Maths Open Morning

27th February 2018
Miss Carruthers
Maths Subject Leader

The **essence of mathematics**
is not to make
simple things complicated, but to
make complicated
things simple.

– Stan Gudder
Mathematician

Agenda

- Maths expectations for children
- How we teach Maths at St Vincent's
- How you can teach Maths at home
- Video support for parents
- Opportunity to see Maths being taught in all class across the school

Learning Journeys

Each class has a Yearly Overview to follow which is linked to the Maths No Problem scheme.

Each class also has a Learning Journey to assess the children with.

- This can be used to help teachers plan as gives clear examples and expectations.
- Look on website to find your child's Learning Journeys so you can see what they have to learn (found on the Year page - under news/blog/home learning)
- You will get updated ones on Parents Evening.

Lesson Structure

Most lesson are using Maths No Problem

- Encourages discussion and exploring methods
- Focus on the fundamentals - a lot of time given to making children secure in this.
- Use a lot of manipulatives and pictures, before moving onto numbers.

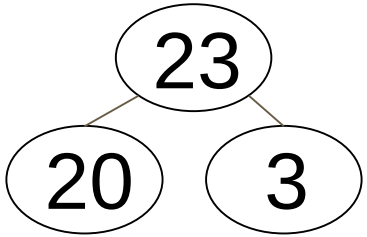
Moved away from grouping

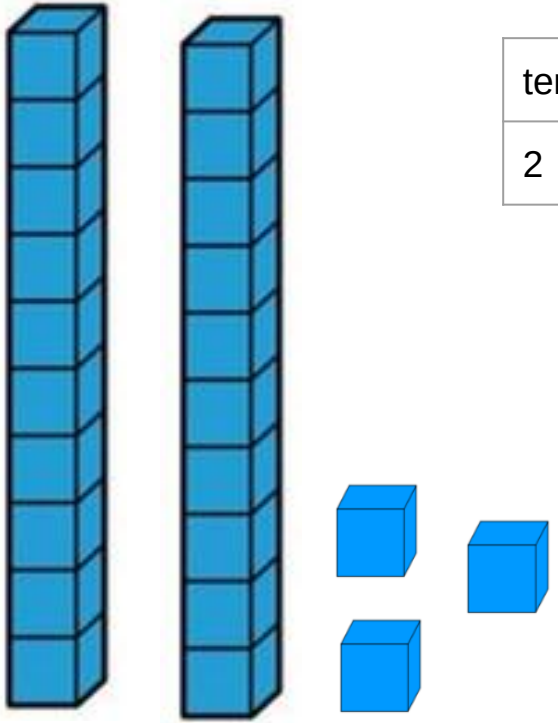
- Children work on the same concept, using their learning partners for support.
- Lessons consist of all children doing the same work, and then challenge activity if children finish.

Place Value

- Basis of all Maths
- Partitioning of a number
- Expressing this in different ways.

23

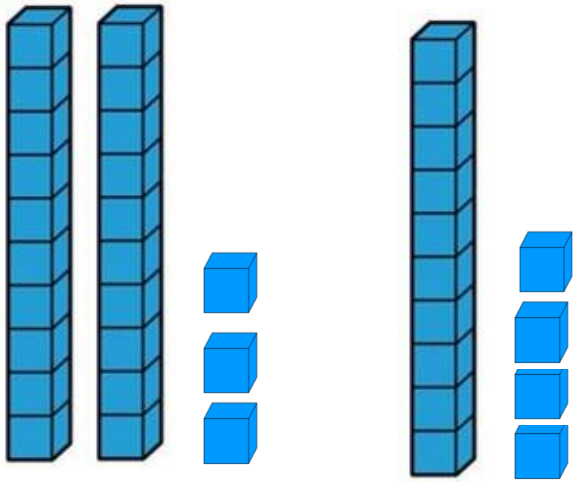




tens	ones
2	3

Calculation

23 + 14 =



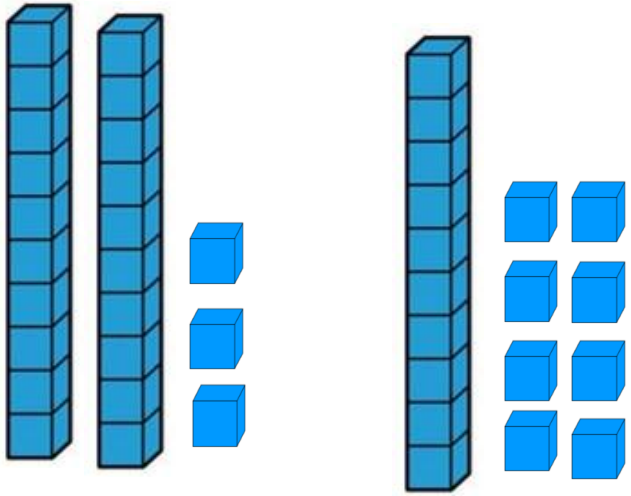
tens	ones
2	3

tens	ones
1	4

$$\begin{array}{r} 2\ 3 \\ +\ 1\ 4 \\ \hline 3\ 7 \\ \hline \end{array}$$

Renaming

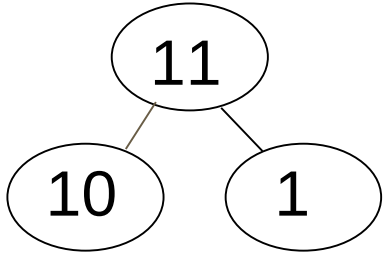
23 + 18 =



Add the ones:	3 + 8 = 11
Add the tens:	2 + 1 = 3

tens	ones
3	11

$$\begin{array}{r} 2\ \ 3 \\ +\ 1\ \ 8 \\ \hline 4\ \ 1 \\ \hline \end{array}$$



Multiplication using Maths No Problem

Starts with a picture and a story

Moves onto using numbers and written method

Uses children’s understanding of place value and times tables

Year 1

Adding Equal Groups

Lesson 2

In Focus

are in equal groups.

How many are there altogether?

How can you tell?

That means every tray has the same number of .

Let's Learn

1

There are 4 trays.

4 trays of 5 = 20
4 groups of 5 = 20
4 fives = 20

There are 20 altogether.

Each tray has 5 .

5, 10, 15, 20

2

Each pack has 2 .

There are 3 packs.

3 packs of 2 = 6
3 groups of 2 = 6
3 twos = 6

There are 6 .

2, 4, 6

3

There are 5 bunches.

5 bunches of 3 = ☐

5 groups of ☐ = ☐

☐ threes = ☐

There are ☐ altogether.

Each bunch has 3 .

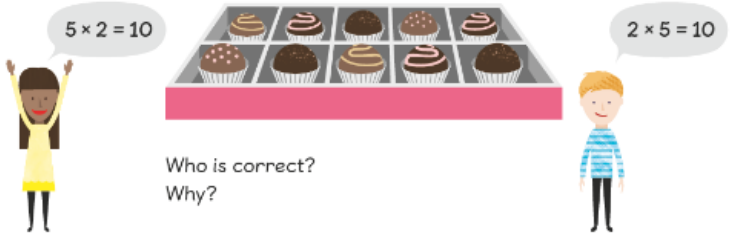
3, ☐, ☐, ☐, ☐, ☐.

Multiplying by 2, 5 and 10

Lesson 8

Year 2

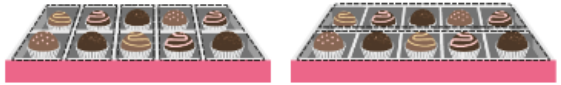
In Focus



Who is correct?
Why?

Let's Learn

1



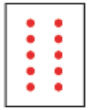
5 x 2 = 10

2 x 5 = 10

5 × 2 is equal to 2 × 5.

2 How many dots are there?

2 x 5 = 10

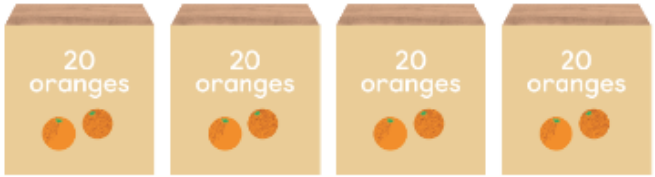


5 x 2 = 10

2 × 5 is equal to 5 × 2.

Year 3

In Focus



How many oranges are there in the 4 boxes altogether?

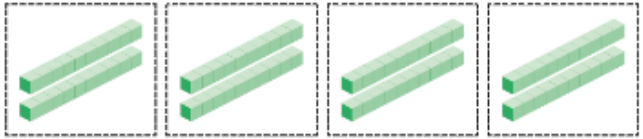
Let's Learn

1

Multiply 2 ones by 4
2 × 4 = 8

	o
	2
×	4
	8

2



Multiply 2 tens by 4
20 × 4 = 80

	t	o
	2	0
×		4
	8	0

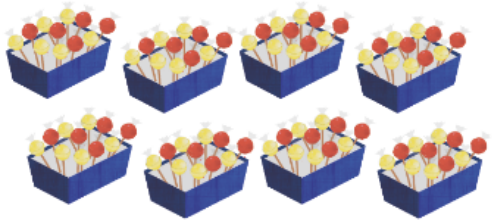
There are 80 oranges in the 4 boxes altogether.

Year 4

Multiplying 2-Digit Numbers

Lesson 6

In Focus



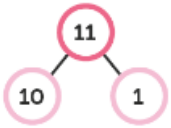
How many 🍭 are there in 8 boxes?

Let's Learn

1 $8 \times 11 =$ ☐

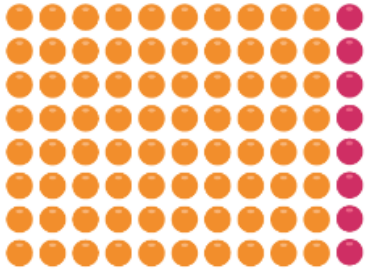
Method 1

Method 2



$8 \times 11 = 80 + 8$

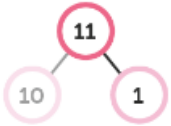
$= $ ☐



$8 \times 10 = 80$ $8 \times 1 = 8$

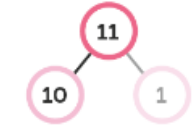
Method 3

$8 \times 11 =$ ☐



$8 \times 1 = 8$

$$\begin{array}{r} 1\ 1 \\ \times\ \ 8 \\ \hline 8 \end{array}$$



$8 \times 10 = 80$

$$\begin{array}{r} 1\ 1 \\ \times\ \ 8 \\ \hline 8 \\ +\ 8\ 0 \\ \hline 8\ 8 \end{array}$$

Year 5

In Focus

Is the offer a good deal?

2 3 × £118 = ☐

This shows 118.

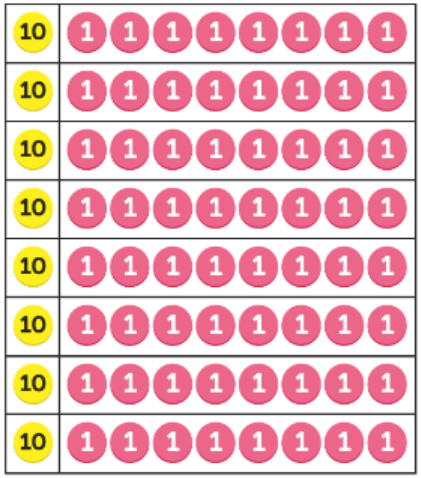
3 × 8 = 24	2 4 →	multiply by ones
3 × 10 = 30	3 0 →	multiply by tens
3 × 100 = 300	+ 3 0 0 →	multiply by hundreds
3 × 118 = 354	3 5 4	

1 1 8 × 3

Three sets of 8 boxes cost £354.

Let's Learn

1 8 × £18 = ☐



8 × 18 = ☐

1 8 × 8		
6 4	→	multiply by ones
+ 8 0	→	multiply by tens
1 4 4		

8 × 10 = 80 8 × 8 = 64

8 boxes would have cost £144.

They now cost £118.

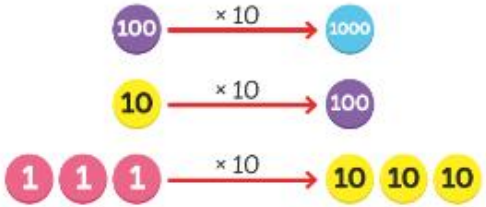
Year 6

In Focus

A standard box of apples contains 113 apples. A pastry shop needs 2500 apples for its apple pies. Would ordering 23 standard boxes of apples be enough for them?

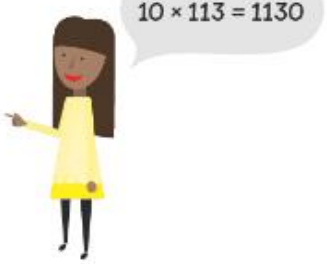
Let's Learn

1 20 × 113 = ☐



10 × 113 = 1130

20 × 113 = 2260



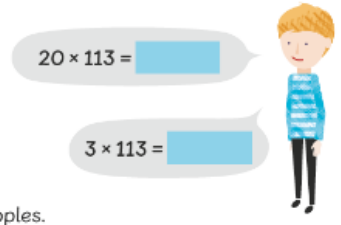
2 23 × 113 = ☐

20 × 113 = 2260

3 × 113 = 339

23 × 113 = 2599

23 boxes contain 2599 apples.



3 23 × 113 = ☐

	1	1	3
×		2	0
2	2	6	0

	1	1	3
×			3
	3	3	9

→

	1	1	3
×		2	3
2	2	6	0
+	3	3	9
2	5	9	9

	1	1	3
×		2	3
	3	3	9
+	2	2	6	0
2	5	9	9

23 boxes contain 2599 apples.

How to teach Maths at home.

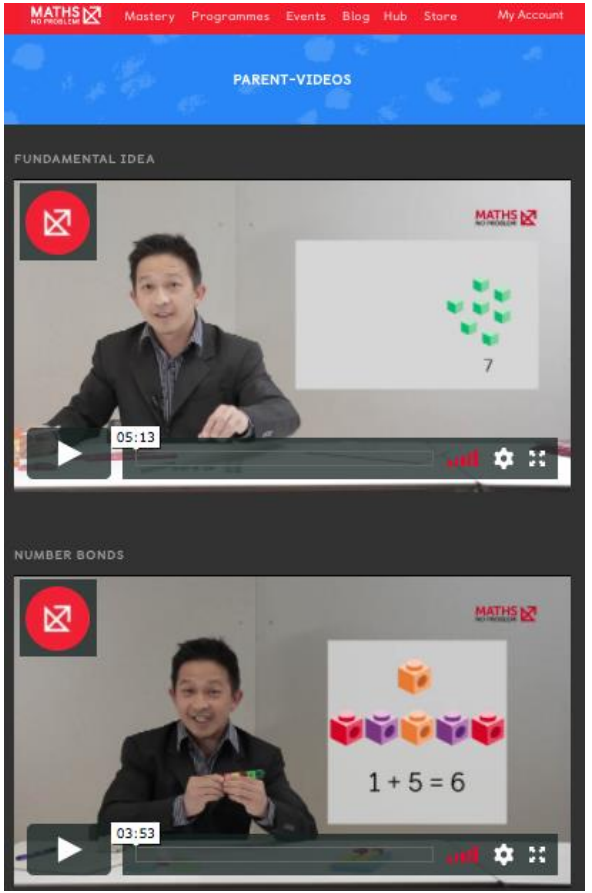
Practise little and often

- Times tables
- Number bond facts (+ and -)
- Playing with numbers

Videos for Parents.

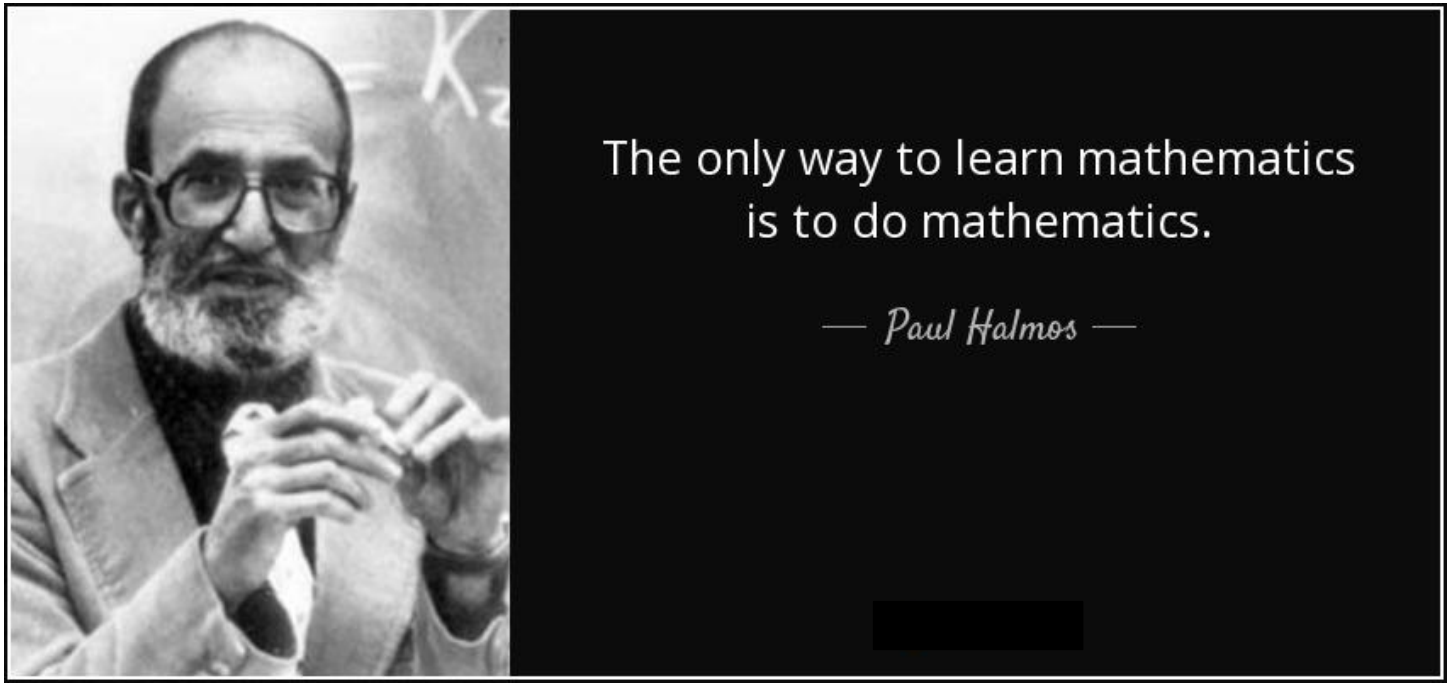
Link: School website -> Curriculum & Ethos -> Home Learning

Link: School website -> Curriculum & Ethos -> Curriculum

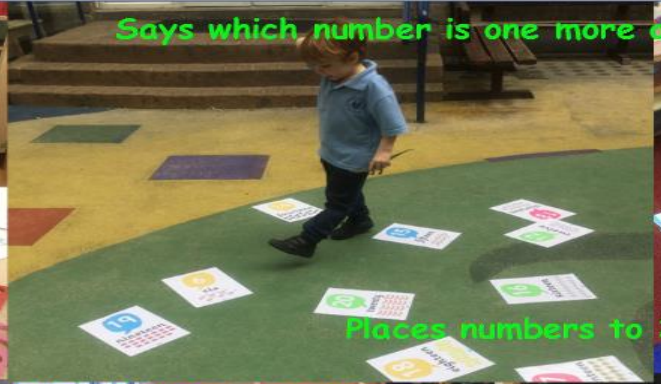


Thank you for listening.

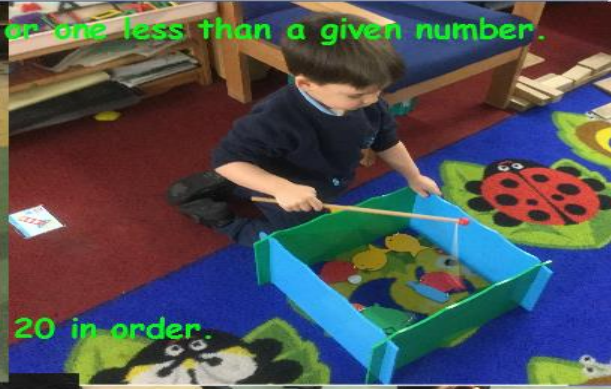
Any questions?



EYFS

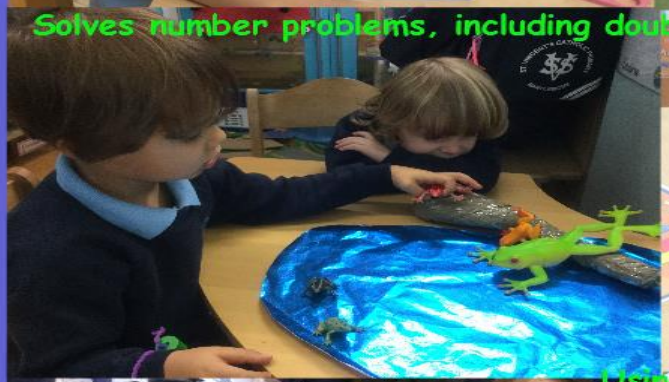


Says which number is one more or one less than a given number.



Places numbers to 20 in order.

Solves number problems, including doubling, halving and sharing.



Counts reliably with numbers to 20.

Using quantities and objects, adds and subtracts two single-digit numbers and counts on or back to find the answer.