



EYFS Maths Workshop 2023

TUESDAY 10TH OCTOBER 2023

DEBBIE MILLS



Aims of this workshop

- ▶ To share Mastery Approach to teaching Maths
- ▶ To explain how maths is taught in Foundation Stage
- ▶ To give ideas about how you can help your child at home



The Mastery Approach

Everyone can do maths!

Our aim is to develop the belief for children that by working hard at maths they can succeed.



The Mastery Approach

A mastery approach requires that children are given time to think deeply about maths so that they understand the concept as well as the procedures.



Main Features of Mastery Teaching

- Planning small steps of learning
- Fluency and revisiting prior learning
- Use of full sentences for explanations
- Use of STEM sentences
- Varied and meaningful representations



Early Learning Goals in Reception

There are two Early Learning Goals for maths.

This is what most children in Reception are expected to be able to do by the end of their first year at school.



Number

- Subitise (recognise quantities without counting) up to 5
- Have a deep understanding of numbers to 10, including the composition of each number
- 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



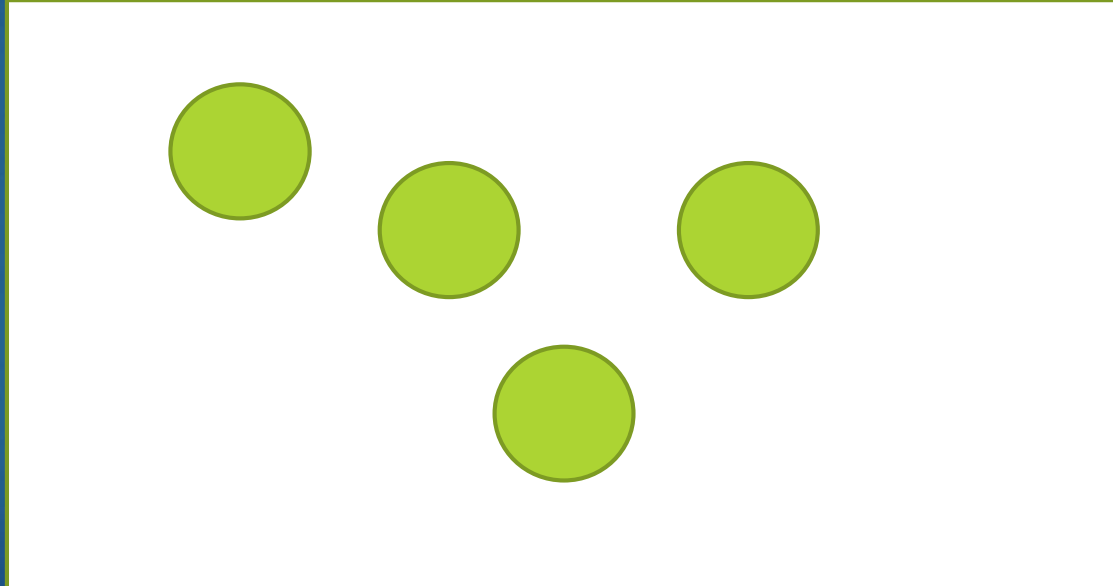
Numerical Patterns

- 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.



Subitising

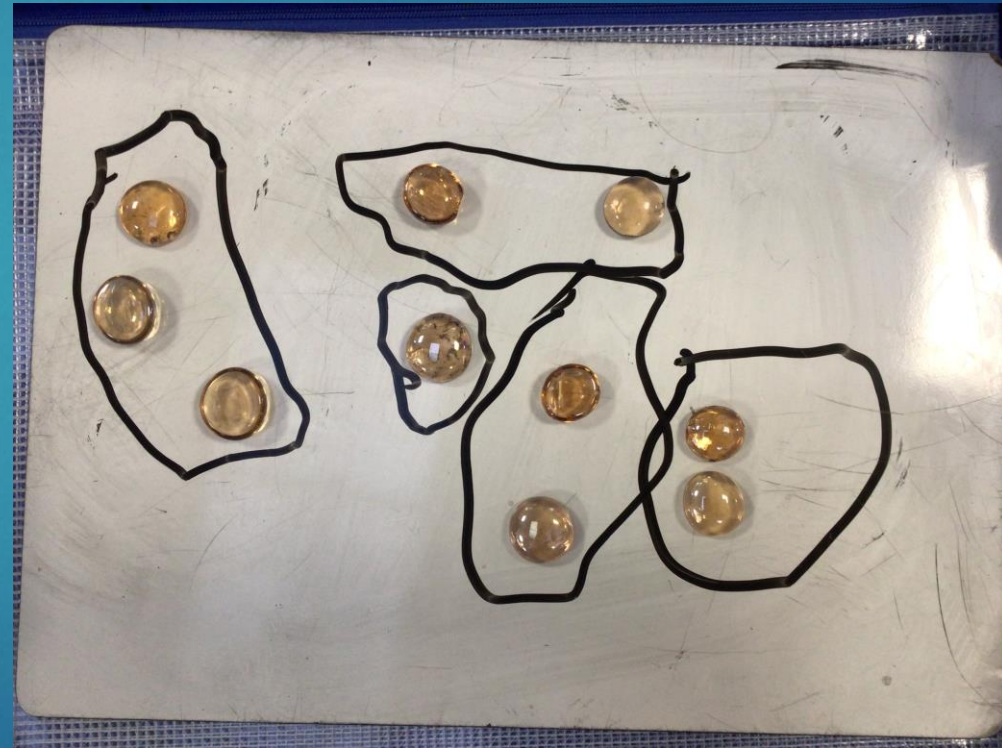
- ▶ Subitising is your brains ability to know 'how many?' without counting



STEM sentence:
“Don’t count...see the amount!”



Subitising





Subitising

Counting

Subitising



How many?



Subitising

- ▶ Counting does not make sense to young children

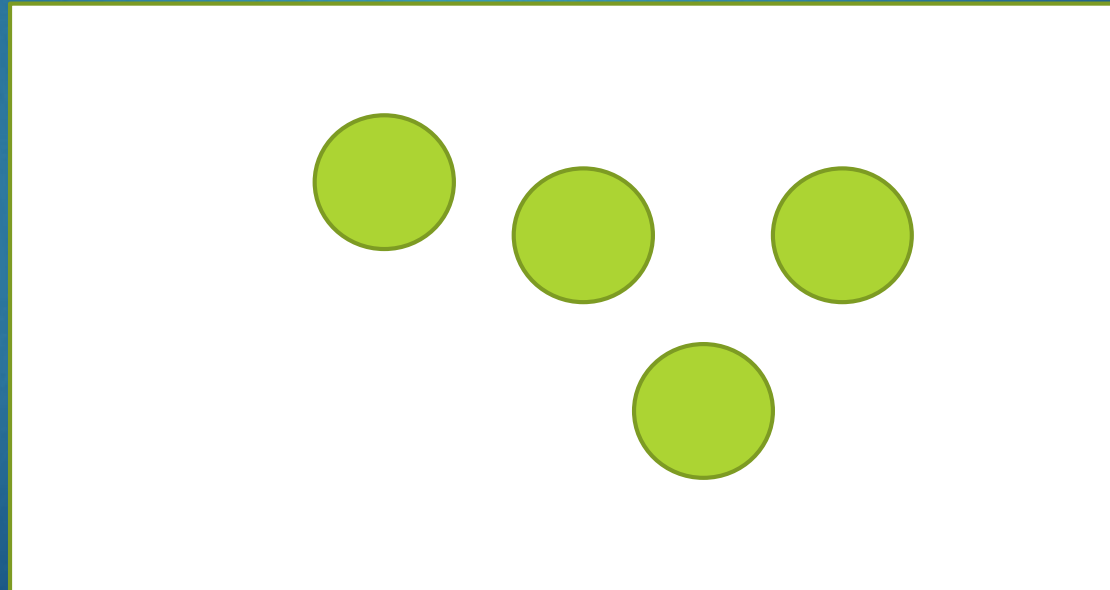
Why counting doesn't make sense to young children
webinar with Karen Wilding

https://www.youtube.com/watch?v=qtykz72u-wg&list=PL3GjErSHiQQG-pWtj_ieHae8YaBhAd5sr&index=7



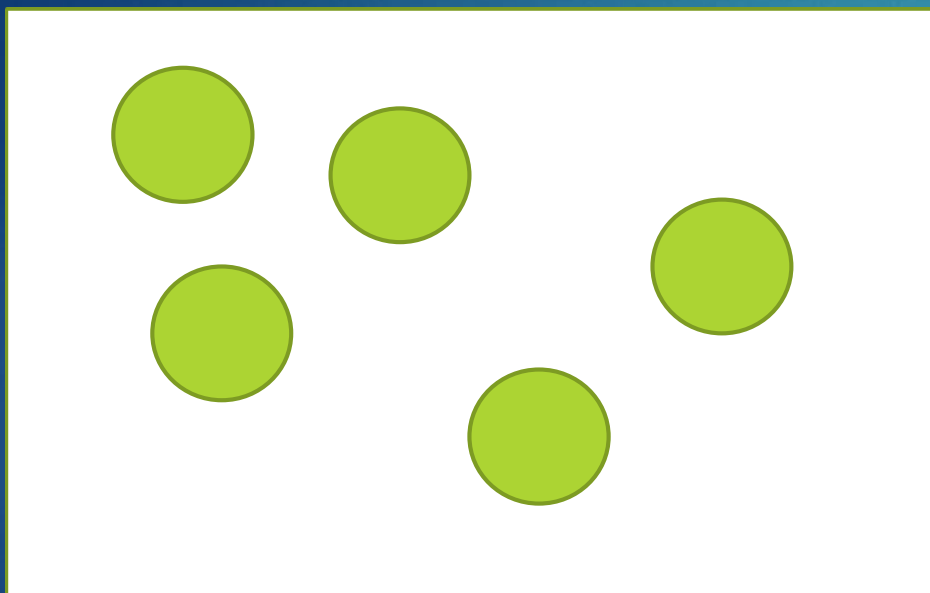
Subitising

- It is subitising, and NOT counting, that allows us to learn to calculate efficiently





Deep understanding of numbers to 10

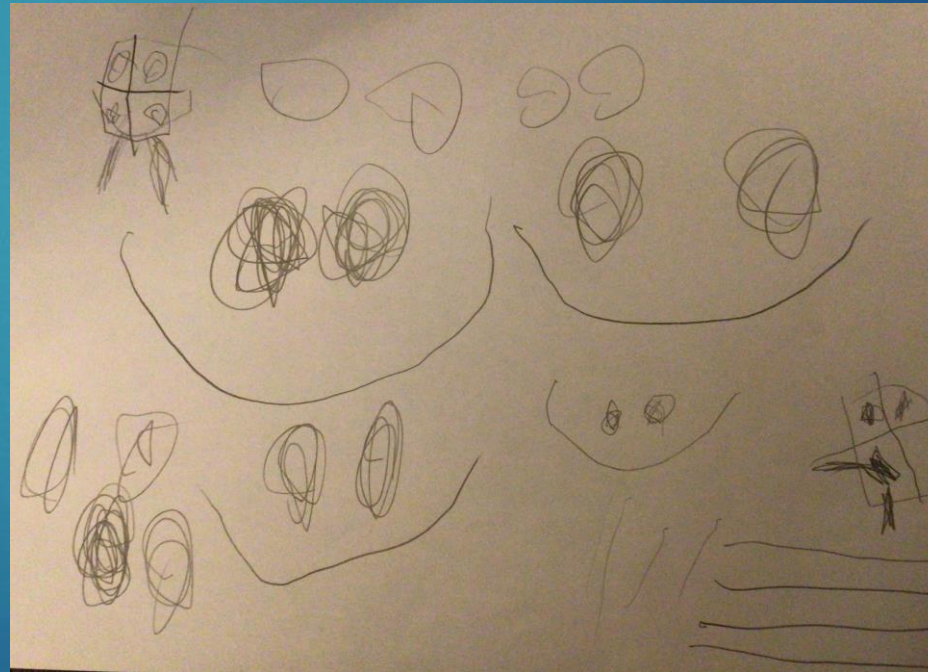
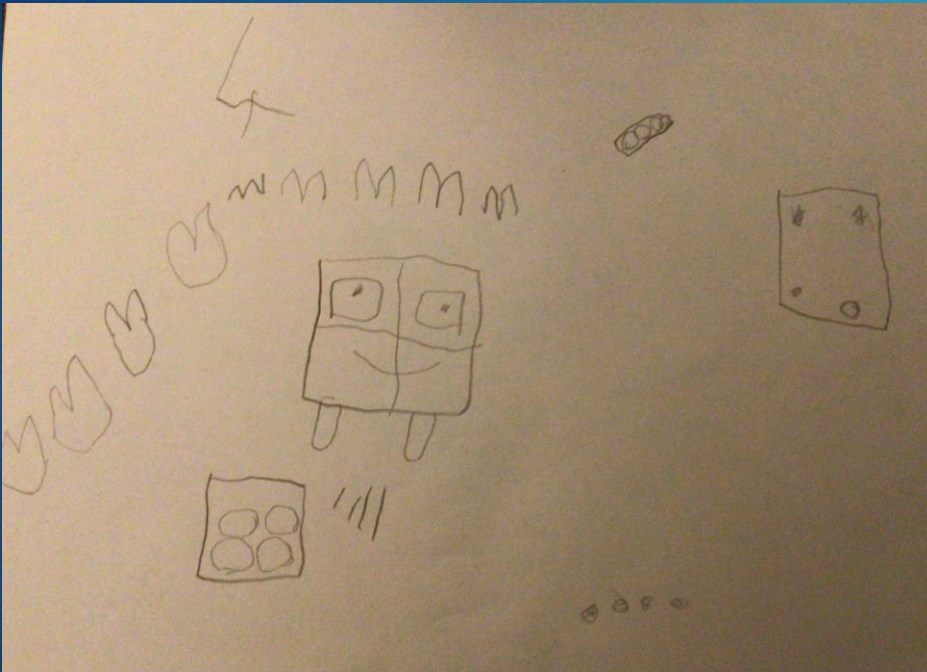


<https://www.bbc.co.uk/cbeebies/shows/numberblocks>



Deep understanding of numbers to 10

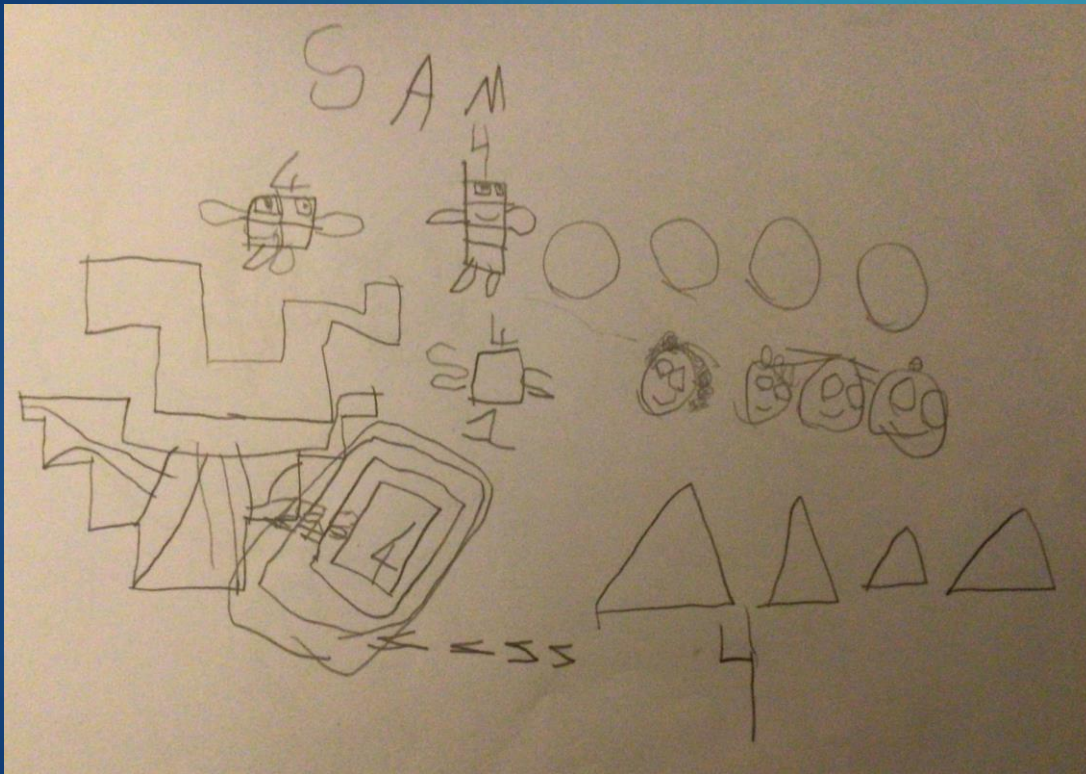
Children's drawing of representations of the number 4



I know it is
number 4
because..."

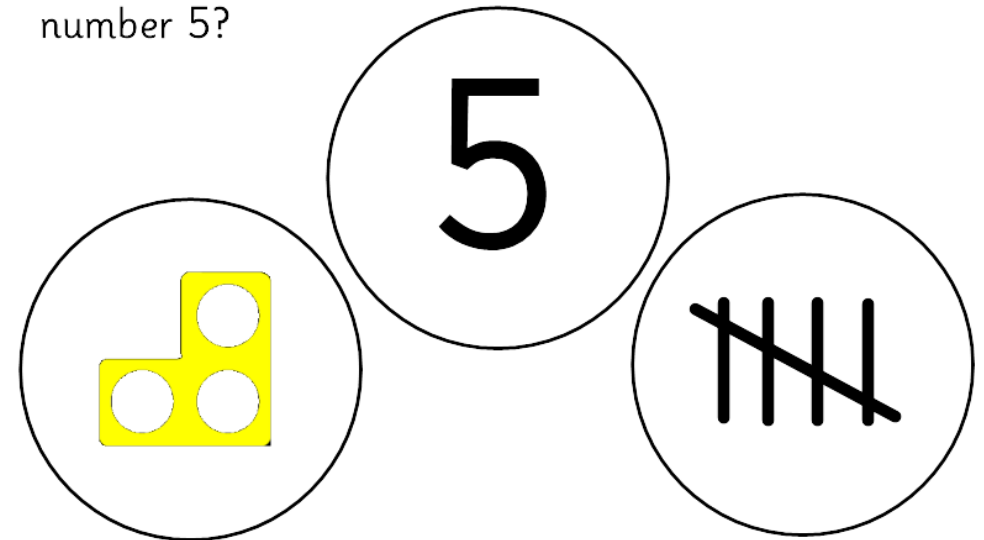


Deep understanding of numbers to 10



Odd one out!

Which one of these is not a representation of the number 5?

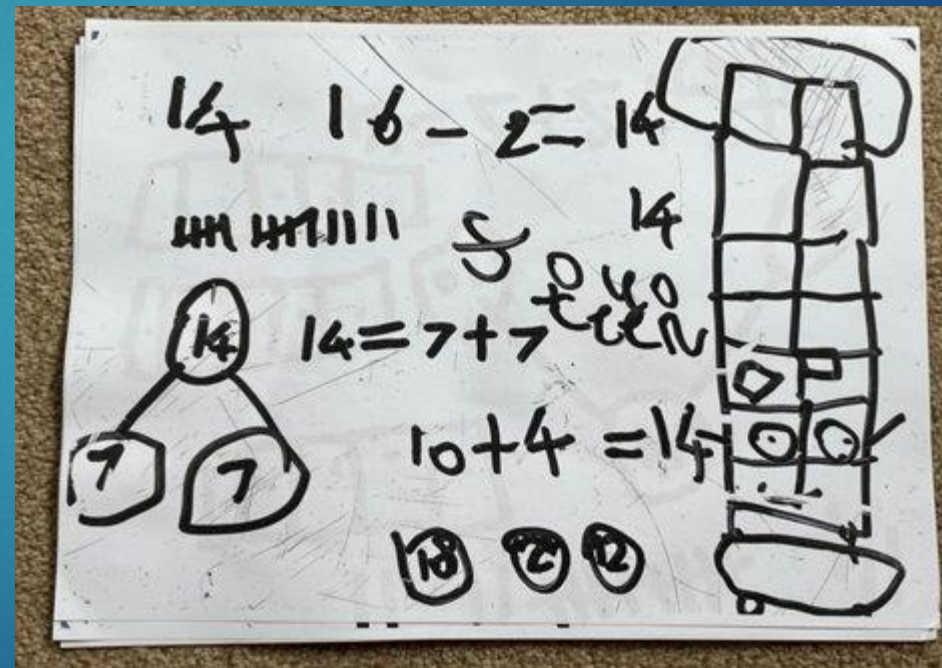
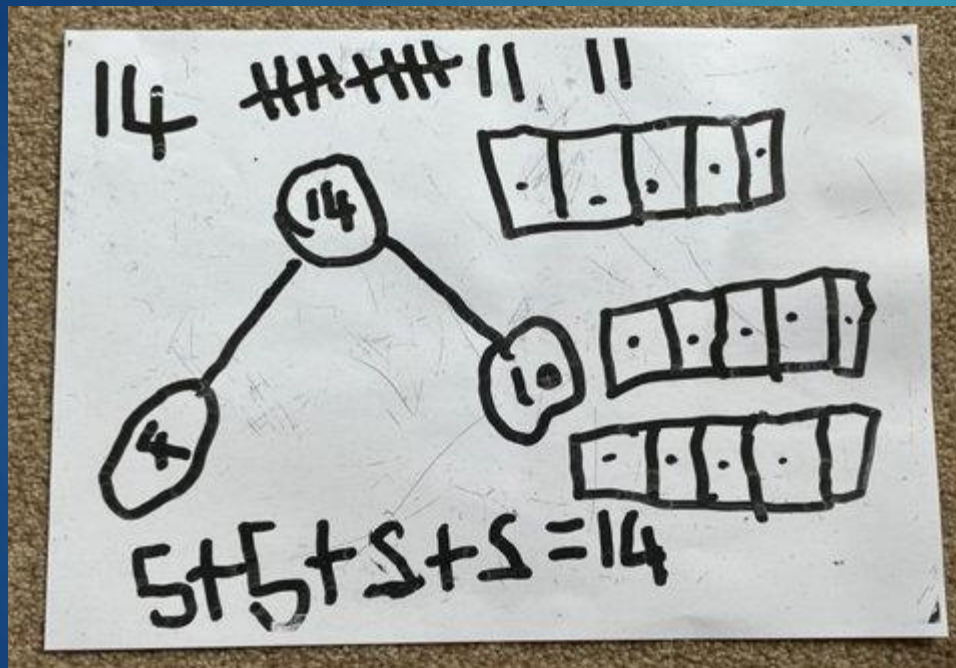


Type of activity to encourage reasoning skills and explanations



Representations beyond 10...

- Children's drawing of representations of the number 14

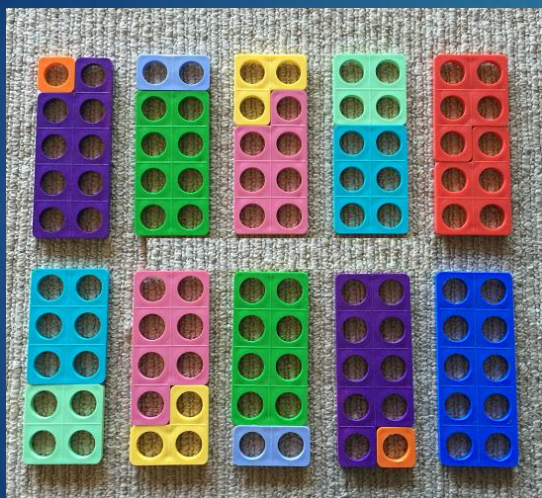


I know it is
number 14
because..."

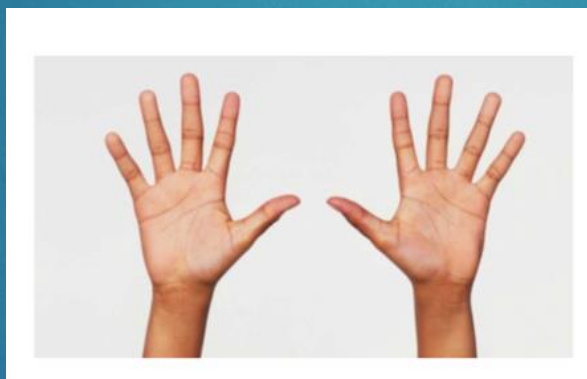


Number bonds

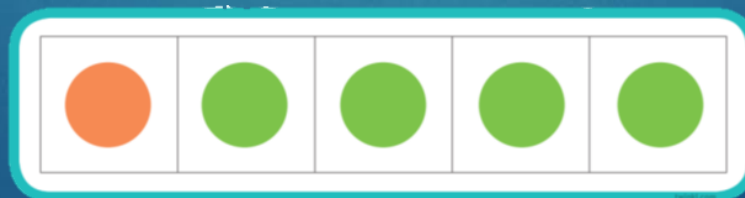
- ▶ Number bonds are pairs of numbers that can be added together to make another number e.g. $1 + 4 = 5$



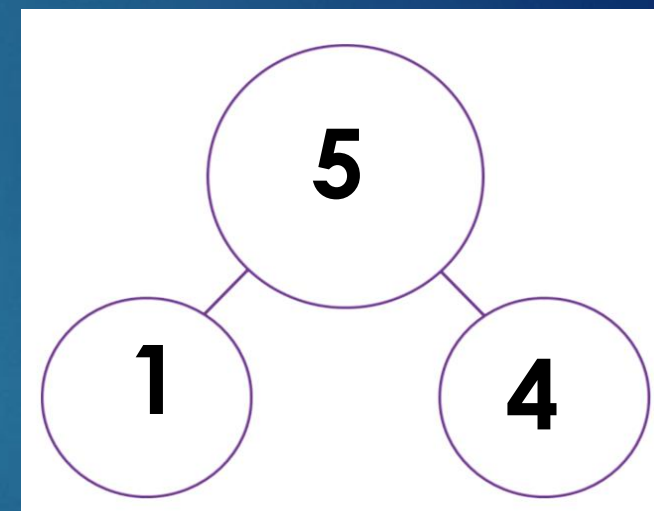
Numicon



Grow me, Show me, Throw me



5 frames



Part whole models:

“5 is made up of 1 and 4”

“1 is a part, 4 is a part, the whole is 5”

“ $1 + 4 = 5$ ”



Count beyond 20



Rocket Blast Off!

0-10/10-0
0-15/15-0
0-20/20-0
0-25/25-0

Counting Songs and Rhymes



<https://www.bbc.co.uk/teach/school-radio/nursery-rhymes-counting-songs/zn67kmn>

Opportunities for counting

- Counting jumps, steps, bounces of a ball
- Board games
- What's the time Mr Wolf?
- Hide and Seek



How you can help at home



How you can help your child at home

- Keep positive at home – everyone can do Maths ☺
- Maths is everywhere - practise little and often!
- Ask children to explain their answers to questions. Ask the question: how do you know? when they respond with an answer.
- Use the STEM sentences at home and help your child to answer in sentences when explaining their own knowledge.

Subitising (Don't count...see the amount!)

- Ask your child to be a Super Subitiser when looking at quantities to 5.
- Pose the questions: What do you see? How do you see it?
- Play games using dice/dominos and encourage children to say how many spots without counting.

Counting

- Count steps up the stairs, cars along the road, bricks in the box, bounces of a ball
- Sing number songs and rhymes e.g. 1, 2, 3, 4, 5, 10 green bottles, 10 in the bed, 5 little speckled frogs. [Counting songs - BBC Teach](#)
- Play board games using a dice (for subitising using the dice and counting moving spaces on a board), What's the time Mr Wolf and Hide and Seek.
- Practise Rocket Blast Off – jump on your launch pads 0-20, 20-0 – Blast off!

Representations of Numbers

- Display the Number Houses we send home weekly. Ask your child to explain the representations. Which number is it? How do you know? "I know it is number — because..."
- Watch Numberblocks episodes on Cbeebies/BBC Iplayer with your child and visit their website: <https://www.bbc.co.uk/cbeebies/shows/numberblocks>
- Practise drawing/finding lots of ways to represent numbers
- Spot numbers in the environment – on phones, microwaves, clocks, registration plates, doors etc.
- Practise forming the numerals using the number formation rhymes overleaf
- Hide numbers around the house or garden to find and place in the correct order.

Numberblocks number formation rhymes



One line down like a stick,
makes a 1, that was quick!



One curve down is what you do,
then straight across to make a 2



Make a curve just like me, then
one more and you've got 3.



Down and right, off once more,
cross the line, that's a 4.



Down and around, then a
line up high, high 5!



Start with a curve, round with a
swish, that's the way to make a 6.



A line in the sky, then down to the
ground, that's how lucky 7 is found.



An S to start, looking great, loop
back up and there's your 8.



A loop and then a downward
line, that's the way to make a
9!



Any questions?

If you have any concerns, worries or would like some advice, please email us.

If you have any WOW moments, please do share these with us on Tapestry.