

# Welcome to our Year 2 Maths Parent Workshop



*St. Teresa's*  
R.C. Primary School

## Aims for this morning:

- Understand more about **our approach** to Maths here at St Teresa's
- Explore ***how*** to explore **multiplication facts**
- Look at **how** this knowledge is then applied and tested
- **Have a go** ourselves

## Current picture...



### Nationally

- **71%** of Year 6 pupils achieved the **Expected Standard** in May 2022 in Mathematics
- **22%** of pupils achieving **Greater Depth**

### St Teresa's

- **91%** of our 2022 Year 6 cohort achieved the **Expected Standard**
- **50%** of pupils achieved **Greater Depth**

## So what does this tell us?



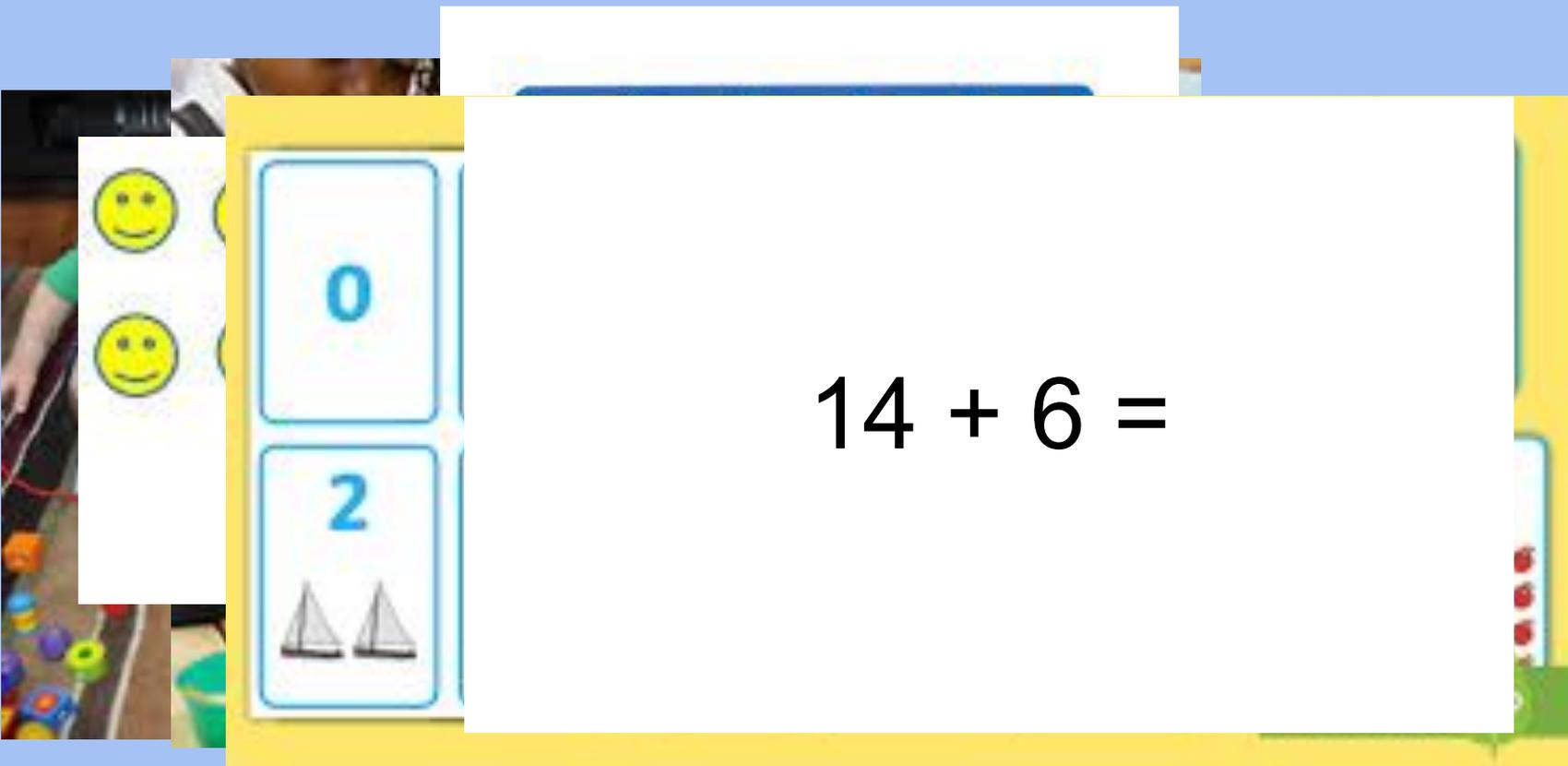
- Our **CPA** (**C**oncrete, **P**ictorial and **A**bstract) **approach** to the teaching and learning of the mastery of maths across the school is **yielding positive results**.
- There's still **room for improvement** nonetheless.
- The **application of multiplication facts** still remains one of the most **fundamental areas** of knowledge that **underpins** a large percentage of the **KS2 mathematical curriculum** and their **further education**.
- The more secure children are with their **multiplication and division facts**, the **greater** their **chance** of achieving the **expected** and **beyond expected** standard in maths at the end of KS2

## How are multiplication facts in KS2 related to Year 2 children?



- In 2016 an additional **statutory assessment** was introduced aimed at **testing** the **fluency** of **multiplication facts** up to and including **12 x 12** for all Year 4 pupils.
- Several pilot studies followed this and yet the pandemic halted the planned 2020 official first Multiplication Tables Check (MTC)
- Our **current Year 2 pupils** are due to take the **MTC** in two academic years - **June 2025**.
- As a school, we **do not** simple ask our pupils to learn all of **their multiplication facts** through **rote learning** and memorising answers to particular questions. Instead, at this stage of their learning, we allow children time to **explore** these facts, **recognise patterns** and therefore have **better application** of them for later learning.

So what does a Concrete Pictorial Abstract approach look like?



$14 + 6 =$

## So what does multiplication look like in Year 2?

- Children in **Year 2** begin their understanding of multiplication facts by starting with their ability to count in **2s**, **5s** and **10s** yet the concept of **multiplication is not introduced** at this time alongside this learning.
- This is then further developed into the idea of repeated addition e.g.

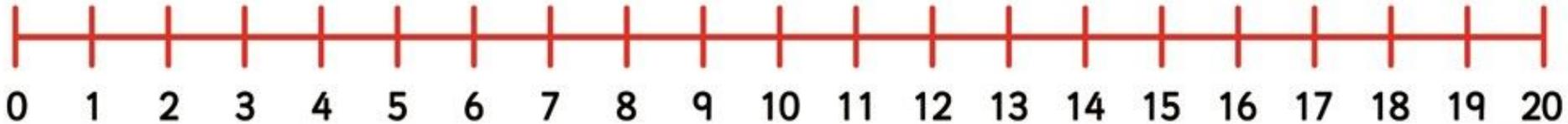
$$2 + 2 + 2 + 2 + 2 + 2 + 2$$

- Which then becomes  $2 \times 7 =$

Let's explore...

**Task 1:** Let's count as a year group in 2s starting from 0...

**Task 2:** Can we count in 2s from the number 12? *Use the numberline if you need to*



**Task 3:** Can we count backwards in 2s from 20?



**Task 4:** Using the counting blocks inform of you, can you represent your ability to count in 2s, using them? *There are o right or wrong answers as to how this should look...*

**What does your counting in 2s look like?**



**How can you further develop your work?**

Can you modify your what you have done so far?

Can you range your blocks into groups or sets?

Can you arrange your groups into an array?

Can you add a value to your blocks to describe what is being represented?

Can you add a number sentence that describes your array?



# Can you do it all?



1 group of 2

1 set of 2

$1 \times 2$

**2**



2 groups of 2

2 sets of 2

$2 \times 2$

**4**



3 groups of 2

3 sets of 2

$3 \times 2$

**6**



4 groups of 2

$4 \times 2$

Now, a **teaching tool** is starting to be developed, by our pupils, the contents of which they have **explored themselves** and can use to **learn from**.

4 groups of 2

$4 \times 2$

4 sets of 2

**8**

Let's pause for a moment and consider the **symbols, operations** and **language** we are now making use of? What do we already know?



So, what does this sign mean?



Addition  
Add  
Plus

Multiply...



Sets of...

Boxes of...

Bags of...

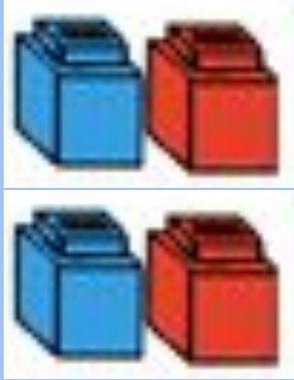
Groups of...



Less than

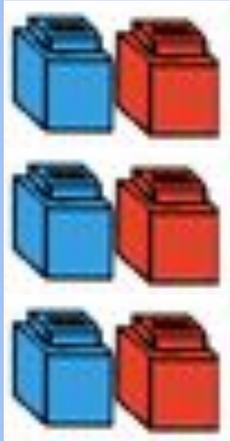
# Let's have a look in context...

$2 \times 2 =$



$2 \text{ sets of } 2 \text{ blocks} = \mathbf{4}$

$2 \times 3 =$



$3 \text{ sets of } 2 \text{ blocks} = \mathbf{6}$

Over to you... Let's look at the abstract

Example arithmetic

$$3 \times 2 =$$

Over to you... Let's look at the abstract



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$6 \times 2 =$

Over to you... Let's look at the abstract



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$$2 \times 7 =$$

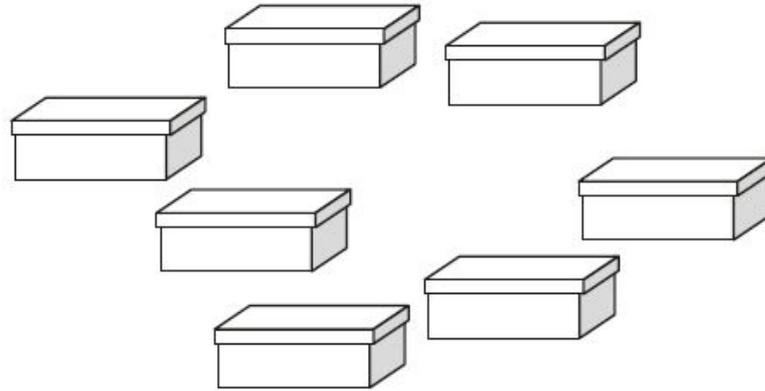
Over to you... Let's look at the abstract



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$$12 \times 2 =$$

For an extra challenge, can you apply your learning to some reasoning and problem solving style questions?



Sita puts **2** shoes in each of these boxes.

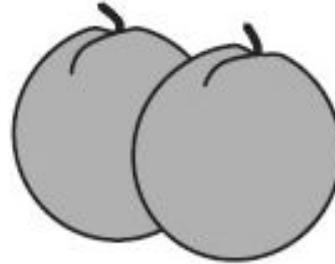
How many shoes are there altogether?

For an extra challenge, can you apply your learning to some reasoning and problem solving style questions?



8 children are eating plums.

Each child eats **2** plums.



How many plums do they eat **altogether**?

plums
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For an extra challenge, can you apply your learning to some reasoning and problem solving style questions?



Look at these **three** numbers.

5      12      60

Use **all three** numbers to make these correct.

$$\boxed{\phantom{000}} \div \boxed{\phantom{000}} = \boxed{\phantom{000}}$$

$$\boxed{\phantom{000}} \times \boxed{\phantom{000}} = \boxed{\phantom{000}}$$

For an extra challenge, can you apply your learning to some reasoning and problem solving style questions?

Desi makes cakes with these.

1	egg	
4	spoons of flour	
2	spoons of sugar	
3	spoons of milk	

Ella makes **double** the number of cakes.

Write the missing numbers.

2	eggs	
<input type="text"/>	spoons of flour	
<input type="text"/>	spoons of sugar	
<input type="text"/>	spoons of milk	