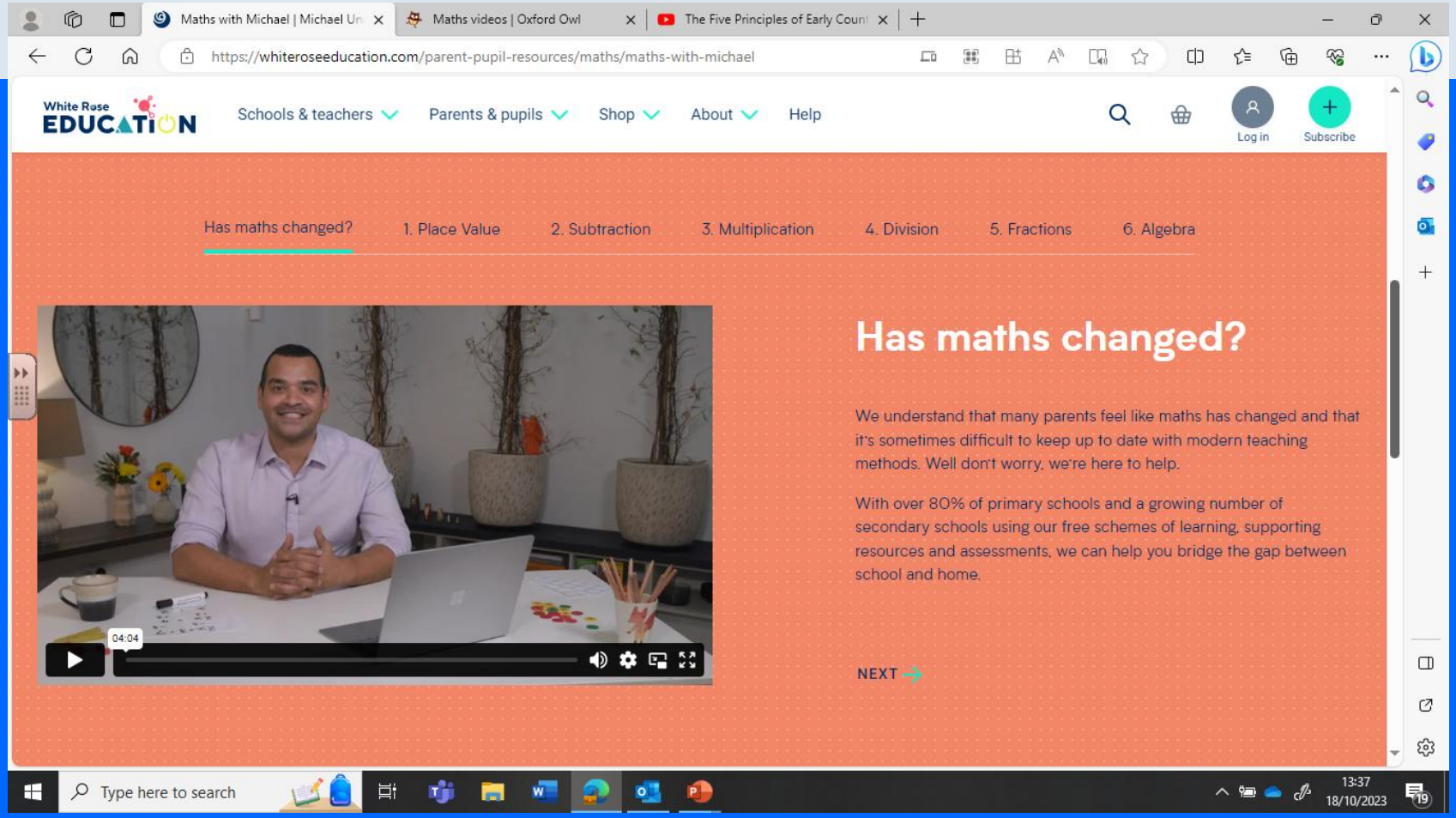
Wednesday 18th November 2026

Agenda

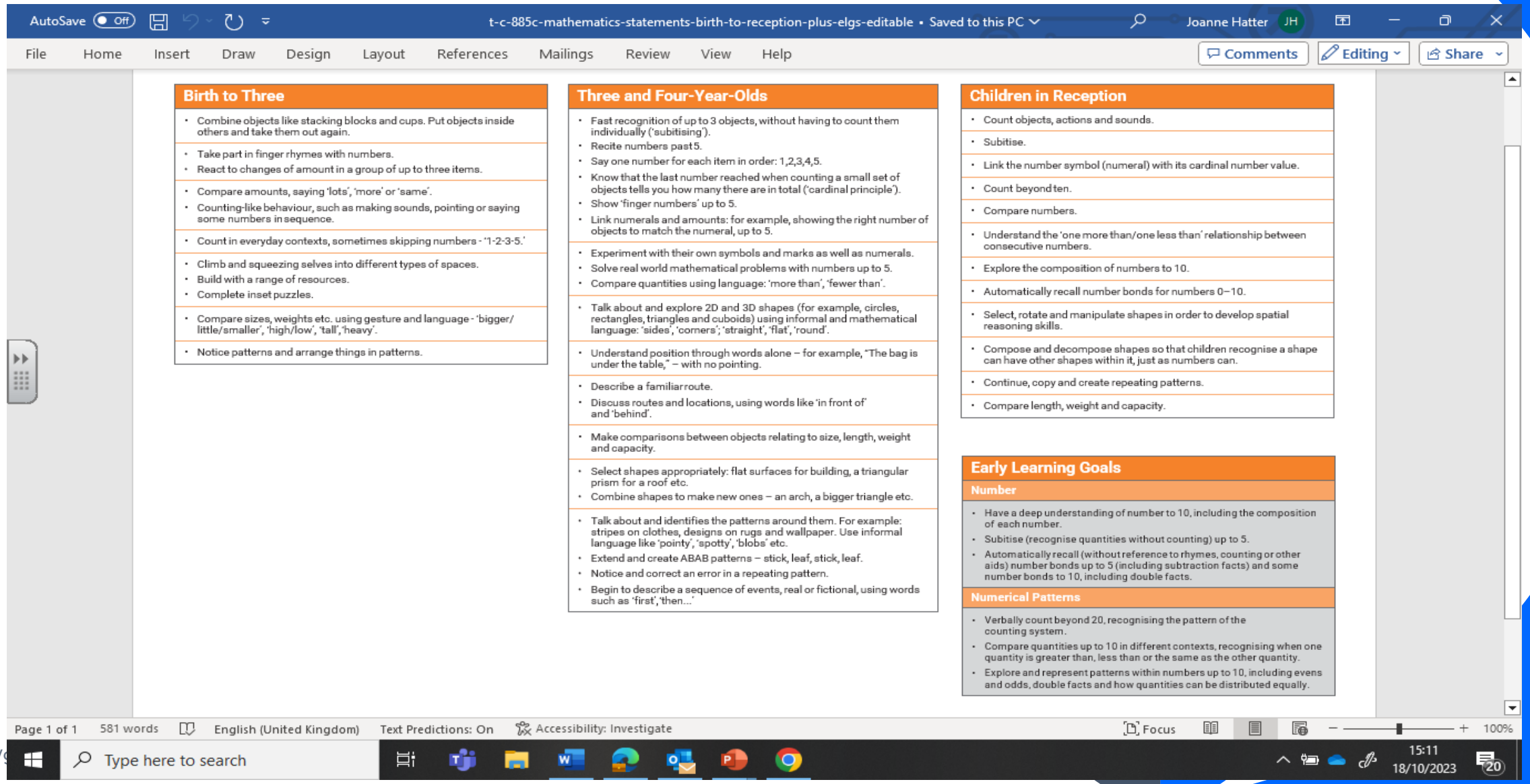
- How has Maths changed?
- Maths coverage, Early Learning Goals & White Rose Maths
- The small steps
- Subitising
- Types of numbers – What is number?
- Five principles of counting
- Some of the resources used in school – Numicon, Ten Frames, Counters
- Tablet based apps
- Extra ideas for how to help ☺

How has Maths changed?

https://whiteroseeducation.com/parent-pupil-resources/maths/maths-with-michael



How much does my child need to know?



Birth to Three

- Combine objects like stacking blocks and cups. Put objects inside others and take them out again.
- Take part in finger rhymes with numbers.
- React to changes of amount in a group of up to three items.
- Compare amounts, saying 'lots', 'more' or 'same'.
- Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.
- Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.'
- Climb and squeezing selves into different types of spaces.
- Build with a range of resources.
- Complete inset puzzles.
- Compare sizes, weights etc. using gesture and language - 'bigger/ little/smaller', 'high/low', 'tall','heavy'.
- Notice patterns and arrange things in patterns.

Three and Four-Year-Olds

- Fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.
- Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
- Understand position through words alone – for example, "The bag is under the table," – with no pointing.
- Describe a familiar route.
- Discuss routes and locations, using words like 'in front of' and 'behind'.
- Make comparisons between objects relating to size, length, weight and capacity.
- Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.
- Combine shapes to make new ones – an arch, a bigger triangle etc.
- Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.
- Extend and create ABAB patterns – stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.
- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

Children in Reception

- Count objects, actions and sounds.
- Subitise.
- Link the number symbol (numeral) with its cardinal number value.
- Count beyond ten.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0–10.
- Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- Continue, copy and create repeating patterns.
- Compare length, weight and capacity.

Early Learning Goals

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.

Early Learning Goals (ELG)

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White Rose Maths

A scheme of learning (SOL) is a clear, time-linked plan for learning.

Schemes are written for year groups and cover the whole school year of learning.



The small steps

Each block (phase) of knowledge is divided into a series of small learning steps. Each block lasts between one and three weeks.

Together, these small steps cover all the curriculum content that your child needs to know.

Brain science tells us that your child will remember more by learning maths in small, related chunks.

“

Everyone Can Do Maths: Everyone Can!

”

White Rose Maths

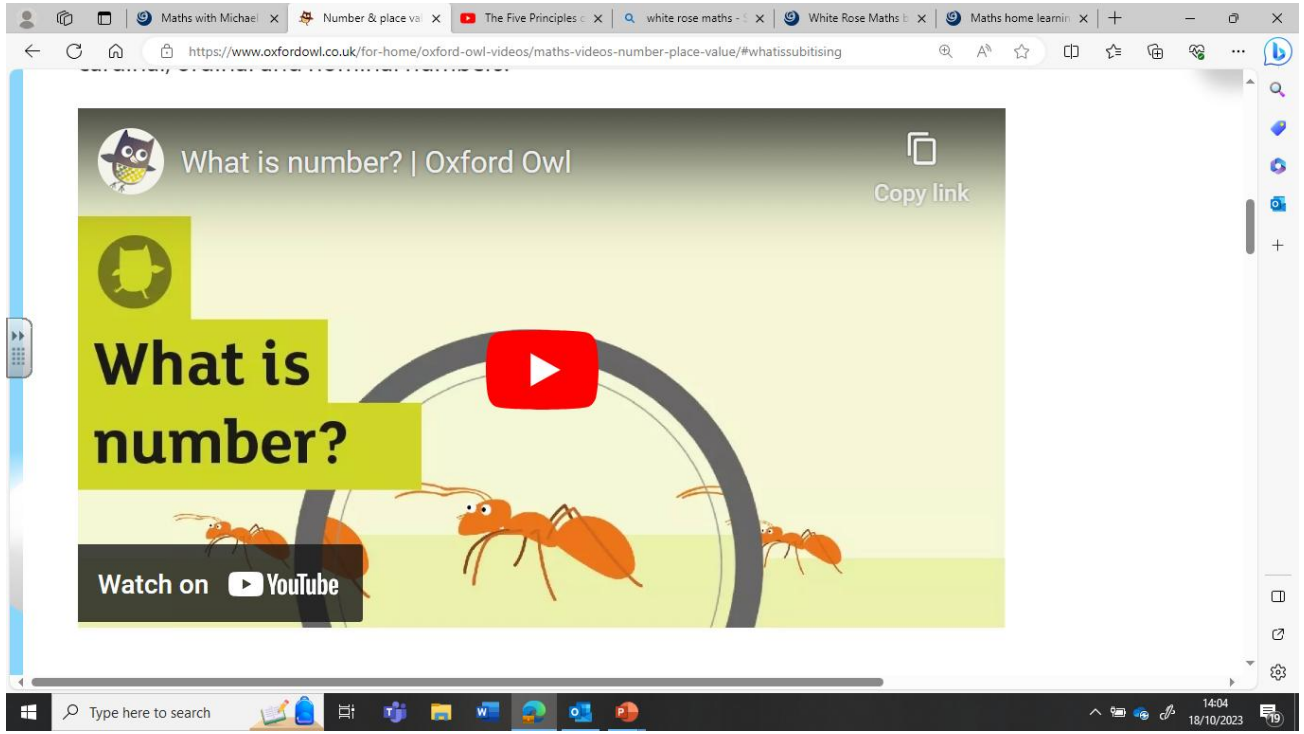
Subitising

https://youtu.be/Lwt7NgfeZRY



What is Number? https://youtu.be/vyjHrDpBlKo

This short animation explains the concept of number and the difference between cardinal, ordinal and nominal numbers.



Understanding Counting Principles – 5 Counting Principles

How to count:

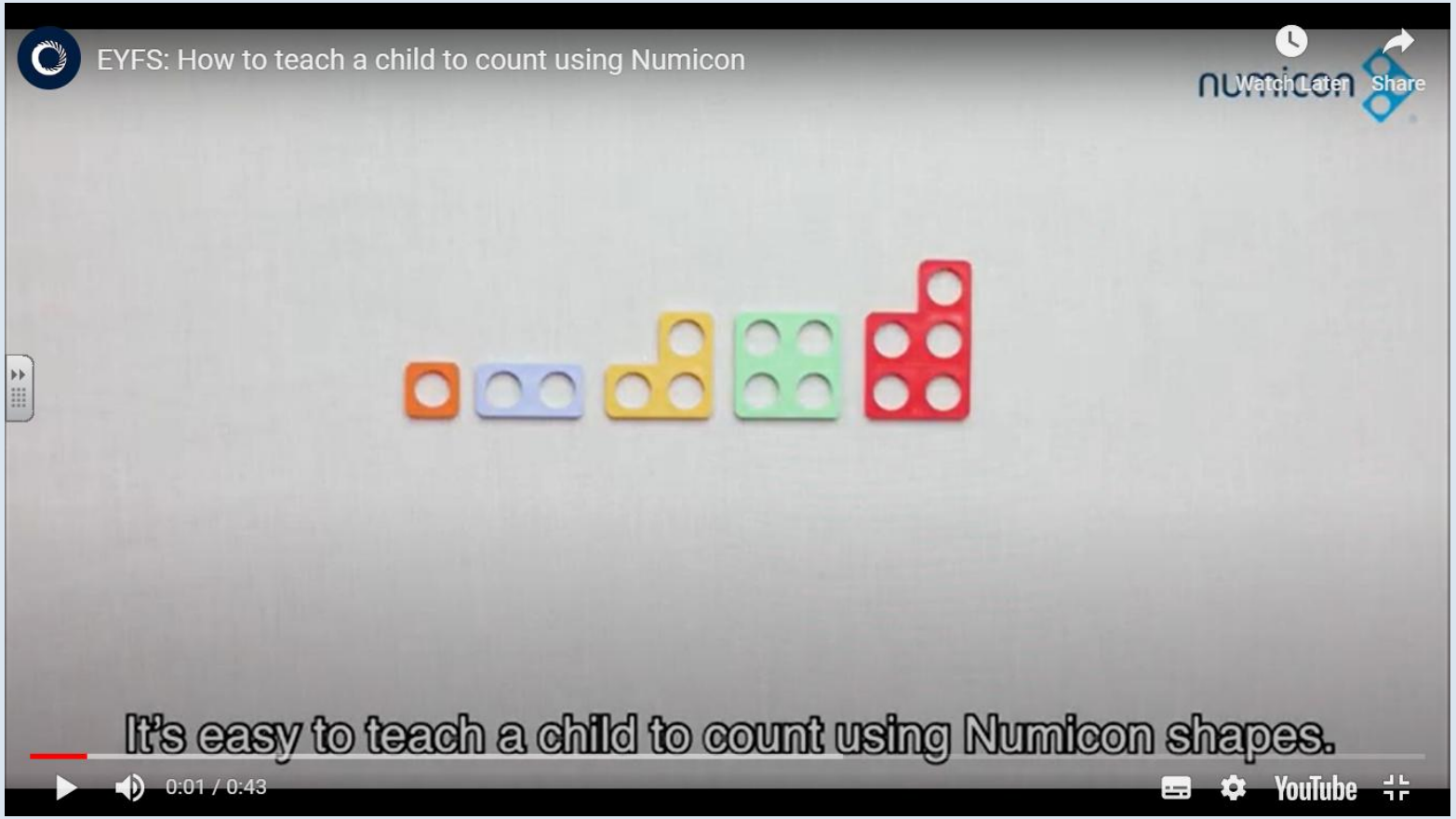
1. One-to-one principle (touch,move,count aka tagging)
2. Stable order principle (order of numbers)
3. Cardinal principle (last number that you count is how many are in the set)

What we count:

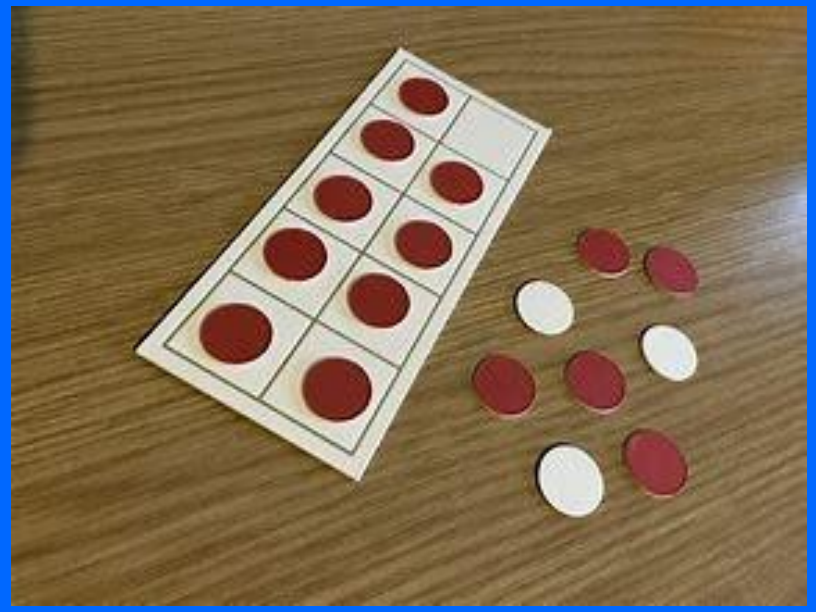
1. Abstraction principle (anything can be counted)
2. Order of irreverence principle (things don't have to be counted in a straight line)

Resources used in school - Numicon

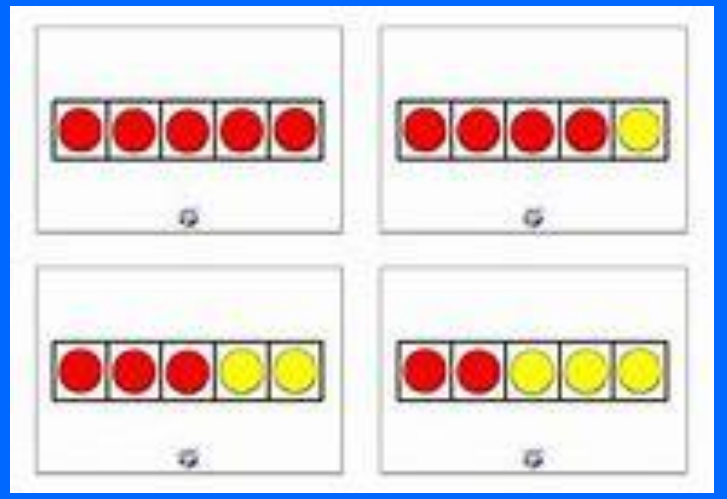
https://www.youtube.com/watch?v=04Eo27vMGIk



Ten Frames



Five frames



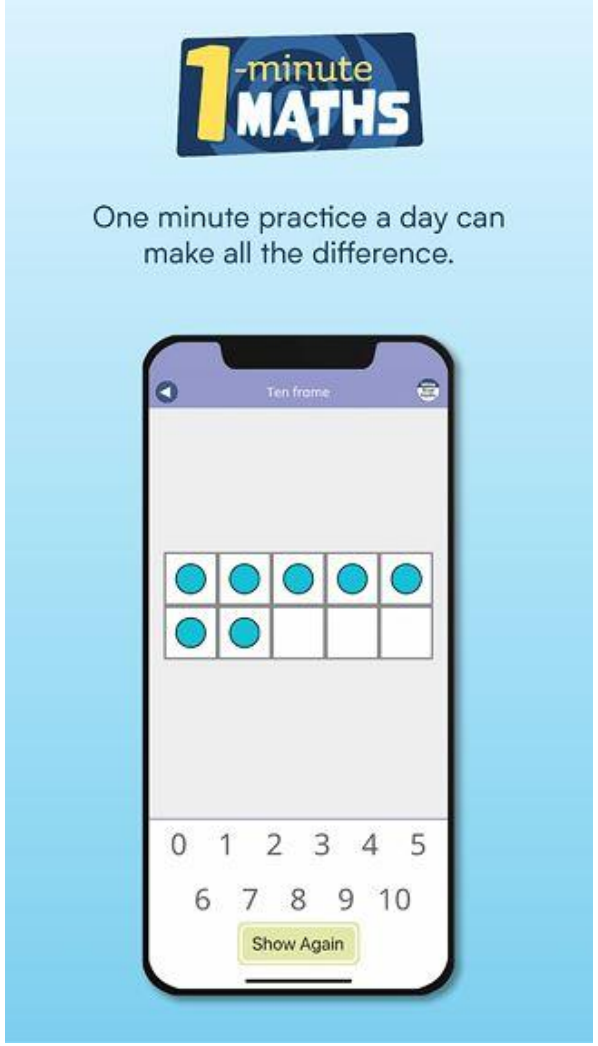


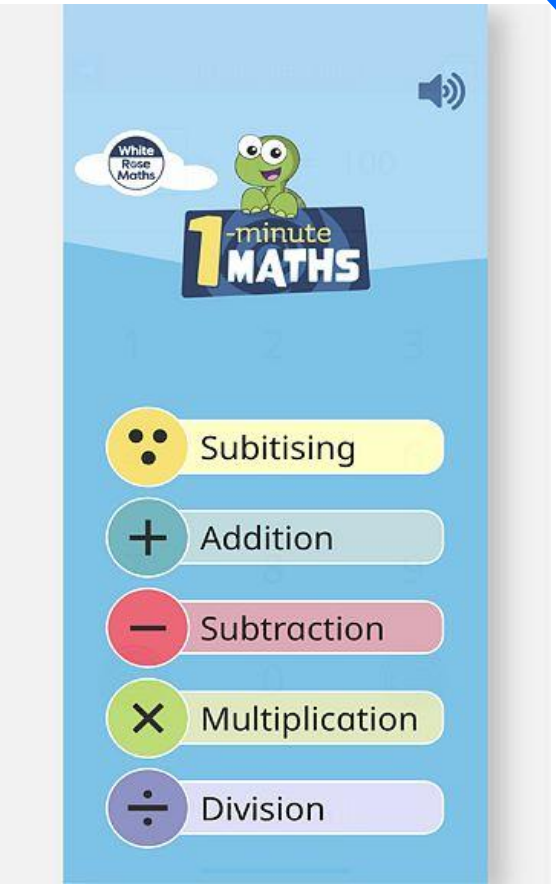
Double-sided counters

Have a go...

Extra ideas ☺

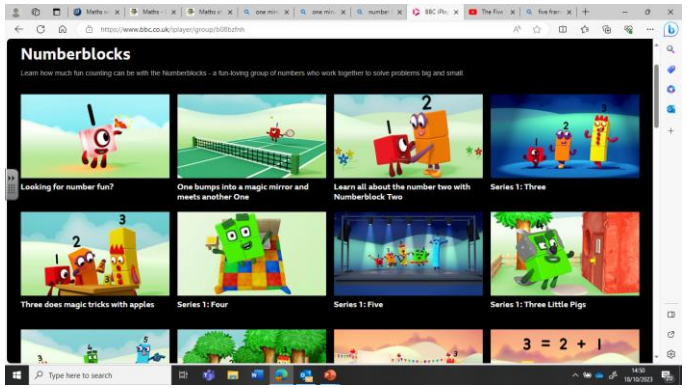
1-Minute Maths is a free app that helps children build number confidence & fluency through engaging, 1-minute tasks.

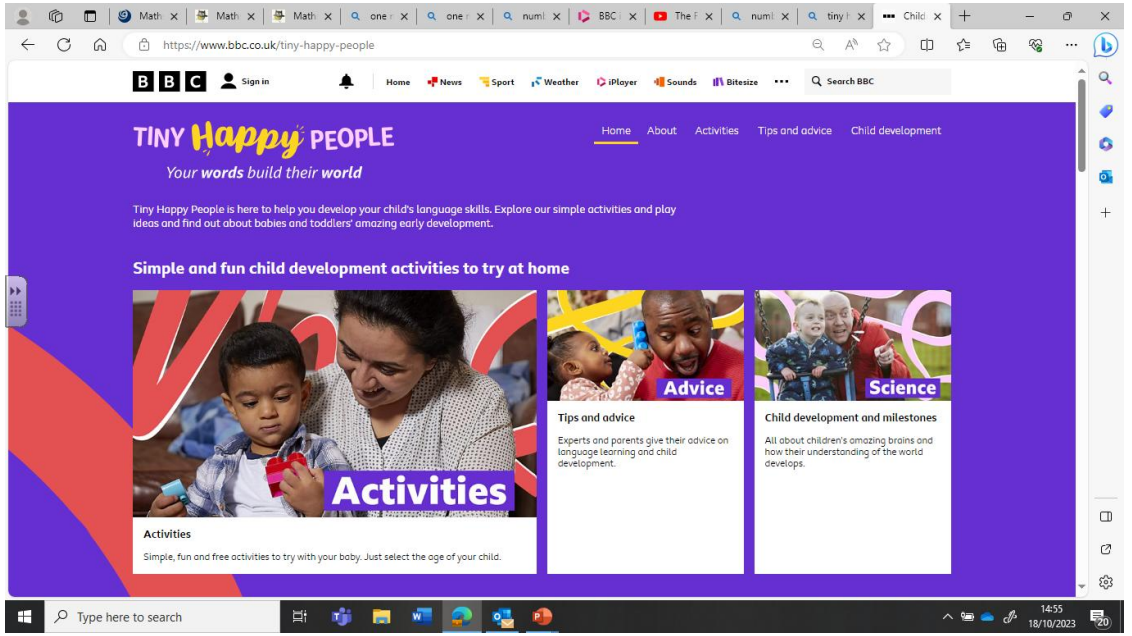




Number Blocks







[Activities for 4-5 year olds - BBC Tiny Happy People]

Tiny Happy People

Cardinality and Counting | NCETM

Counting and cardinality progression chart and suggestions for activities to try at home – download the grid

The Five Principles of Early Counting

https://www.youtube.com/watch?v=8PZSOF45NEY



Questions



Feedback



FS2 Feedback Form - How do we teach Maths at Blackwell Primary School? 18/11/2026