



AVANTI HOUSE

EXCELLENCE · VIRTUE · DEVOTION

MATHS WORKSHOP YEAR 1

PRESENTATION FOR
SELECTED PARENTS
NOVEMBER 2024

Maths Mastery in Year 1

Draw what you see in your head when I say 5

Draw what you see in your head when I say 5
add 3

Draw what you see in your head when I say 5
subtract 3

Draw what you see in your head when I say 5
multiplied by 3

CPA Approach

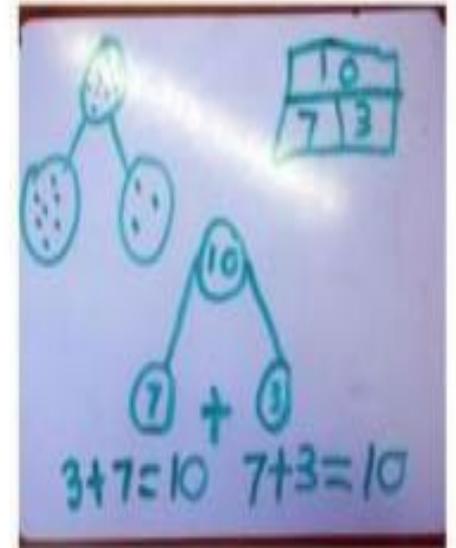
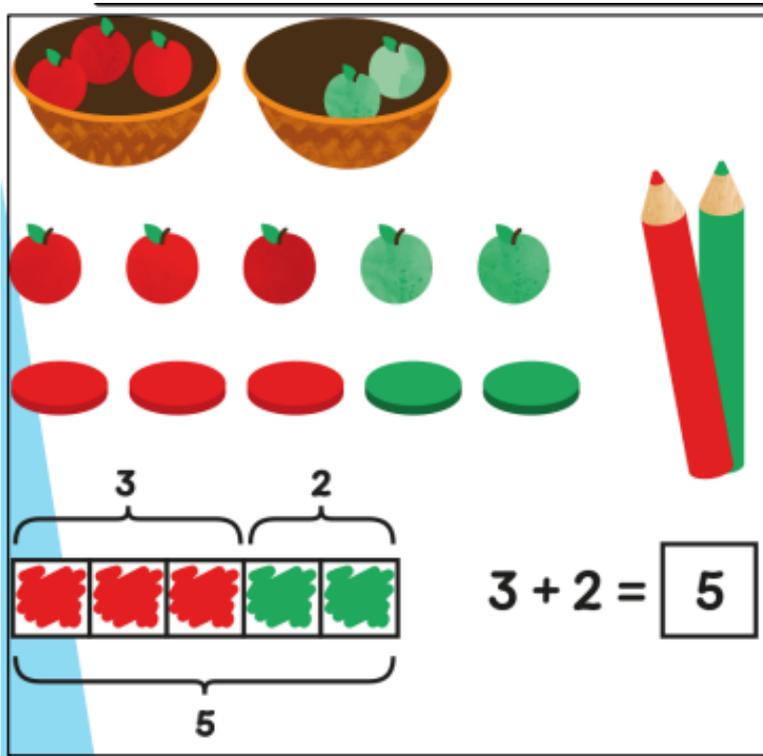


Concrete (manipulatives/hands-on)

Pictorial (pictures/models)

Abstract (numbers/equations)

CPA Approach



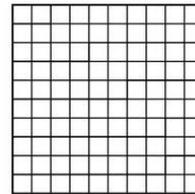
What are concrete resources?



Bead strings



Numicon

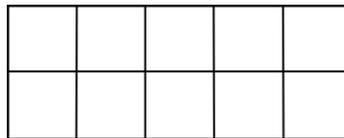


100 grids

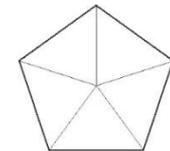
Number lines



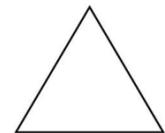
Tens frames



Shapes



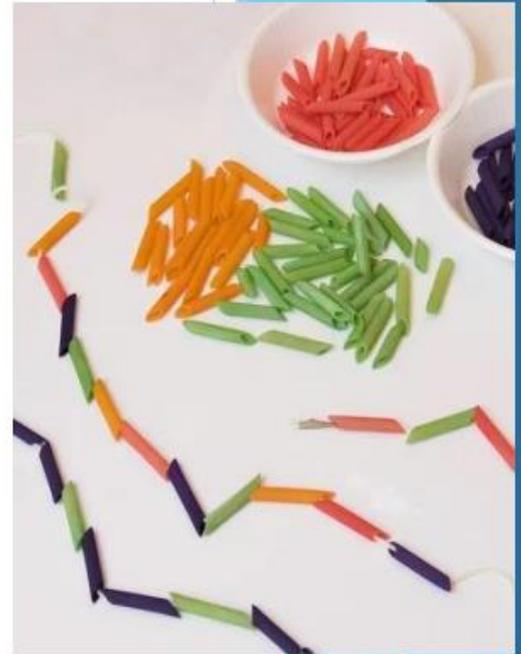
Dienes blocks

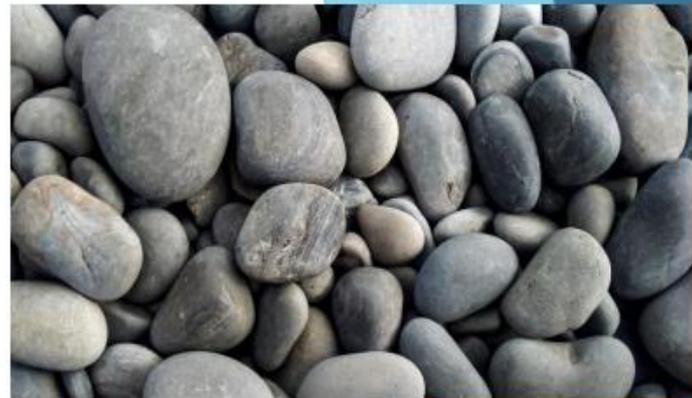


Multilink cubes



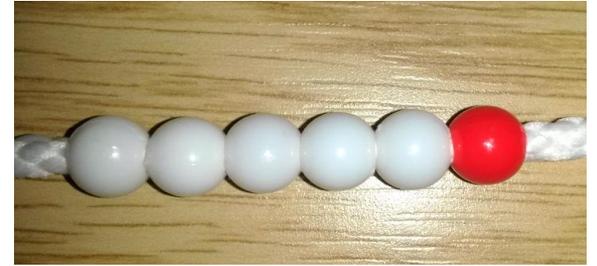
Objects to count and use as manipulatives



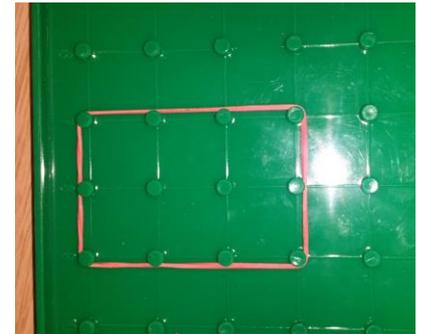


Your turn!

- Using the resources available, can you show the number 6?
- We ask the children to know all the different ways that numbers can be represented and that they have a real understanding of the numbers.



Make 6



Mathematical Language

- Sharing essential vocabulary at the beginning of every lesson and insisting on its use throughout
- Modelling clear sentence structures using mathematical language

What does Maths looks like?

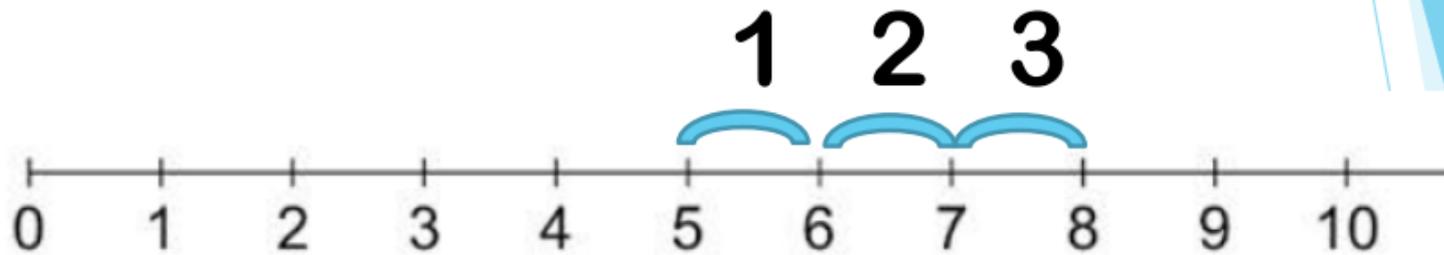


- Learning through play.
- Outdoor activities.
- Counting, counting and more counting!
- Pattern spotting
- Number recognition and ordering to 10.
- Learning numbers bond up to 10.
- Shape recognition, 2D and 3D.
- Addition and subtraction using single digit numbers.



Number line

▶ How we use it- ADDITION

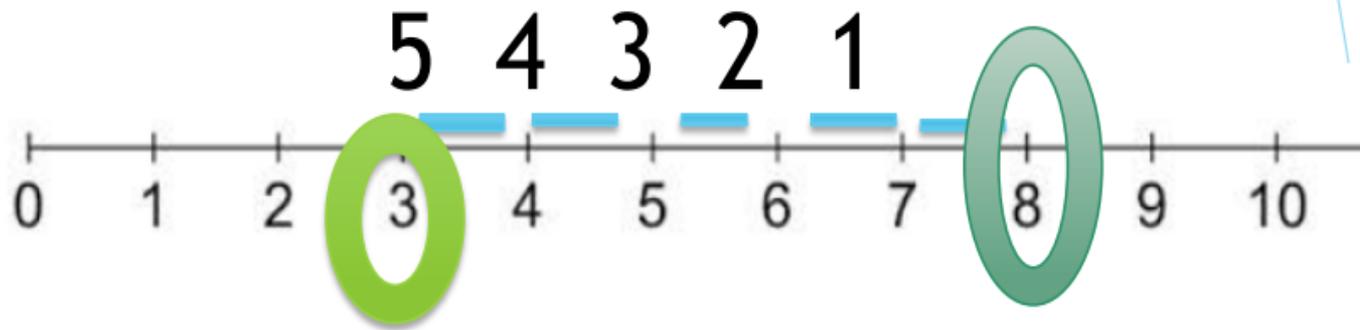


$$5 + 3 = 8$$

Jump forwards

Number line

▶ How we use it - SUBTRACTION



$$8 - 5 = 3$$

Slide backwards

Understanding Equivalence

the same as

equivalent

=

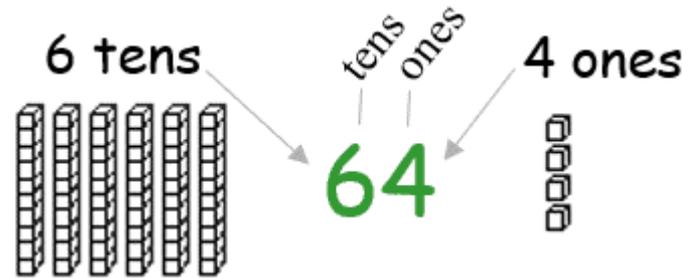
Not the answer
to a calculation!

equal

balance

Number

- Order numbers – know how many tens and ones in a number – partition using tens and ones.

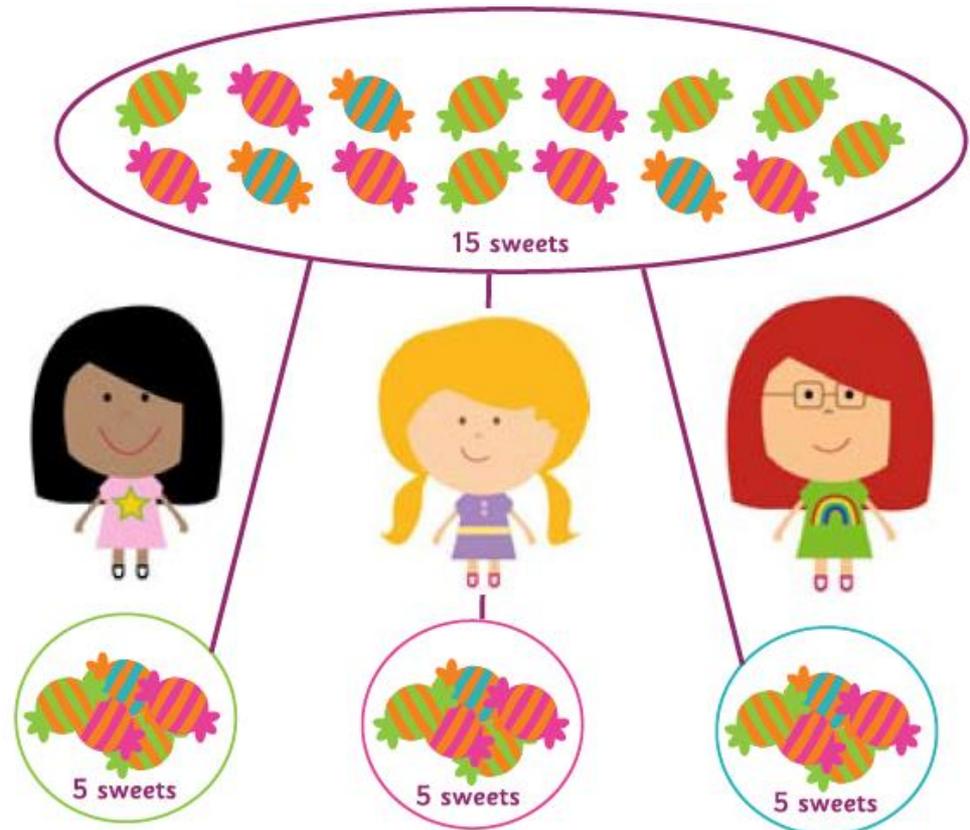
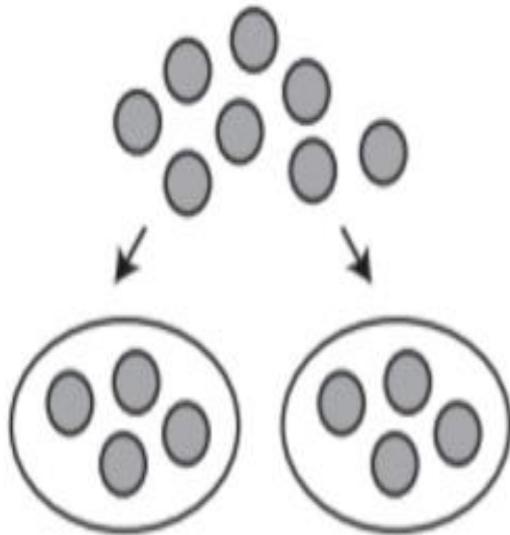


- Use a place value chart.
- Compare on a number line.

How do you know that 17 is more than 12?

How do you know that 9 is fewer than 14?

Half/share and dividing

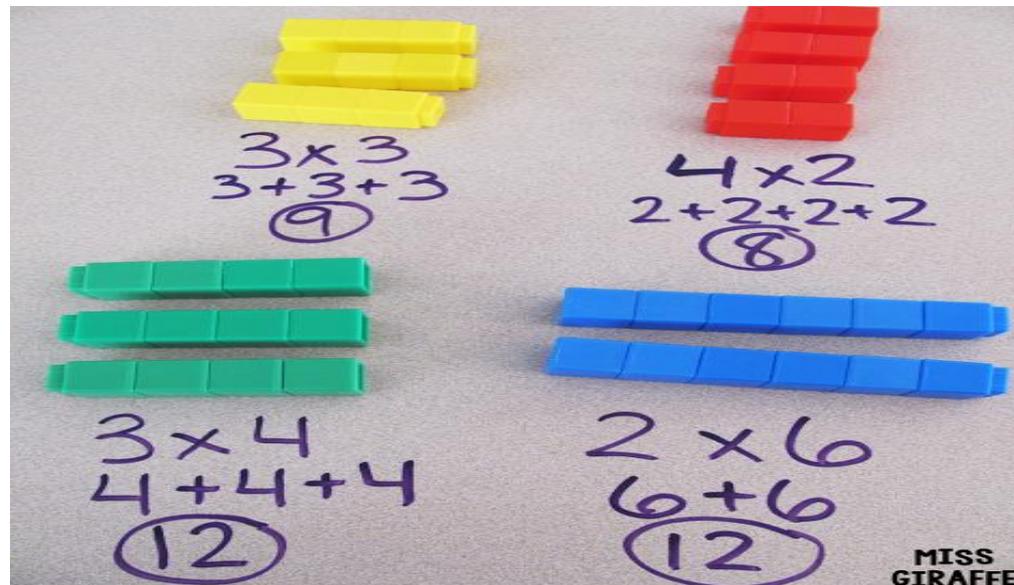


Multiplication

- In Year 1 children are expected to skip count in 2's, 5's and 10's from 0.
- In Year 2 they need to be able to skip count in 2's, 3's, 4's, 5's and 10's.
- Year 2 – repeated addition

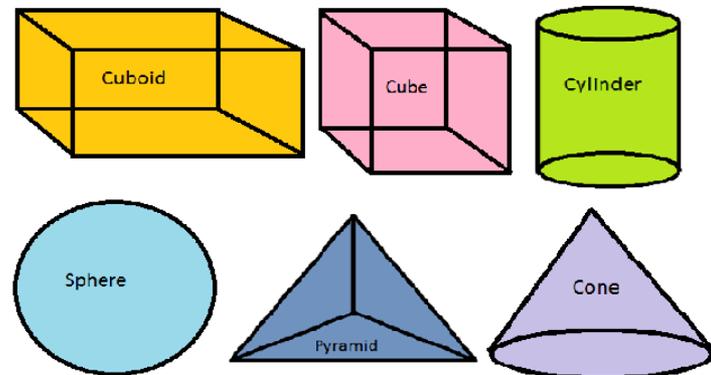
$$5 \times 2 = \quad 2 + 2 + 2 + 2 + 2 = \quad 5 + 5 =$$

- Arrays



2D and 3D shapes

- In both year groups they need to be able to name a variety of shapes.
- Say how many sides, faces and vertices that they have – this is trickier for 3D shapes.
- They need to be able to sort them by their properties.
- Know whether they are flat or curved.
- Know what 2D shapes they can see in the faces of 3D shapes.
- Direction and movement – move forward, backwards, left and right
- Positional language – on top of, behind, next to



Supporting Maths at Home



- ▶ **Door Numbers** – Odd & even numbers, place value
- ▶ **Playing Board Games** – Place value and ordering
- ▶ **Baking** – Weighing, capacity, understanding scales
- ▶ **Clocks & Time** – Encourage children to wear a watch & tell the time
- ▶ **Shopping & Working Out 'Change'** - Word problems, +, -, x, ÷
- ▶ **Food for Counting & Fractions** – Pasta shapes, pizza/cake fractions
- ▶ **Purses & Wallets** – Emptying your purse for children to count coins
- ▶ **Rubik's Cubes, Puzzles & Toys** – Get presents that challenge children
- ▶ **Internet Activities** - www.ictgames.com , www.kenttrustweb.org.uk, www.woodlands-junior.kent.sch.uk , www.kidsmathgamesonline.com , www.bbc.co.uk, [mathletics](http://mathletics.com)
- ▶ **100 square patterns / games**

What can I do at home?

- Homework – amend numbers to check understanding as well for own consolidation
- Encourage your child to talk in full sentences
- Take every opportunity to look at maths that happens around you everyday – what the time is, how long it takes to do something, using coins to pay etc.

What can I do at home?

- Count - steps up the stairs, money into a money box etc
- Ask children to say how many without counting (5 or fewer)
- Play games using dice/dominoes and encourage child to say how many spots without counting.
- Ask children to set the table with enough knives, forks and plates for everyone.
- Spot numbers in the environment – on phones, microwaves, clocks, registration plates, doors.
- Ask children to think of their own representations for numbers eg one of them, two hands, three bears, four wheels on a car, five toes, six sides on a dice, seven dwarves, eight legs on an octopus etc.

What can I do at home?

- Watch Numberblocks on CBeebies. This programme is written by maths specialists to model maths concepts and represents number brilliantly. Also, Numberjacks is excellent for solving problems.
- Hide numbers around the house or garden for children to find.
- Play outdoor maths games like hopscotch and skittles. Even better, let children make up their own games and decide how to score points.
- Read books with maths concepts eg The Very Hungry Caterpillar, One is a snail, ten is a crab, What's the time, Mr Wolf? The doorbell rang.
- Draw attention to more and less.