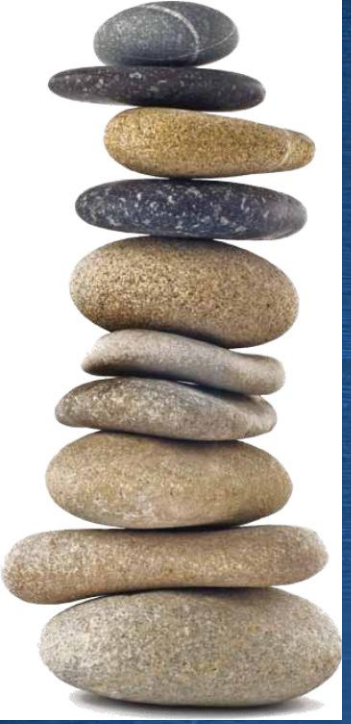
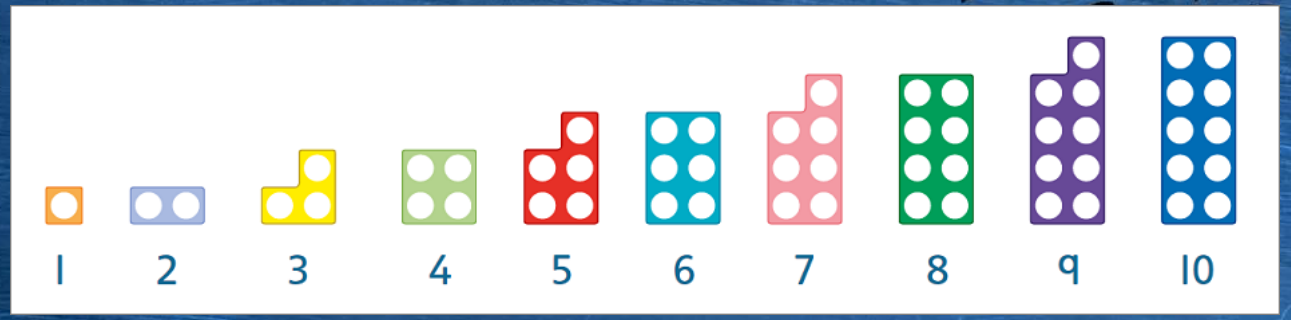
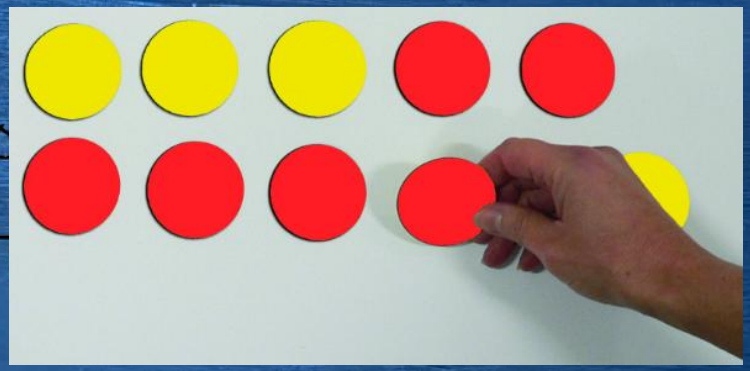
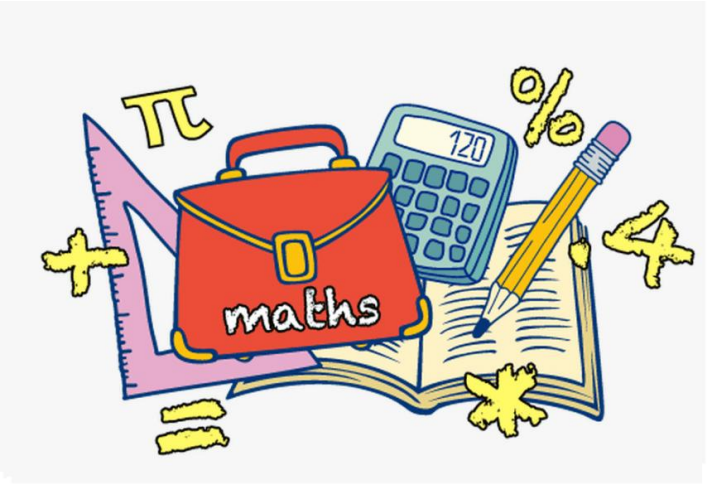


WHAT MATHS LOOKS LIKES IN EYFS AND KS1



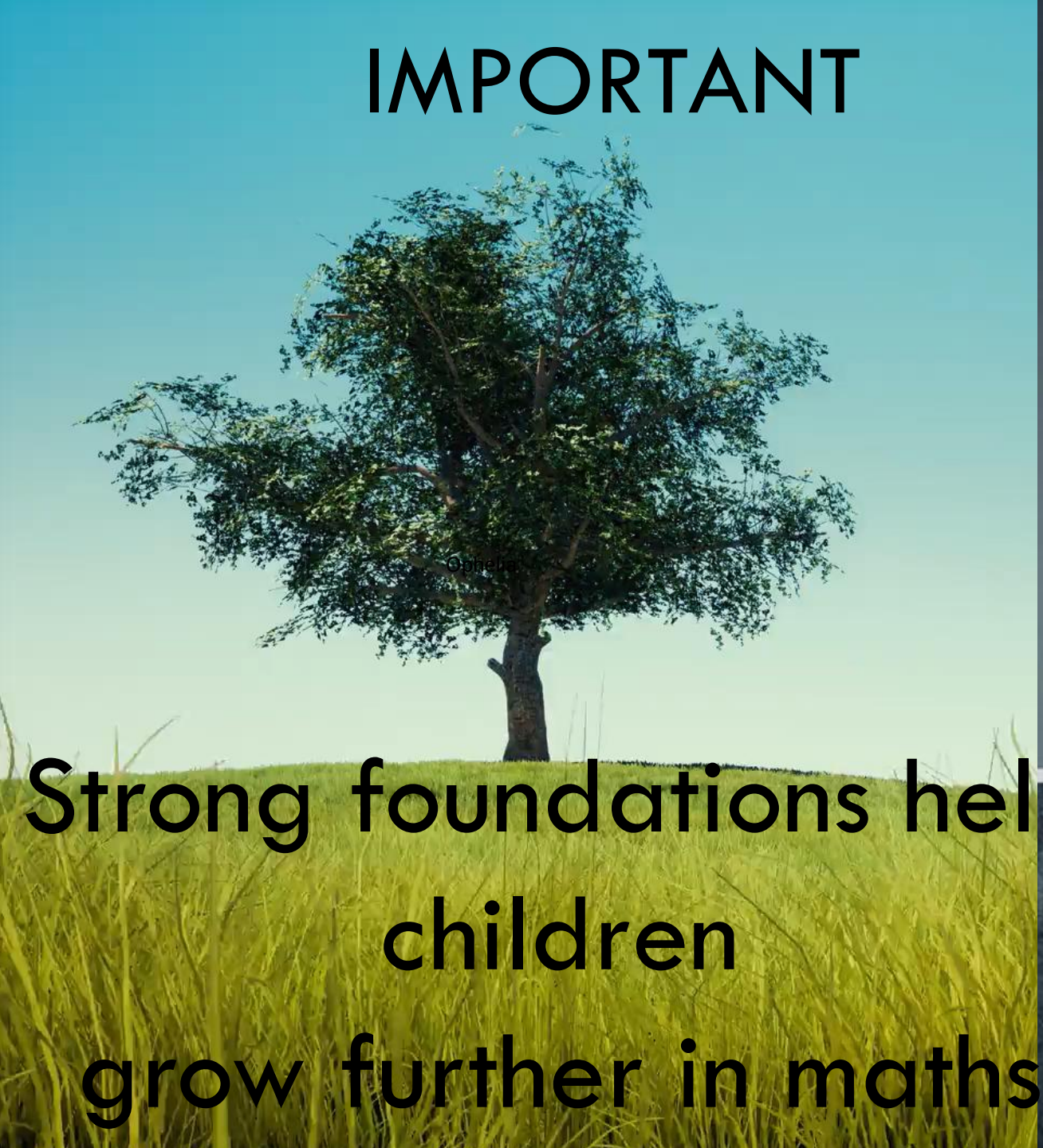


OUTCOMES

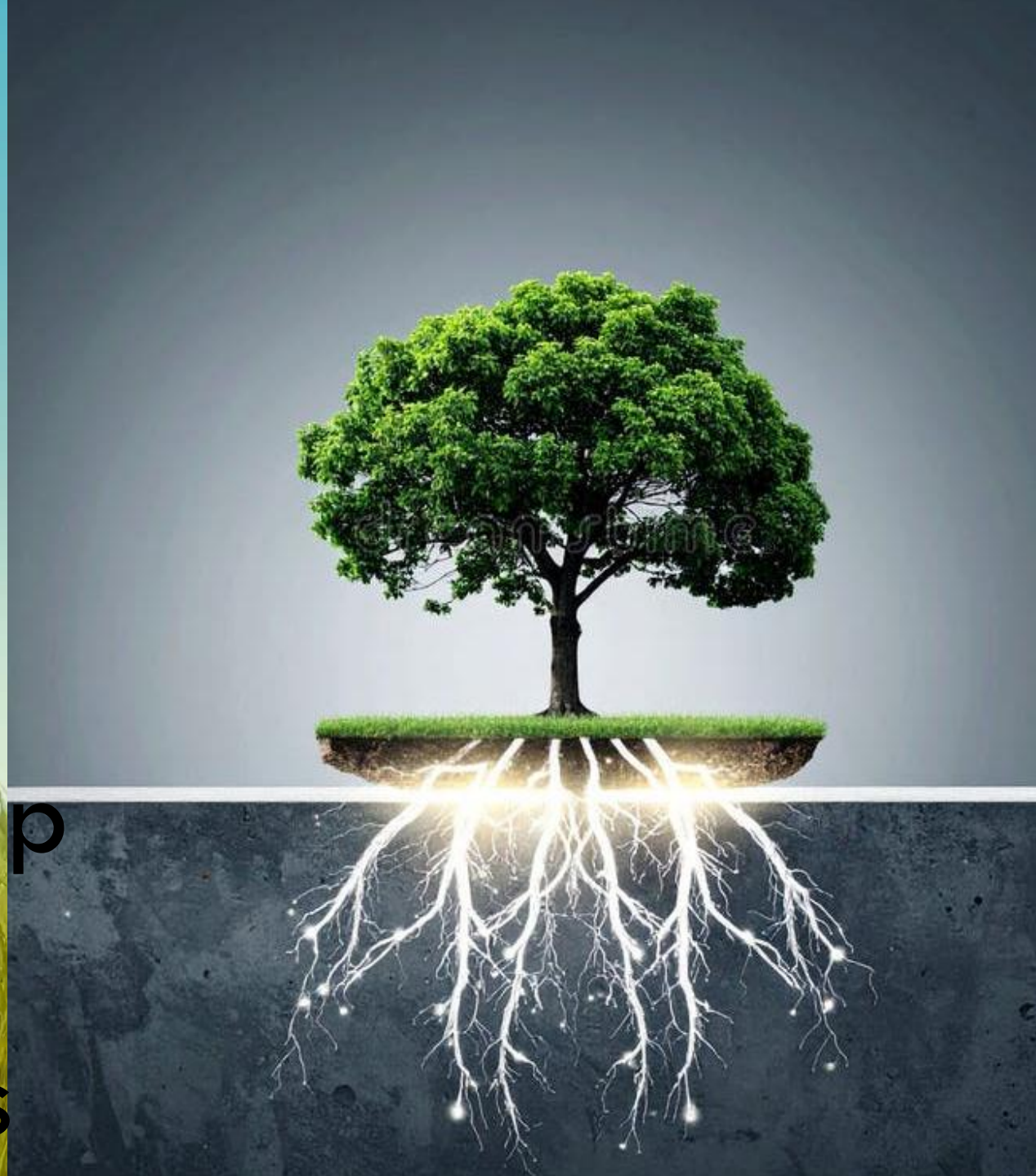


- What maths looks like at school
- What you can do at home to support your child.
- Look at the number part of the curriculum
- There are other parts, such as time, measure and statistics
- With a deep understanding of number the children will have a better understanding of the other areas.

IMPORTANT



Strong foundations help children grow further in maths



EARLY LEARNING GOALS

Mathematics

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.

WHAT IS A NUMBER?

- In Reception, we spend a lot of time teaching children how numbers are made up

- Children learn the composition of each number up to 10

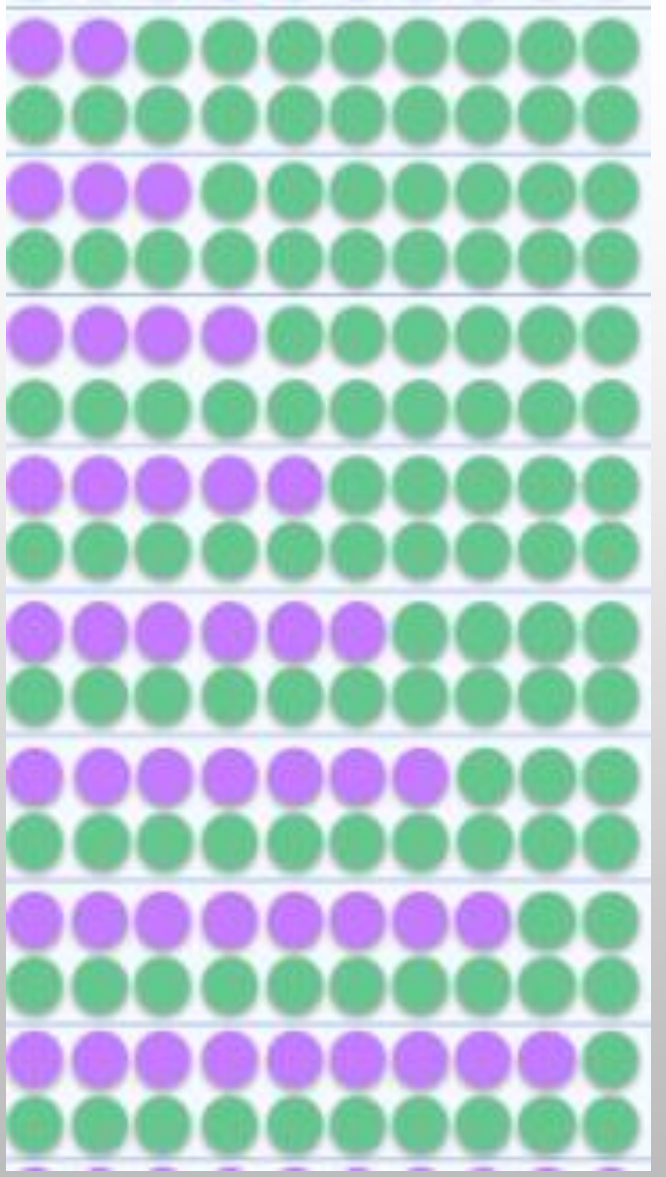
- The Early Learning Goal (ELG) expects children to have a **deep understanding** of numbers to 10

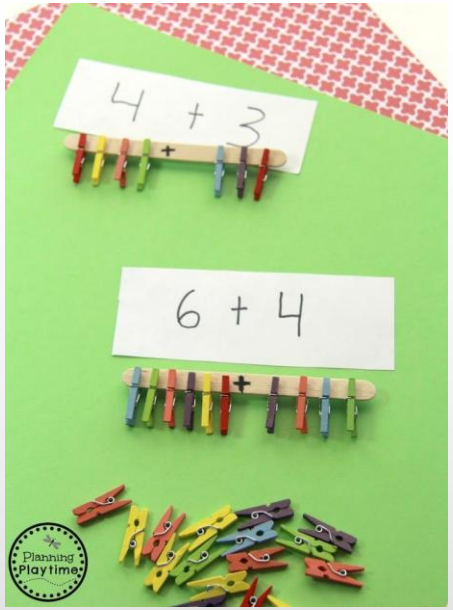
- This includes learning **number bonds** (how numbers can be split and combined)

- Children are also taught **one-to-one correspondence** (matching one object to one number)

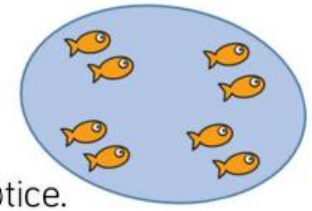
WHAT IS A NUMBER?

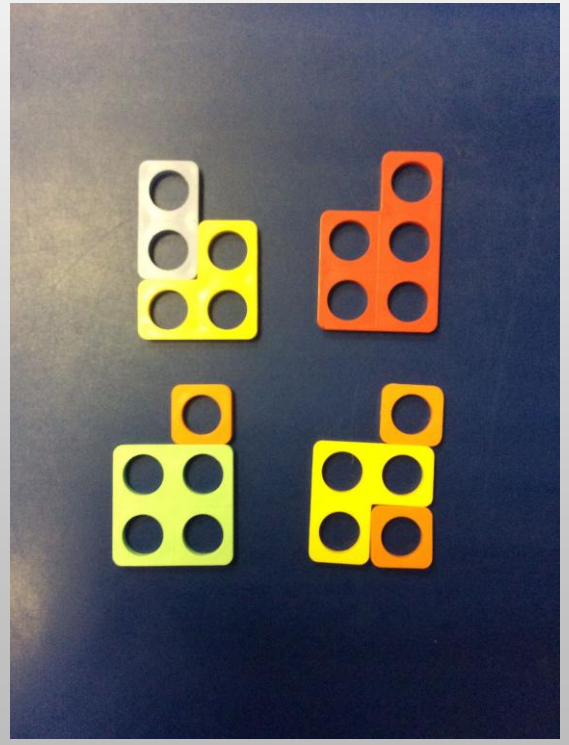
- In **Year 1**, children learn the composition of numbers up to **20**
- In **Year 2**, children extend this understanding to numbers up to **100**
- It is vital that children have a **deep understanding** of numbers to **20** by the end of Year 1
- This includes secure knowledge of **number bonds** (how numbers can be split an combined)

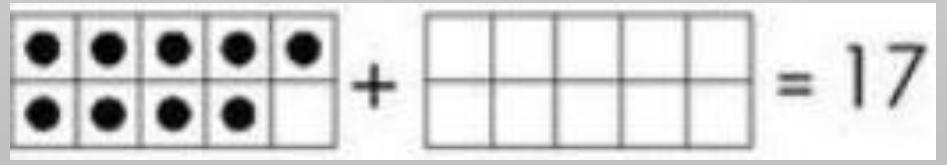




Provide each child with a blue 'pool' and 8 fish. Ask them to arrange their fish into pairs.
Ask the children what they notice.
Ask the children to arrange their fish in a different way and to discuss the different compositions of 8 that they notice.

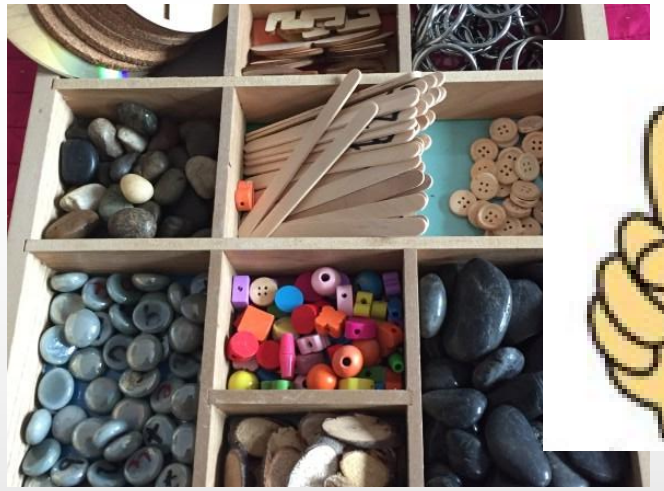


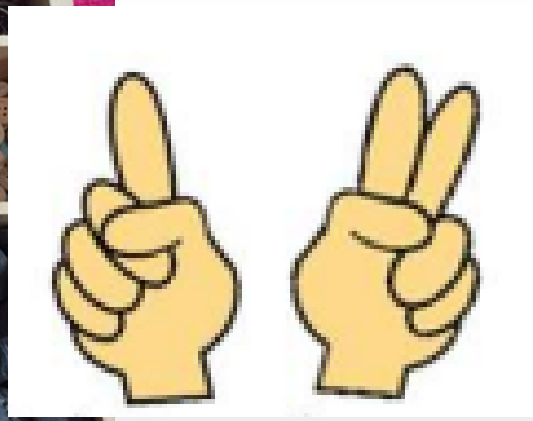




What other ways

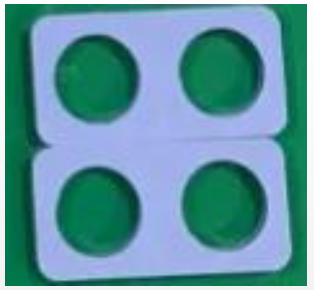
- Ask your child to show a number in **different ways** to demonstrate their understanding
- Use everyday objects around the house (e.g. apples, toys, pasta)
- Let your child choose objects they enjoy to make it more interesting
- You don't even need to tell them it's **maths**!

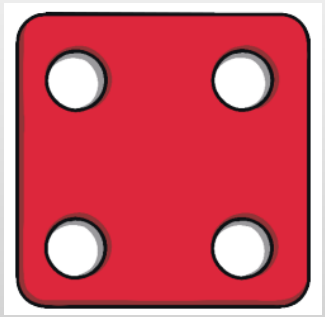


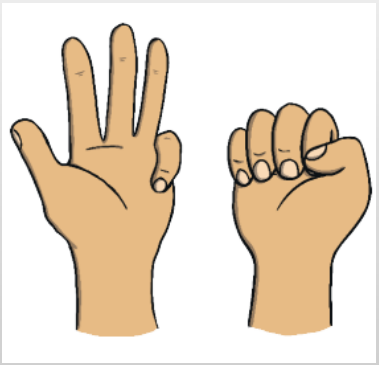


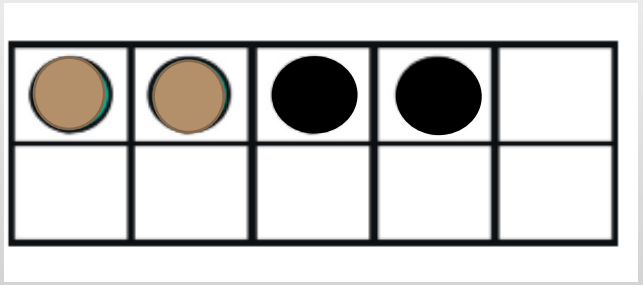
Number recognition

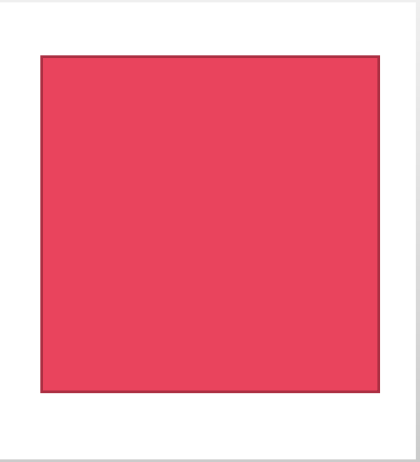
We teach the children that all these things mean the same thing to represent a number.

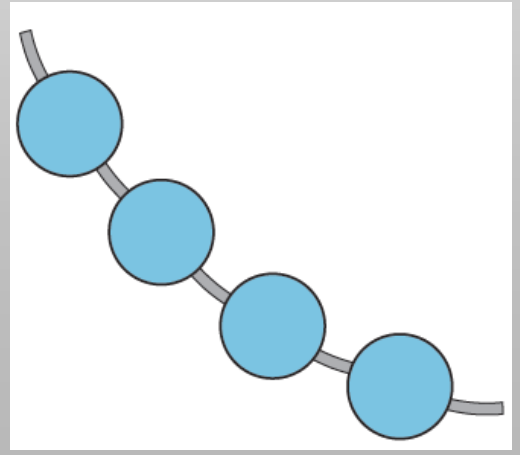


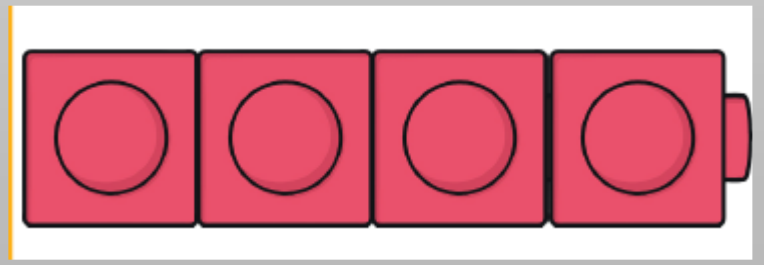


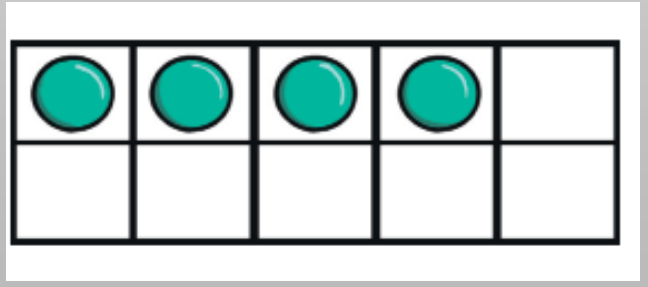






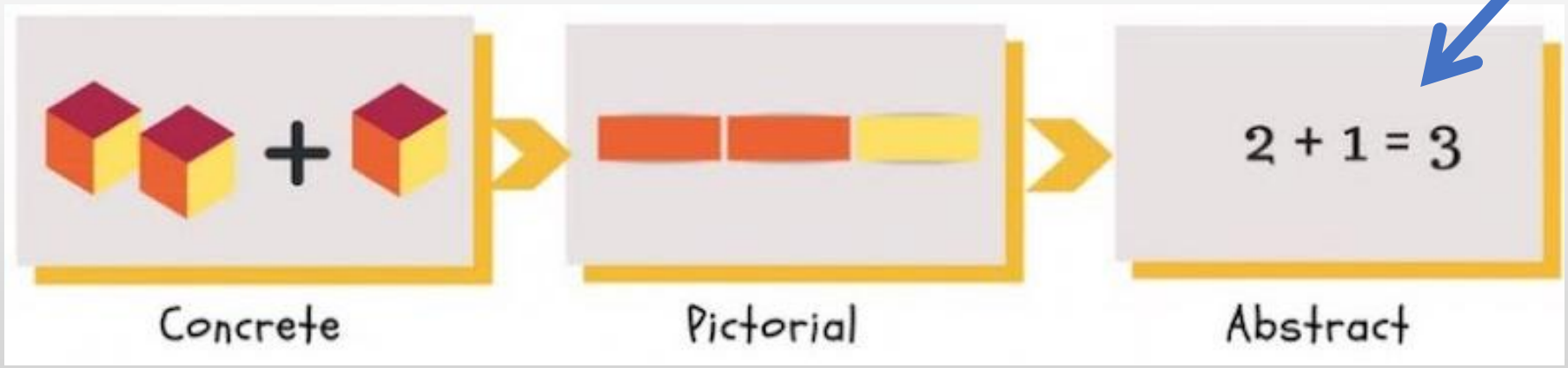






C.P.A

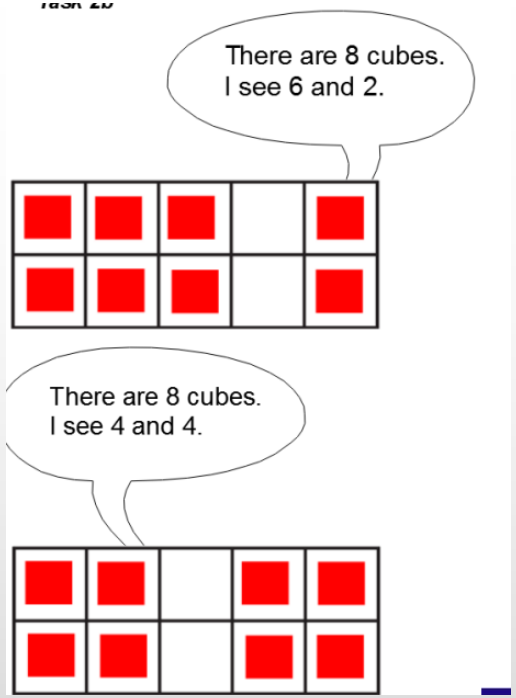
- This is the least important of all of them.

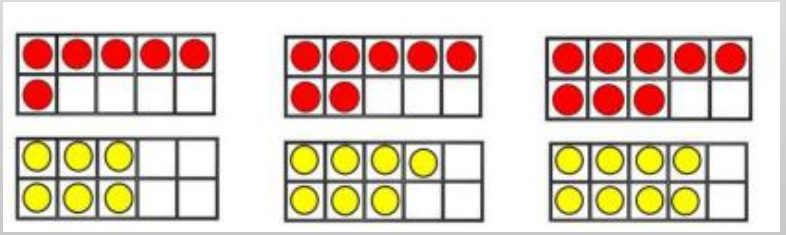


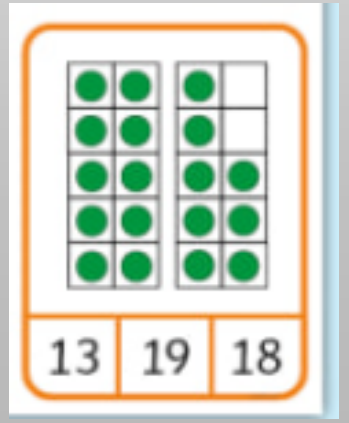
They have to know the first two steps with a deep understanding before moving to the abstract.

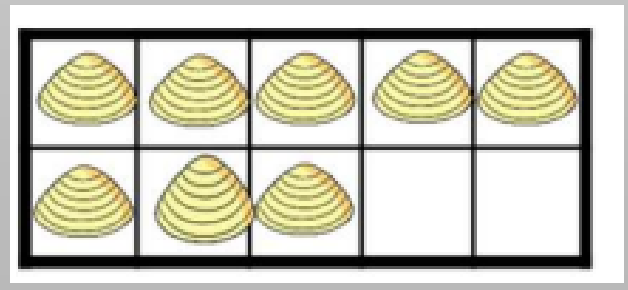
Ten frames

- We use **ten frames** to help children see how a number is built
- Children discuss what they notice about the ten frame
- This includes how many squares are **filled**
- And how many squares are **empty**



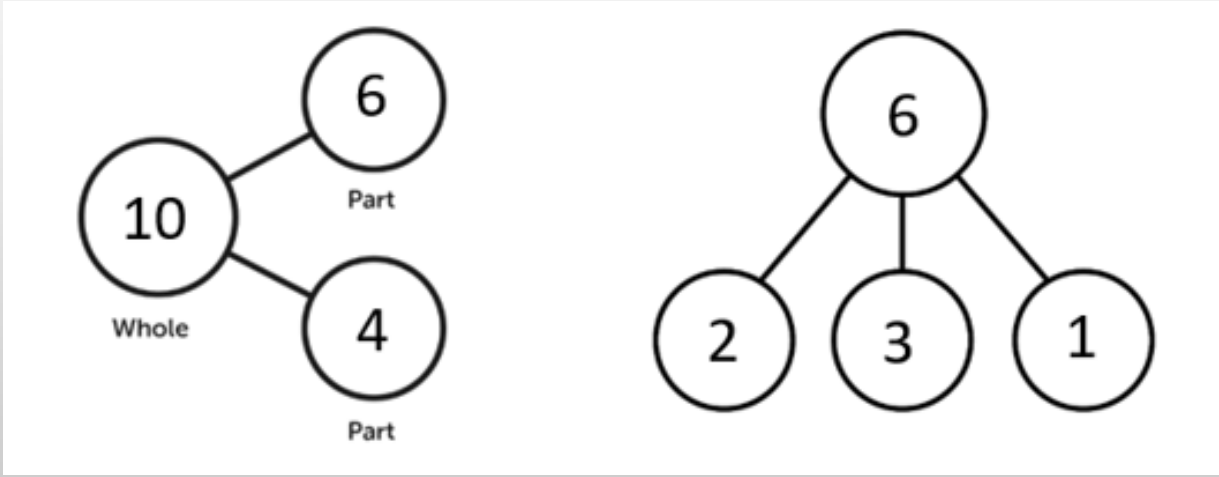




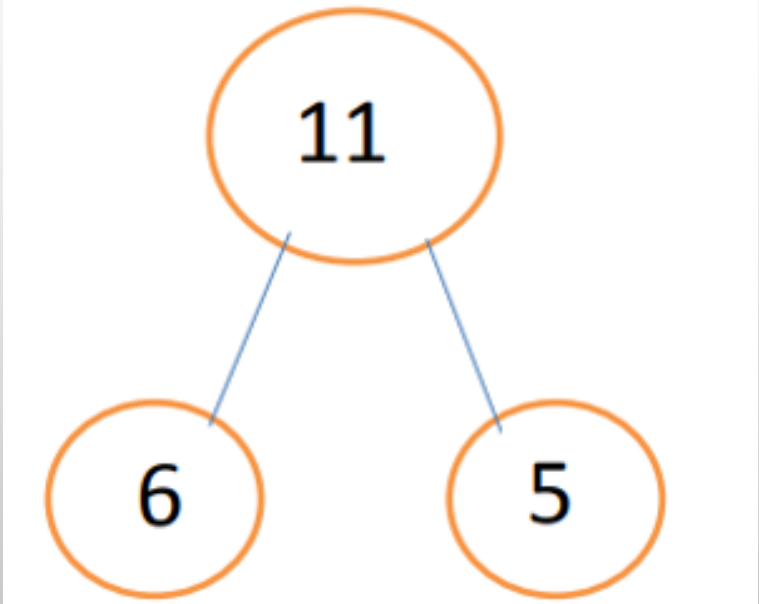


Part whole model

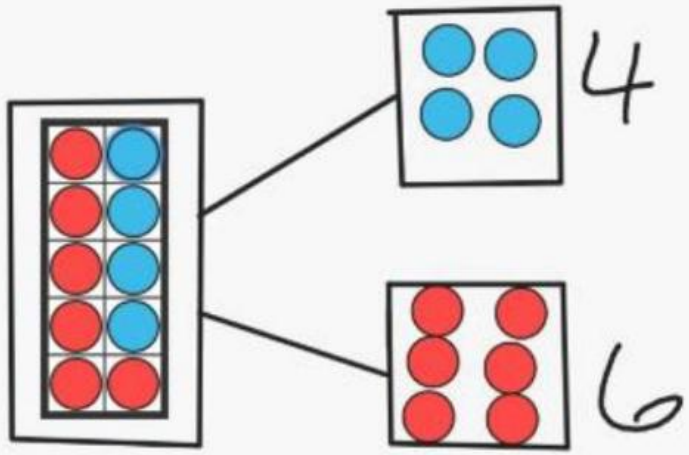
- We use **part-whole models** to show how a number is composed
- Understanding **number composition** is vital for all areas of maths
- At home, you can use **toys, stones, pasta**, not just digits
- This is one of the **most important activities** to help your child understand number



11	
6	5



My whole is 11. One part is 6 and the other part is 5. 6 plus 5 is equal to 11.



4 + 6 = 10

10 = 4 + 6

10 - 4 = 6

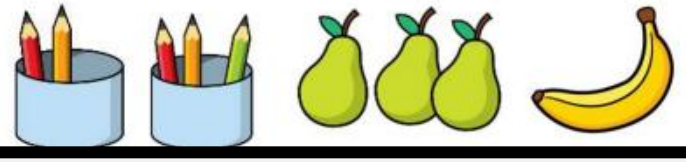
6 = 10 - 4

My whole is 10. One part is 6 and the other part is 4. 6 plus 4 is equal to 10.

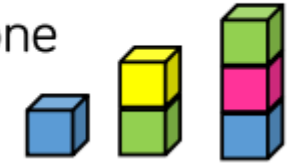
Comparing Numbers

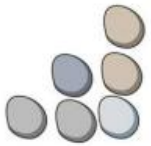
- It is important for children to understand the **relationship between numbers**
- This helps them see how numbers connect and relate to each other
- There are lots of ways to support this learning at home
- You can use **any everyday objects** to help explore number relationships

Using a range of real objects in different contexts ask the children to compare sets. Which set has more? Fewer? Can you find 2 sets with the same amount?



Represent the patterns using bricks or cubes to support the understanding that each number is one more/less than the number before.

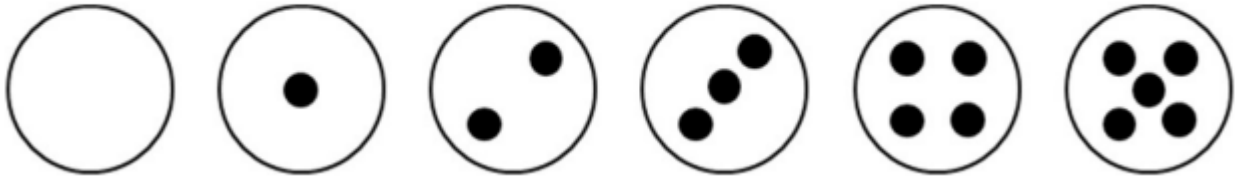




Loose Parts

Provide an assortment of loose parts for the children to build their own one more/one less patterns.

Provide children with dot plates or cards from 0 to 5

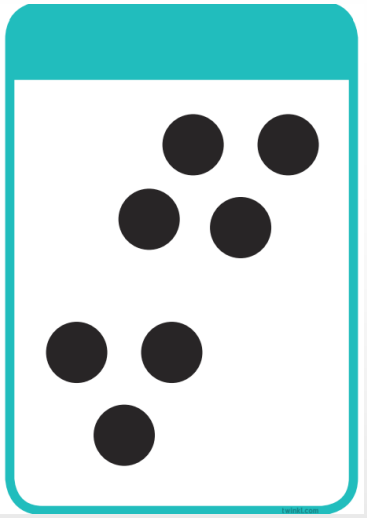


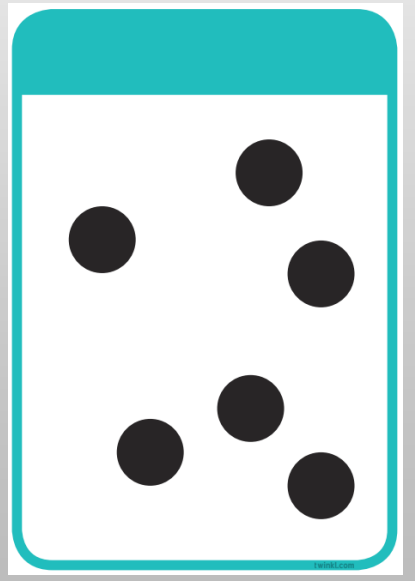
Subitising Numbers

- **Subitising** is recognising how many objects are in a group **without counting.**

- Children may start with familiar arrangements, like **dots on a dice.**

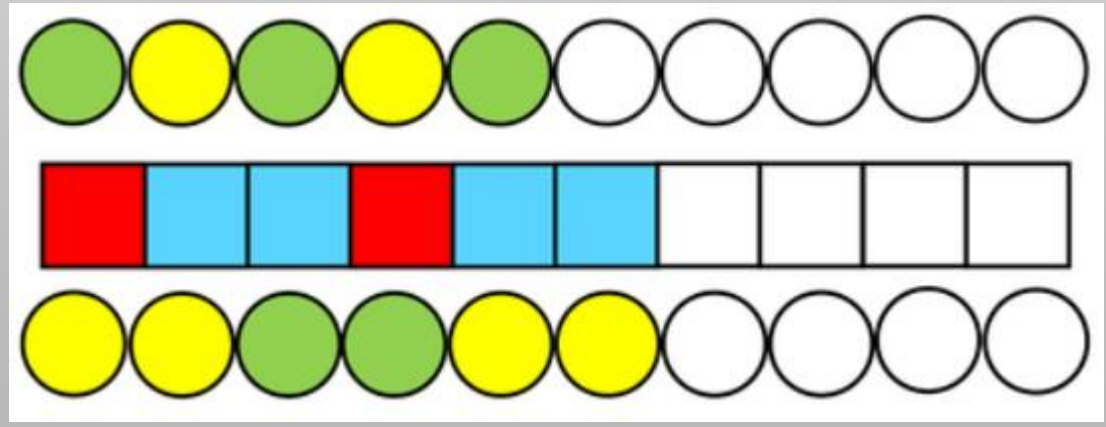
- Later, they practice with **dots in different arrangements.**





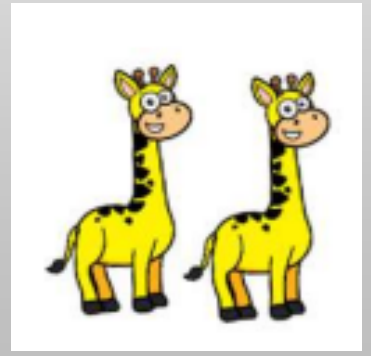
ABBA, ABAB- Patterns

- **Understanding patterns** is a key part of maths
- Patterns help children see **rules and relationships**
- Children can then **connect patterns to numbers**
- You can make patterns at home using **any object**



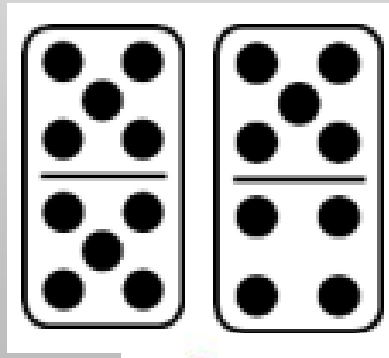
Making pairs

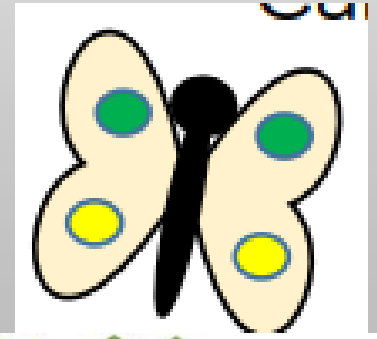
- Help children understand number **patterns** by exploring **odd and even numbers**
- Use everyday objects, like **socks or toys**, to make pairs
- Ask your child: if there is an **odd number**, what do they notice?
- This helps them **see patterns and relationships** in numbers



Doubles

- Children need to understand that **double** means the same amount added together
- Encourage children to **explore doubles** using real objects and practical equipment
- Examples include: **dominoes, dots on paper, building towers, or using toys**





Near Doubles

- After learning **doubles**, children move on to **near doubles**
- Near doubles build on children's **existing number knowledge**
- Having a **basic understanding of numbers** is important before progressing

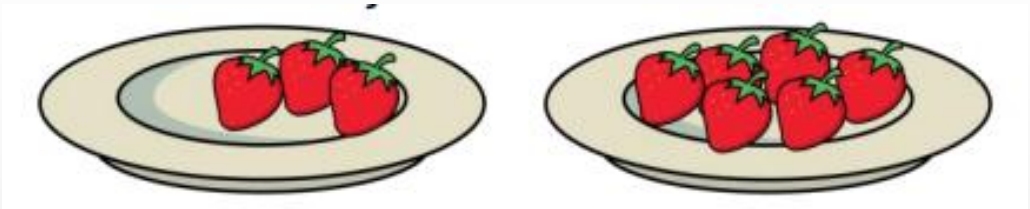
- **4 + 5 =**

7 + 8 =

1 + 1 = 2	6 + 6 = 12
2 + 2 = 4	7 + 7 = 14
3 + 3 = 6	8 + 8 = 16
4 + 4 = 8	9 + 9 = 18
5 + 5 = 10	10 + 10 = 20

- **What do we already know?**
  What can we use to help us?

Sharing and EYFS



- Children should be able to **share and group objects equally**
- Each part must have the **same amount**
- Provide opportunities to **practice grouping** in different contexts:
- Give each gingerbread man 3 buttons
- Place 5 cars on 3 plates
- Arrange pebbles into groups of 2 or 3

Adding

- Adding shows that the **quantity of a group changes** when more is added
- Use the **"First, Then, Now"** structure to explain addition:

❑ **First** you had 4

❑ **Then** we added 3

❑ **Now** we have 7

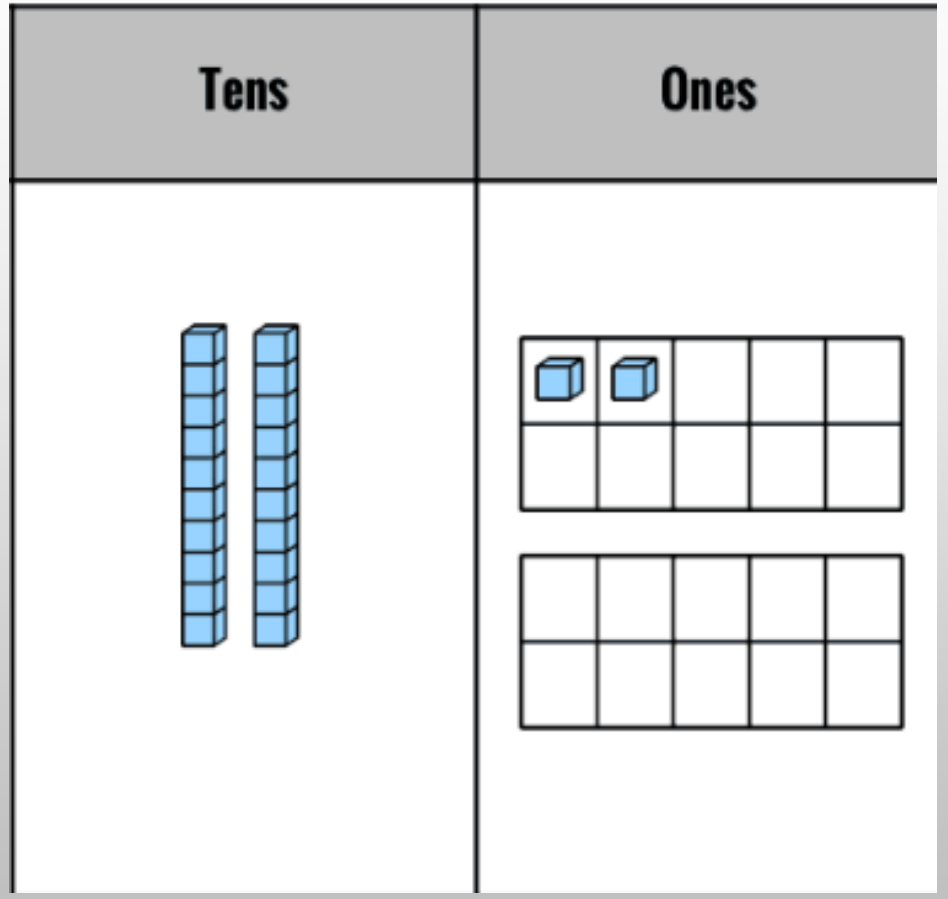
- This approach can be used in **many different contexts**
- Some children may need to **re-count all items** to find the total
- Support children to **count on** when ready (e.g., 4, 5, 6, 7 → now we have 7)
- Children can also use **fingers, ten frames, or a number line** to help add
- **No need to know "+" or "=" signs** in EYFS (introduced in Year 1)
- Use the language of **add / plus** and **equal to / same as / total**

Subtracting

- Help children understand **subtracting** using fingers or objects
- Example: Show 5 fingers, then 4 → notice **one less = taking away one**
- Extend to taking away 3, 4, etc., and observe how many are left
- Children can **physically remove items** and then **count or subitise** the remainder
- **No need to know "-" or "=" signs** in EYFS (introduced in Year 1)
- Use the language of **take away / minus / subtract** and **equal to / same as**

Place value- KS1

- Children need to understand **place value** – a vital part of maths
- Knowledge of place value **supports nearly all other areas of maths**
- Important for children to know the **next ten**:
- Example: 29 → next ten is 30
- Example: 49 → next ten is 50



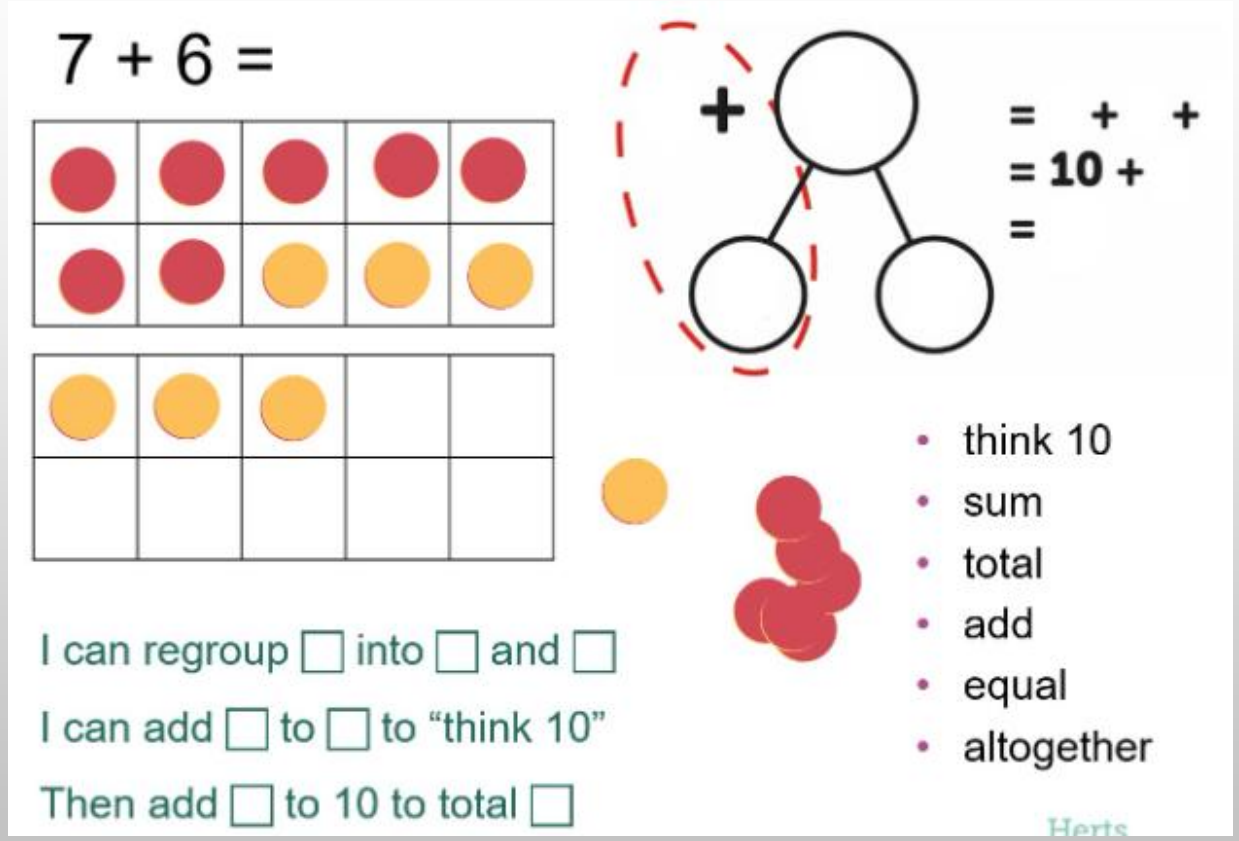
Think 10

•In **Year 1 and 2**, we teach children the **"Think 10" strategy**

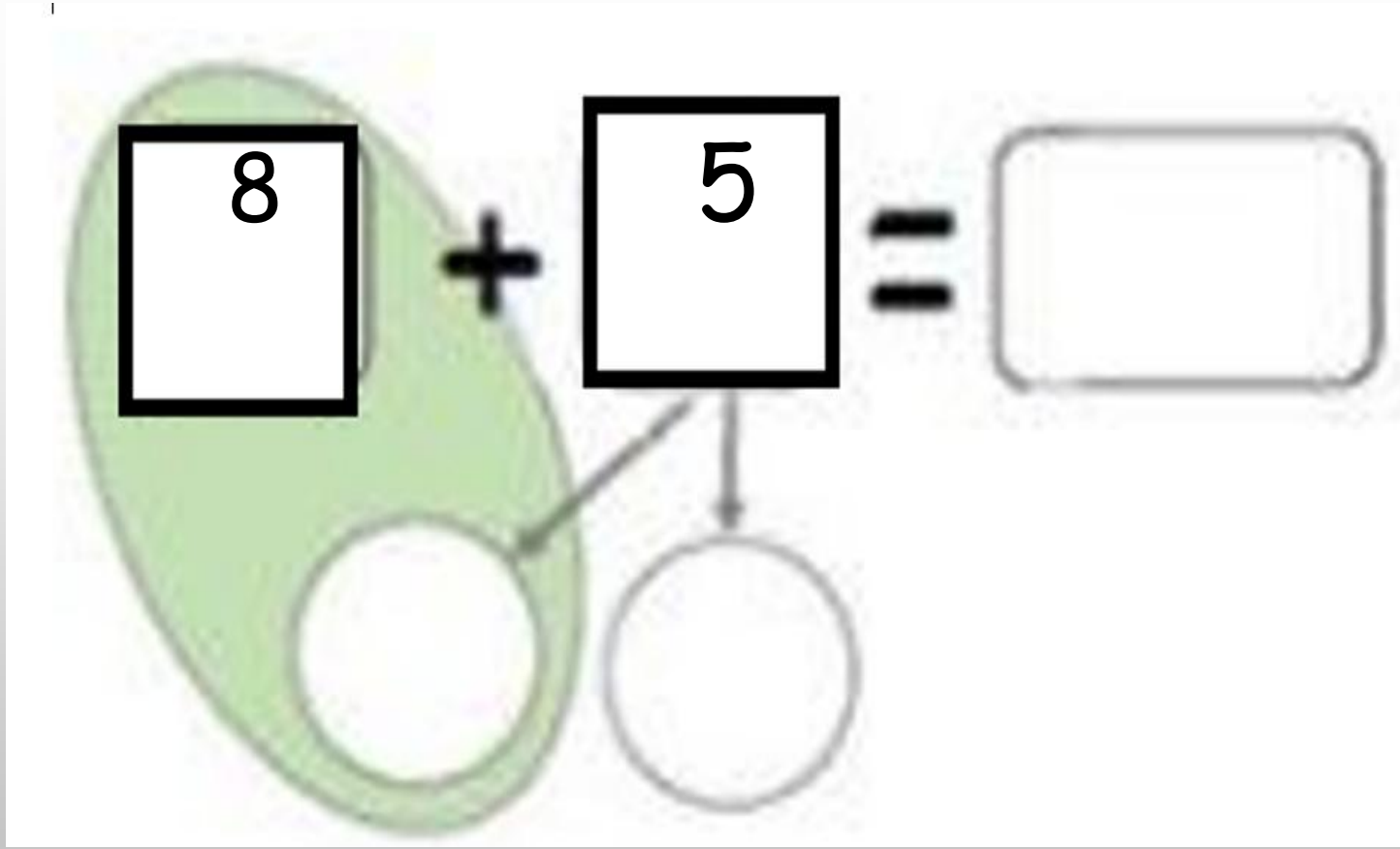
•Children use **number bonds to the nearest 10**, then add the rest

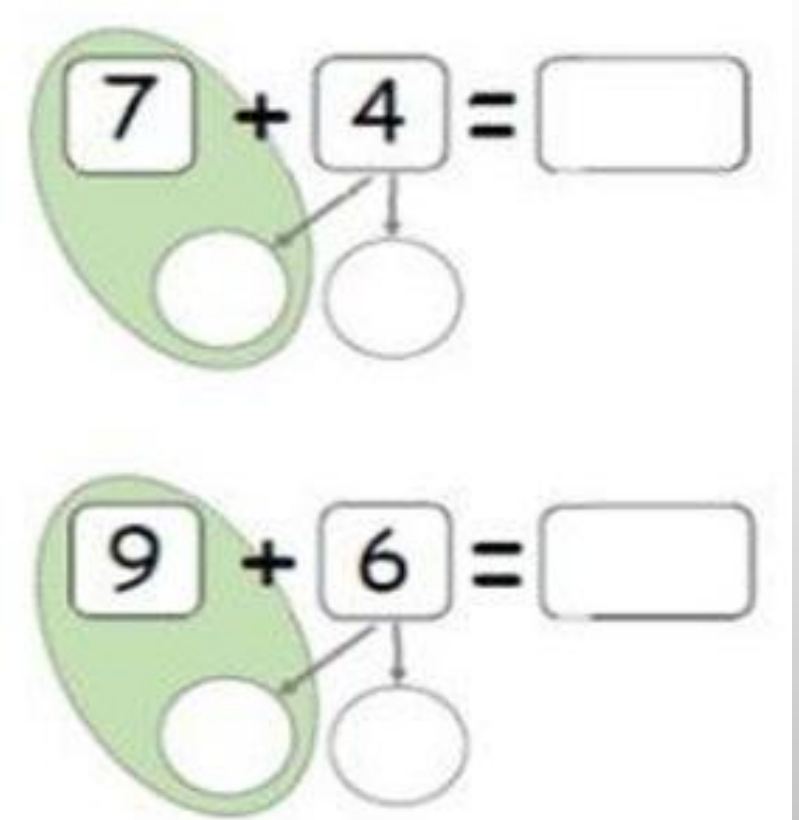
•Supports **reasoning skills** using sentence starters:

- ❑ "I have noticed that… there are 3 gaps in the first ten… so we need to move 3 counters from the 6."
- ❑ "I already know that… 7 and 3 more is 10… so I need to regroup the 6 into 3 and 3."



Think 10

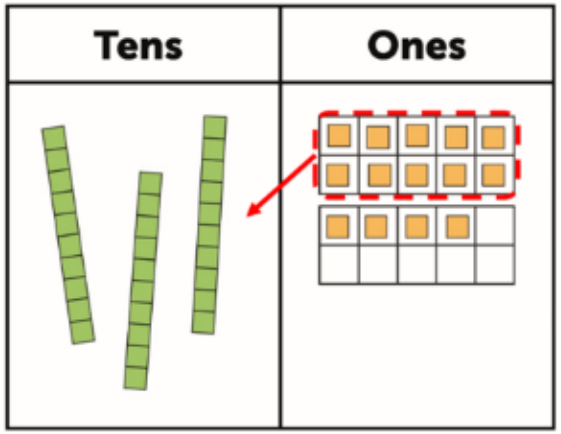




Regrouping

- To develop **place value understanding**, children are taught **regrouping**
- Regrouping is taught mostly in **Year 2**
- A **deep understanding of number** is needed before children can grasp regrouping

Regrouping

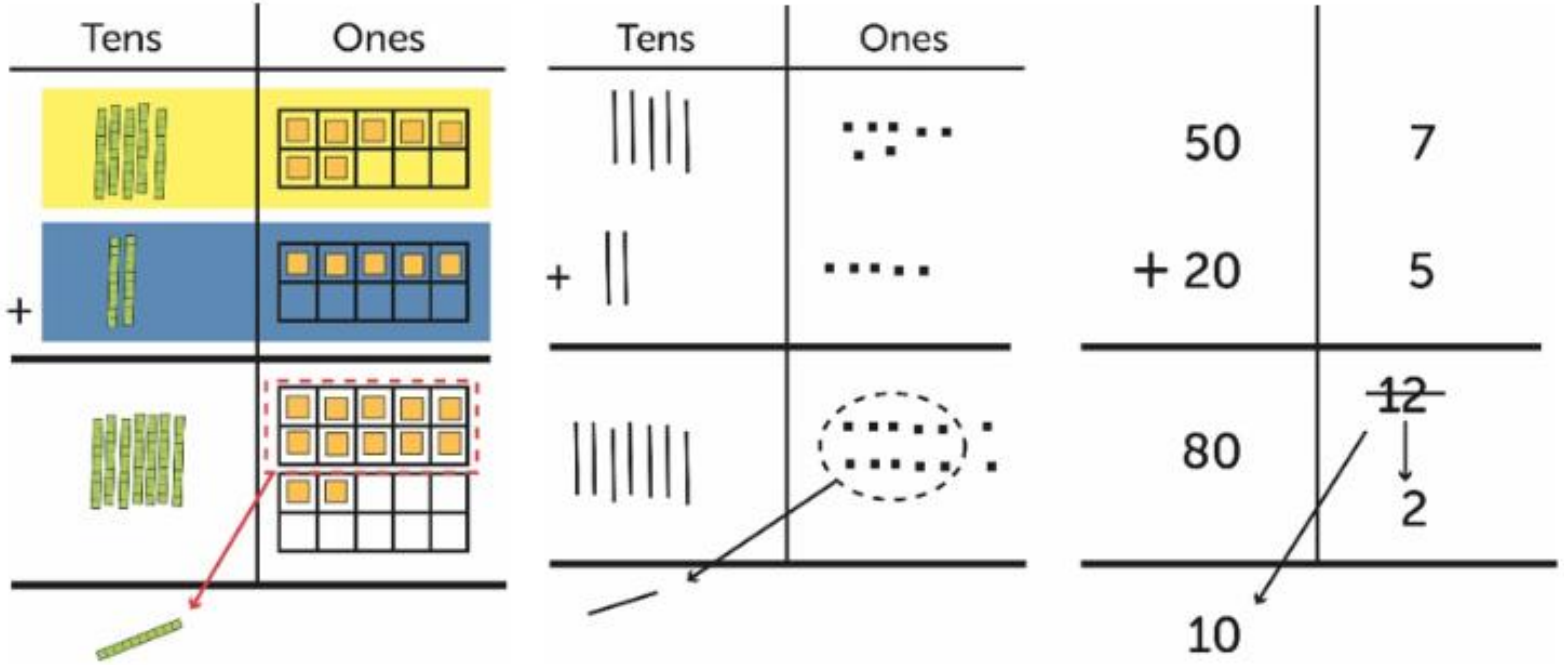


I have 44 made up of 3 tens and 14 ones.

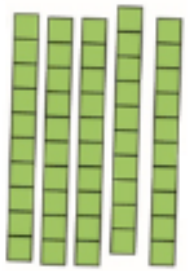
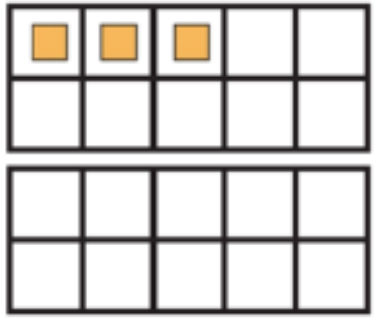
I can regroup ten ones to make one ten.

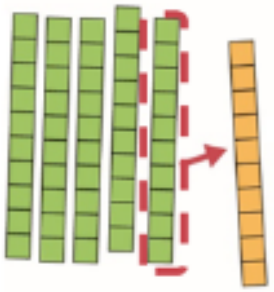
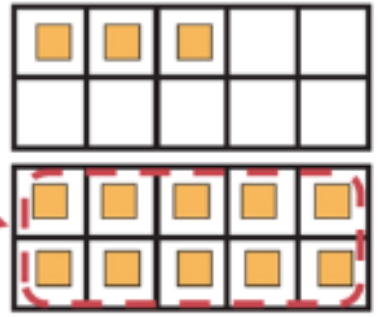
I still have 44 but know I have 4 tens and 4 ones.

For example for 57 + 25:



Regrouping

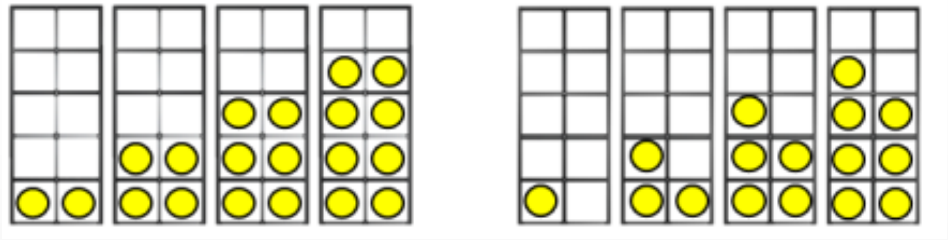
Tens	Ones
	

Tens	Ones
	

I have 53 and I want to take away 9 ones.
53 has 5 tens and 3 ones.
That is not enough ones.
I will need to regroup a ten for 10 ones.
I still have 53 but I now have 4 tens and 13 ones.
I can now take away 9 ones.

Odds and Evens

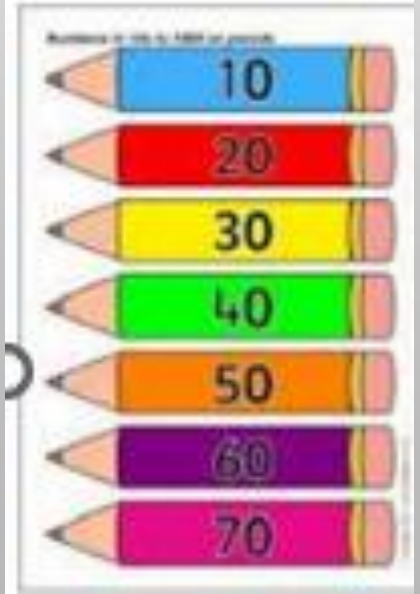
- Children should understand that **some quantities can be shared equally into 2 groups and some cannot**
- Some quantities can be grouped into **pairs**, while others may have **one left over**
- Provide opportunities for children to **explore and talk about** these ideas in different contexts
- Encourage children to notice the **odd and even number pattern**
- Link **odd/even numbers** to **ABAB patterns** for better understanding



You can use ten frames to help children understand that even numbers always have pairs, where as the odds have one left over.

Counting in 2,5,10

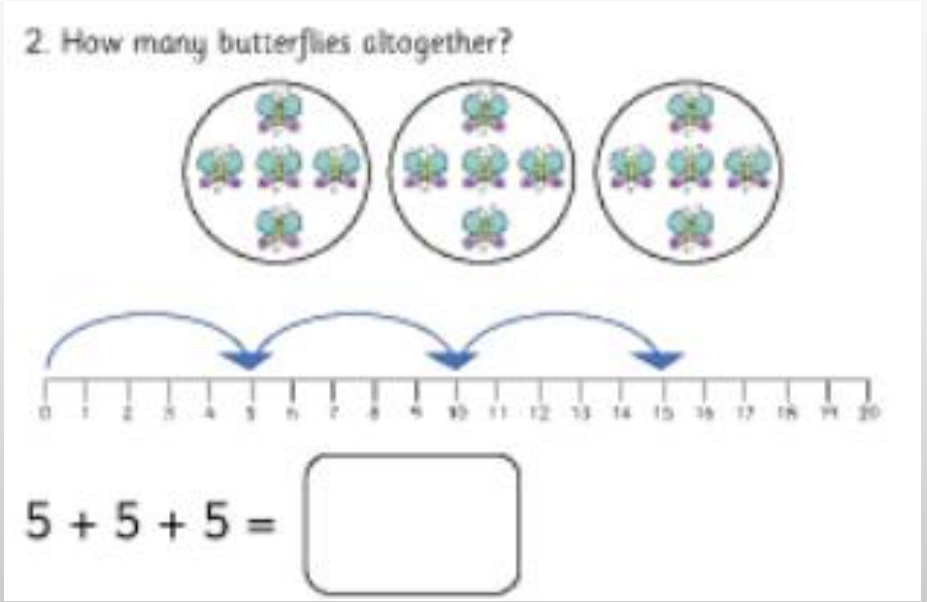
- To understand **number patterns**, children need to learn to **count in 2s, 5s, and 10s**
- **Practical objects** can help children see what adding 2s, 5s, or 10s looks like
- Counting in steps **helps build understanding of number patterns**
- **Videos** (e.g., on YouTube) can support learning these counting steps

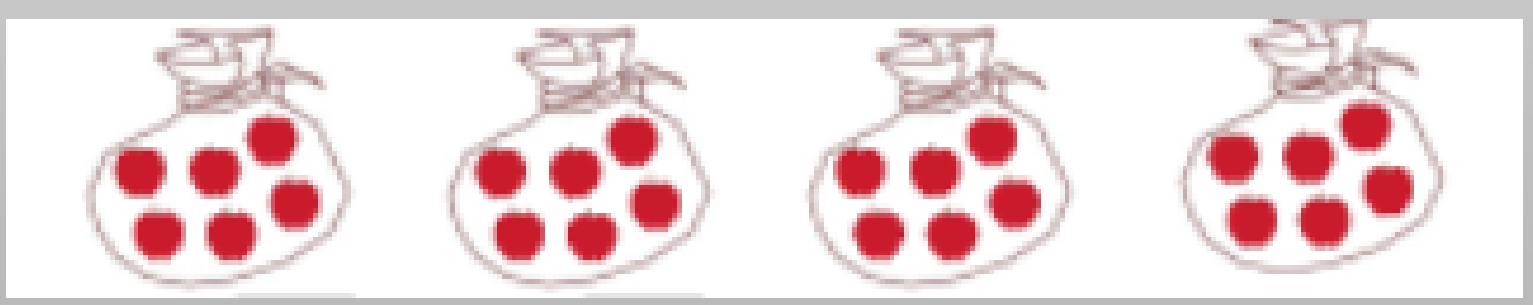


Multiplication

- The **× (multiplication) sign** is not taught until **Year 2**

- In **Year 1**, children learn **multiplication as grouping, "lots of," and repeated addition**
  - ❑ Examples:
  - ❑ "I have 4 groups of 5 apples."
  - ❑ "I have 4 lots of 5."
  - ❑ "I have 20 altogether."

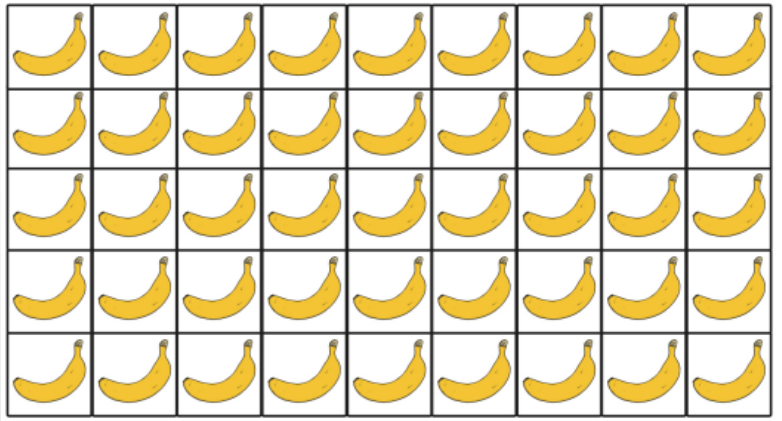




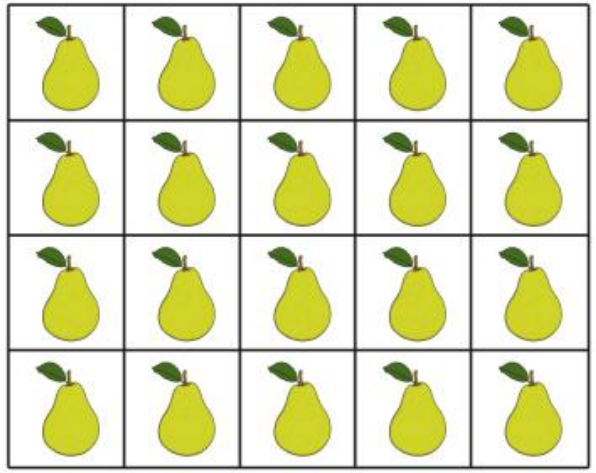
Multiplication

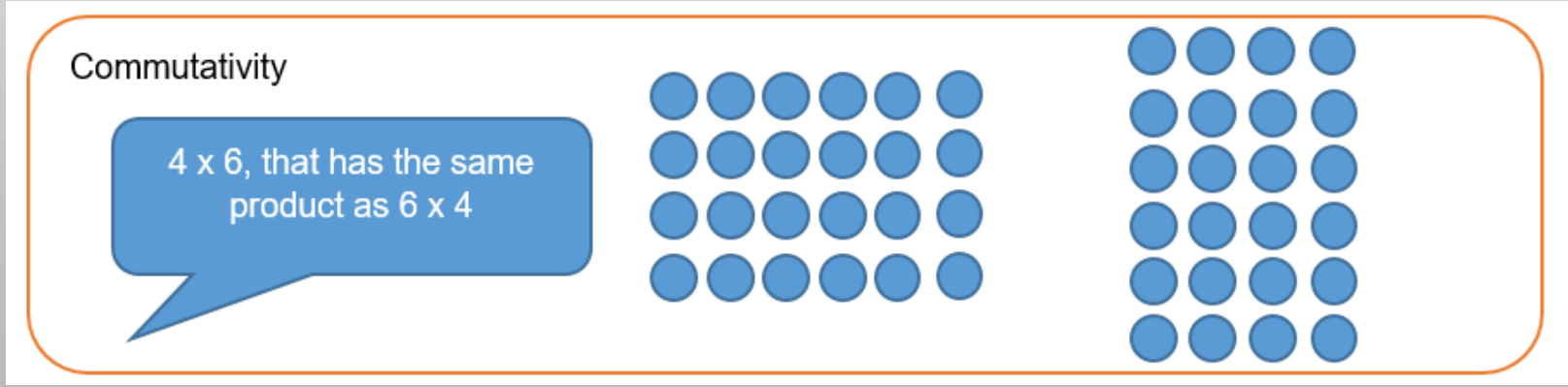
- In **Year 2**, children learn about **arrays** to understand multiplication
- Arrays show **how multiplication works** visually
- They help children understand that **multiplication can be done in any order** (commutative property)

How many bananas are there?

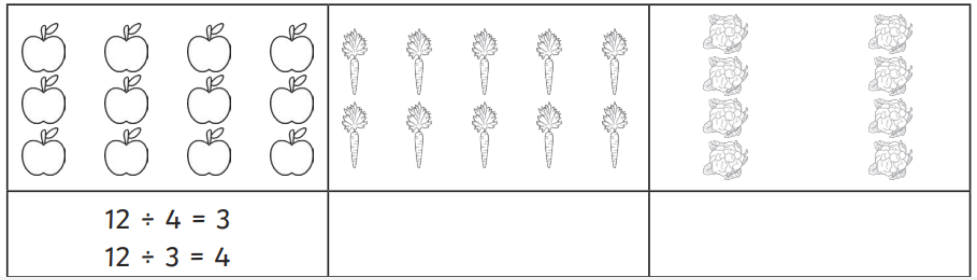


How many pears are there?

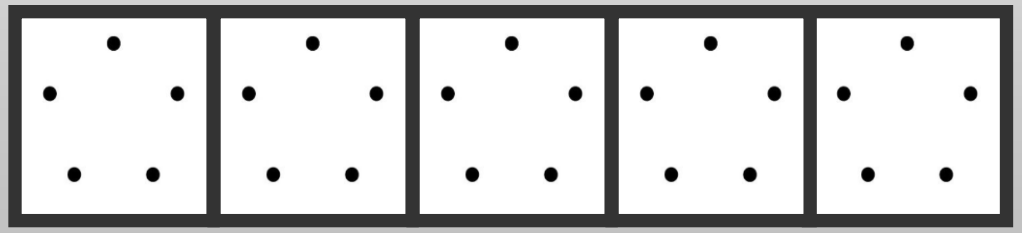




Division



- Children should be able to **share objects equally**, understanding that each group must have the same amount
- Use everyday items such as **toys or pasta** to practise sharing
- Encourage children to notice that sometimes they can make **equal groups** and sometimes there are **items left over**
- Once secure, children move on to learning about **arrays** to support **division**
- The **division symbol (÷)** is not introduced until **Year 2**
- We use **arrays and grouping** to solve division problems
- Example: 30 ÷ 5
- Draw 5 circles and share 30 dots between them
- Count how many are in each circle

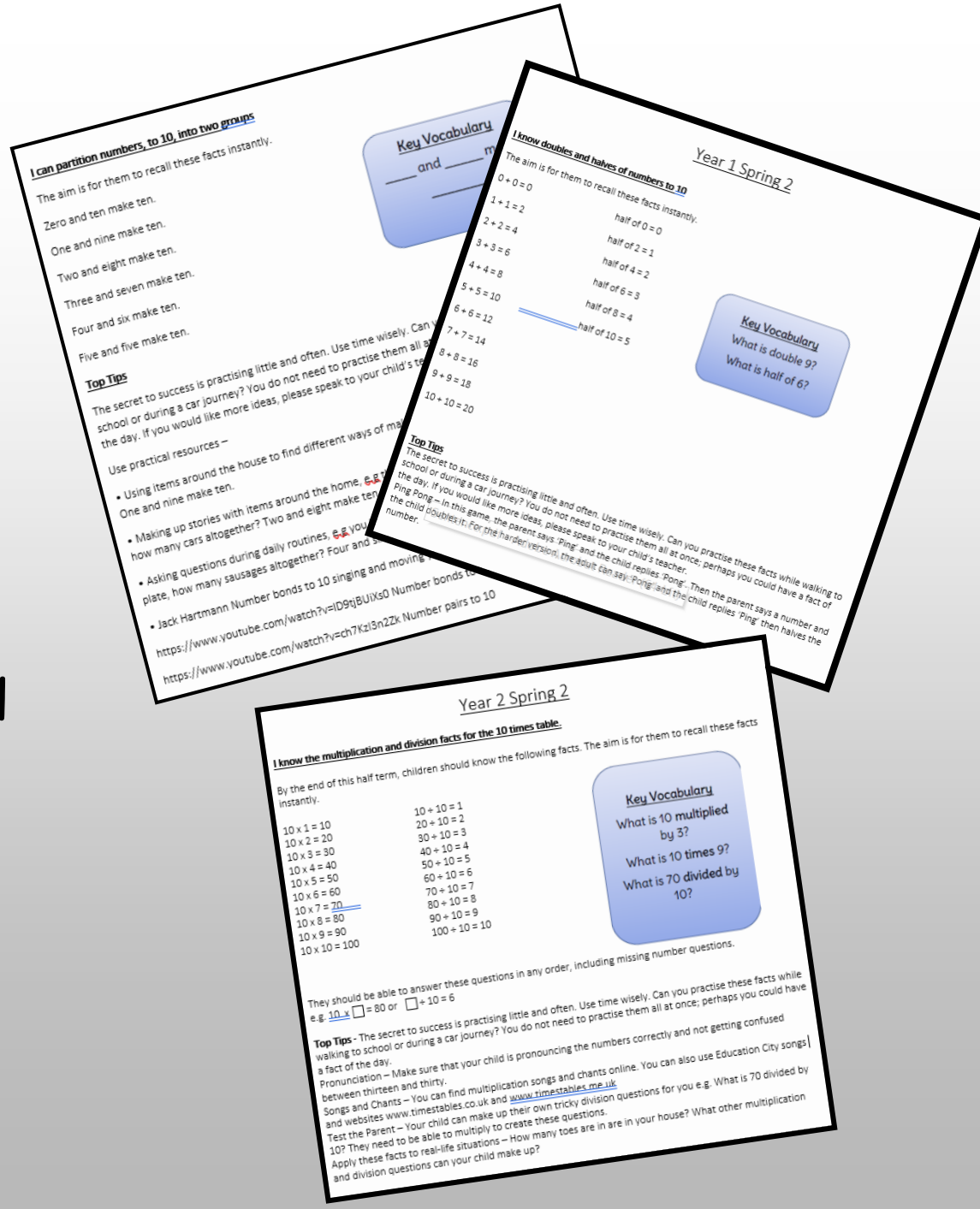


Maths Reasoning

- **Maths reasoning** is about understanding how numbers fit together and thinking logically
- Explaining how a problem was solved helps children **understand it more deeply**
- Talking through methods helps **others understand their thinking** too
- Maths reasoning develops **problem-solving skills**
- It helps children understand **how numbers work together**

Maths Fluency Sessions

- **Fluency sessions** are taught for **10–15 minutes, 3 times a week**
- Focus on **3–5 key areas** based on **previously taught skills** (not new learning)
- Slides are **repeated each session** with small adaptations
- Content is changed only once pupils are **secure and fluent**



Adding 1

Adding 2

Bonds to 10

Adding 0

Adding 10

Doubles

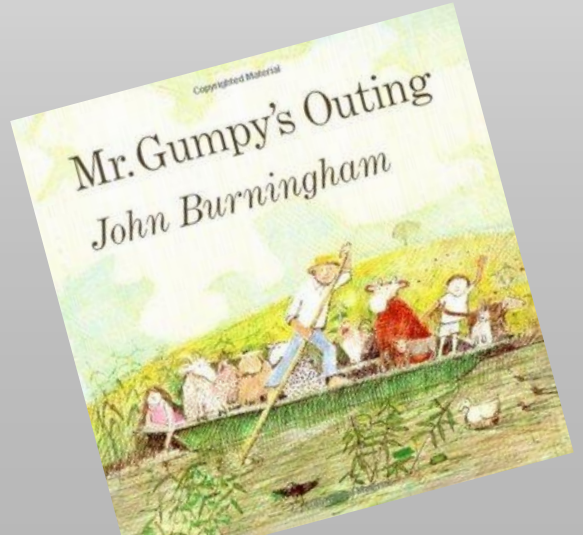
Bridging

Near doubles

Y2 fact

+	0	1	2	3	4	5	6	7	8	9	10
0	0 + 0	0 + 1	0 + 2	0 + 3	0 + 4	0 + 5	0 + 6	0 + 7	0 + 8	0 + 9	0 + 10
1	1 + 0	1 + 1	1 + 2	1 + 3	1 + 4	1 + 5	1 + 6	1 + 7	1 + 8	1 + 9	1 + 10
2	2 + 0	2 + 1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	2 + 9	2 + 10
3	3 + 0	3 + 1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7	3 + 8	3 + 9	3 + 10
4	4 + 0	4 + 1	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6	4 + 7	4 + 8	4 + 9	4 + 10
5	5 + 0	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5	5 + 6	5 + 7	5 + 8	5 + 9	5 + 10
6	6 + 0	6 + 1	6 + 2	6 + 3	6 + 4	6 + 5	6 + 6	6 + 7	6 + 8	6 + 9	6 + 10
7	7 + 0	7 + 1	7 + 2	7 + 3	7 + 4	7 + 5	7 + 6	7 + 7	7 + 8	7 + 9	7 + 10
8	8 + 0	8 + 1	8 + 2	8 + 3	8 + 4	8 + 5	8 + 6	8 + 7	8 + 8	8 + 9	8 + 10
9	9 + 0	9 + 1	9 + 2	9 + 3	9 + 4	9 + 5	9 + 6	9 + 7	9 + 8	9 + 9	9 + 10
10	10 + 0	10 + 1	10 + 2	10 + 3	10 + 4	10 + 5	10 + 6	10 + 7	10 + 8	10 + 9	10 + 10

Books to link to maths



Key things to remember

- **Maths happens all the time**, often without children realising it
- Maths is **not just writing number sentences**
- Children **need a secure understanding of number composition** before moving on
- Use **any everyday objects at home** to support maths learning

What else can you do at home

- **Play board games**
- **Cooking** – measuring and weighing ingredients
- Spot **numbers in the environment** (telephone keys, number plates, door numbers, book pages, sleeps until Christmas)
- **Money** – exploring coins and notes
- **Comparing heights**
- **Time and dates** – birthdays, months of the year, days of the week
- **Understanding time**:
- Morning, afternoon, night
- Daily routines (bedtime, afternoon activities, night-time routines)
- Telling the time: **o'clock, half past, quarter past, quarter to, 5-minute intervals**

Songs

Nursery Rhymes & Kids Songs by Little Baby Bum - Volume 1 S1 E24
Five Little Speckled Frogs | Nursery Rhymes | from LittleBabyBum!

#fivelittlemonkeys #nurseryrhymes #kidssongs
Five Little Monkeys Jumping On The Bed | Children Nursery Rhyme | Flickbox Kids Songs

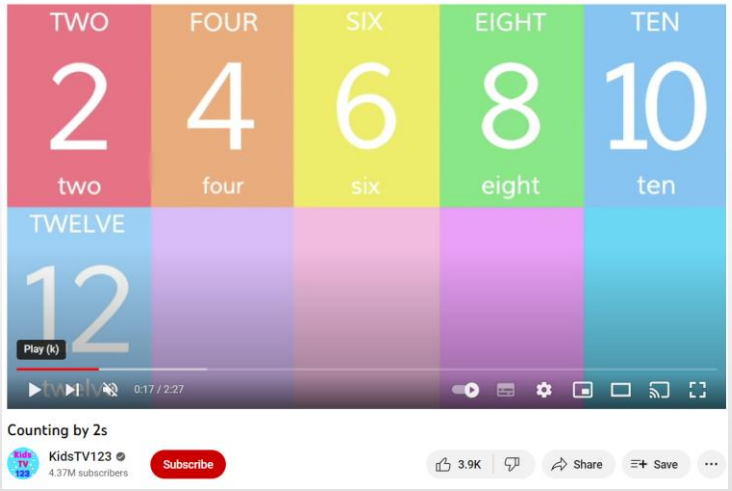
#nurseryrhymes #kidssongs #singalong
Over in the Meadow | Barefoot Books Singalong

Five Currant Buns In A Baker's Shop | 5 | NURSERY RHYME | RainbowRabbit | Counting Song |

Ten Fat Sausages Sizzling in a Pan - Nursery Rhymes

Let's all do the 10 dance (number bonds to 10 song)

Songs



Counting by 2s

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Counting Songs!

The Counting by Tens Song | Counting Songs | Scratch Garden

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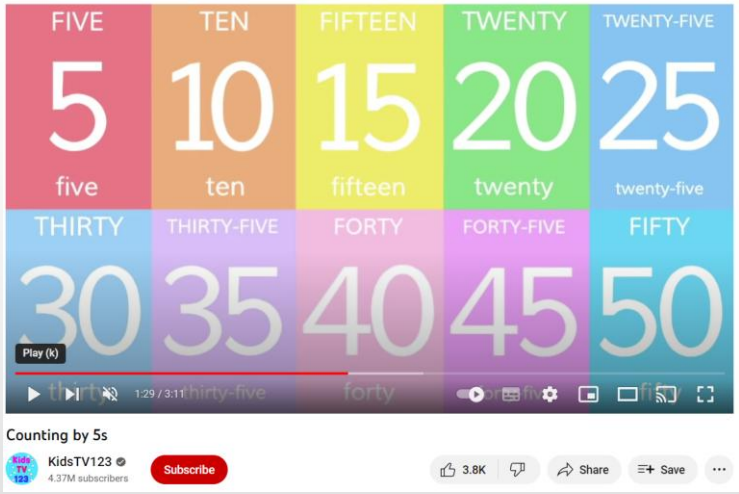

Counting by 5s

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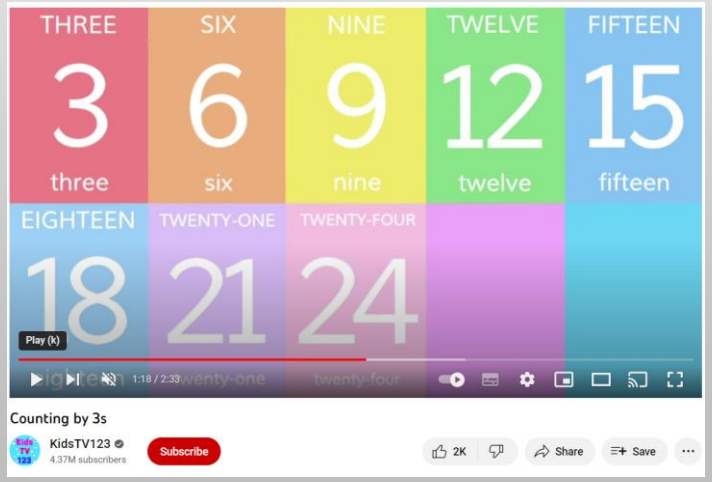

Counting by 3s

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Let's all do the 10 dance (number bonds to 10 song)

Hey 20 You've got a lot of friends (The Friends of 20) Album version

Rocking Dan Teaching Man · 19.2K subscribers · Subscribe · 638 · Share · Save

Websites

- https://www.ictgames.com/mobilePage/index.html

- https://www.topmarks.co.uk/

- https://mathsframe.co.uk/en/resources/category/22/most-popular

- https://www.bbc.co.uk/bitesize/topics/zjkphbk/articles/zd4b382

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