

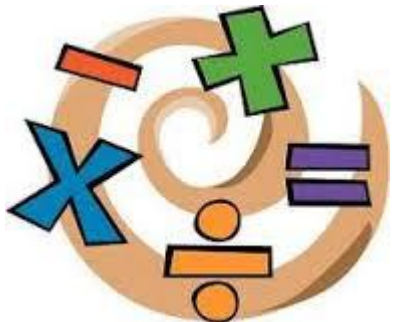
Numberless

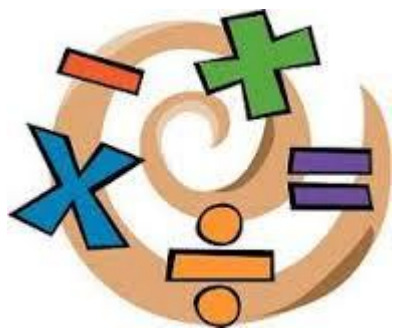
If all the numbers in the world were rubbed out, removed, taken away:

I wouldn't know how old I was,
I wouldn't know the time of day,
I wouldn't know which bus to catch,
I wouldn't know the number of goals I had scored,
I wouldn't know how many scoops of ice-cream I had,
I wouldn't know the page on my reading book,
I wouldn't know how tall I was,
I wouldn't know how much I weighed,
I wouldn't know how many sides there are in a hexagon,
I wouldn't know how many days are in the month,
I wouldn't be able to work my calculator.
And I wouldn't be able to play hide-and-seek!

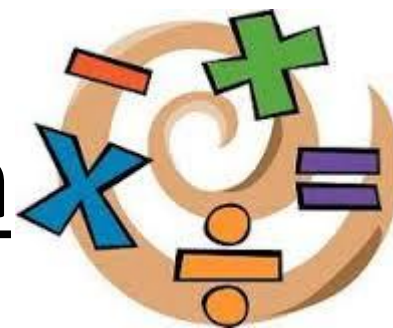
Aims of today

- To get an insight into how Maths is taught here at Dilton.
- To take away some ideas to support your children at home.
- To take part in a variety of maths activities.





The Maths Curriculum

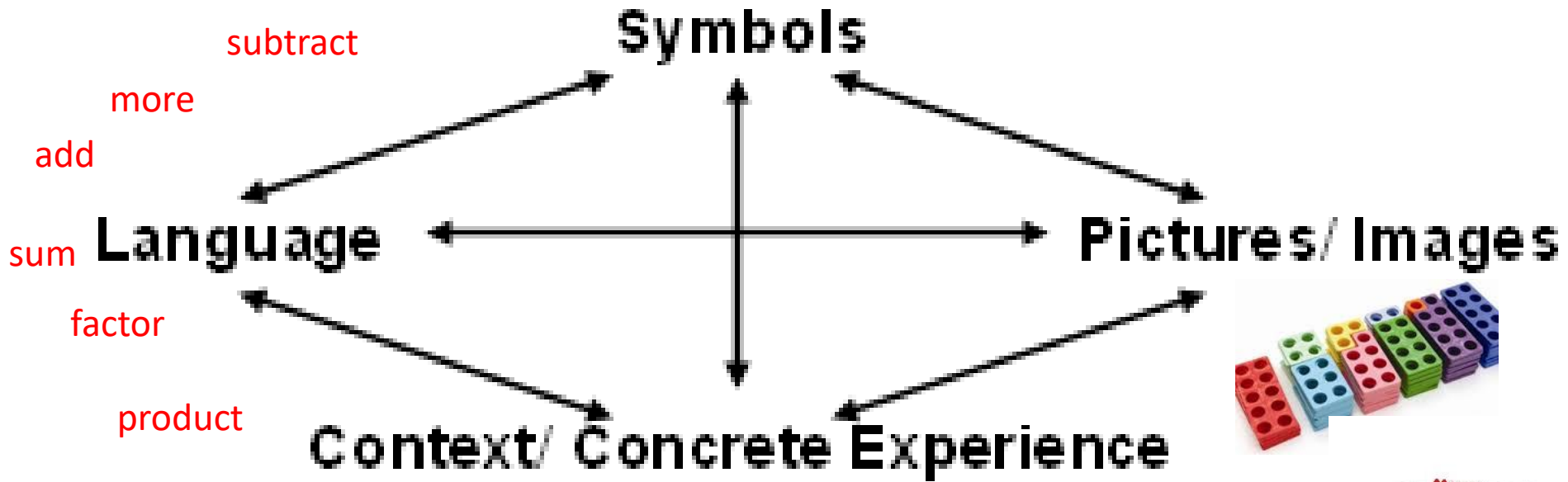


Children should:

- Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **Reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.
- **Solve problems** by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Maths at Dilton

= + x %



Number Sense!

Children need to understand our number system, starting with counting numbers, building an understanding of how our numbers work and fit together. This includes exploring place value and comparing and ordering numbers then applying this understanding in different contexts.



Place Value – The Key

Place value is at the heart of the number system.

We only really have 10 numbers but their place in our value grid makes them what they are.

A secure understanding of this will enable children to use and understand different calculation methods.

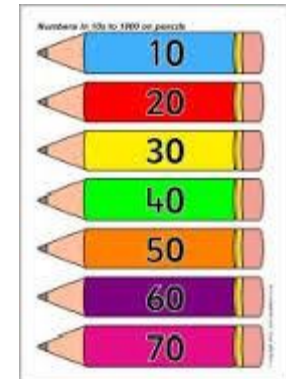
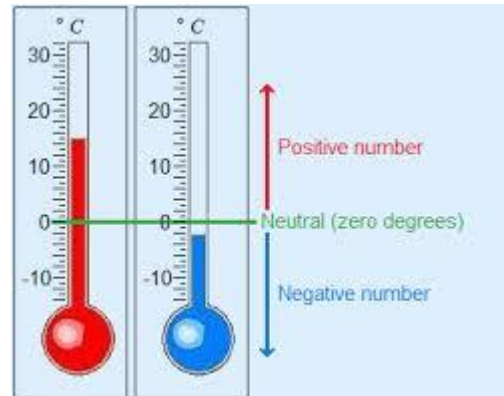


Keep Counting!

- Backwards and forwards in 10s, 100s, 1000s.
- Counting in decimals.
- Counting in fractions.
- Counting into negatives.



$$\frac{1}{4} = \frac{2}{8} = \frac{4}{16}$$



Whom It May
Concern:

Decimals
matter!

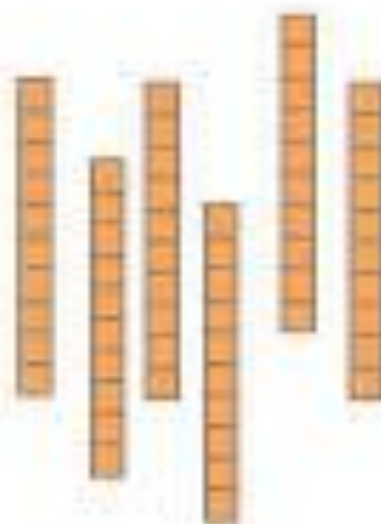
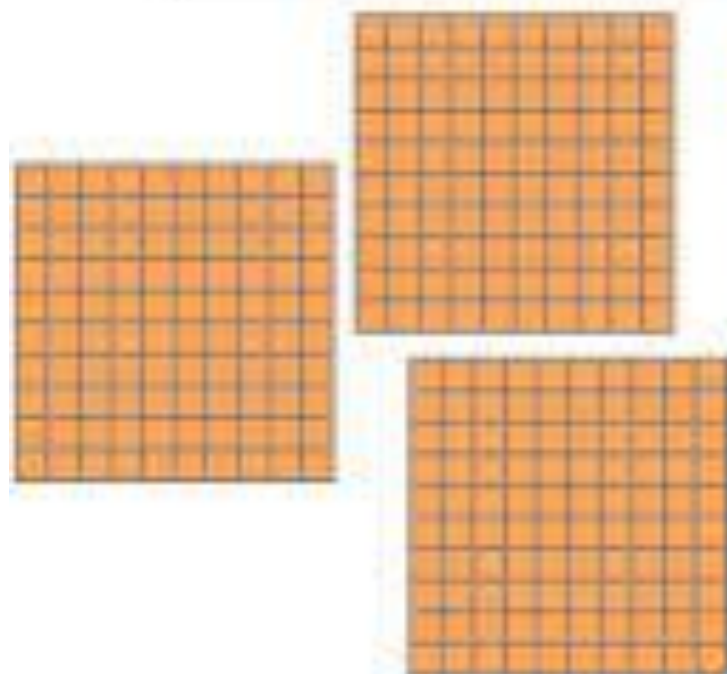



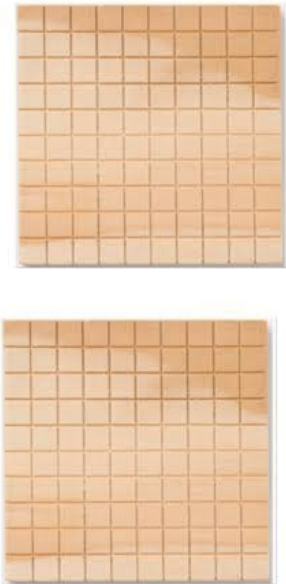
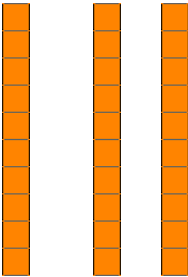
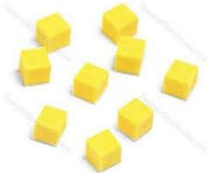
<i>Decimal</i>	<i>Words</i>	<i>Fraction</i>
0.1	1 tenth	$\frac{1}{10}$
0.01	1 hundredth	$\frac{1}{100}$
0.001	1 thousandth	$\frac{1}{1000}$

100

10

1



thousands	hundreds	tens	ones
1	2	3	9
			

Recalling Facts

It is important that children recognise number bonds, different pairs of numbers with the same total.

10
 $7 + 3$



$6 + 4$



8

$6 + 2$

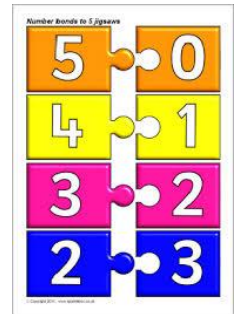
$5 + 3$



$3 + 2$

5

$1 + 4$



$6 + 3$

9

$5 + 4$

6

$3 + 3$

$6 + 1$

7

$3 + 4$



Partitioning

$$432 + 325$$

$$400 + 300 = 700$$

$$30 + 20 = 50$$

$$2 + 5 = 7$$

$$700 + 50 + 7 = 757$$

$$757 - 432$$

$$700 - 400 = 300$$

$$50 - 30 = 20$$

$$7 - 2 = 5$$

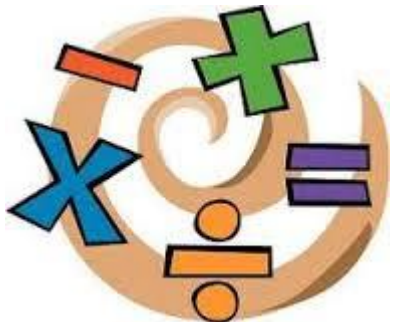
$$300 + 20 + 5 = 325$$

$$72 \times 8$$

$$70 \times 8 = 560$$

$$2 \times 8 = 16$$

$$560 + 16 = 576$$



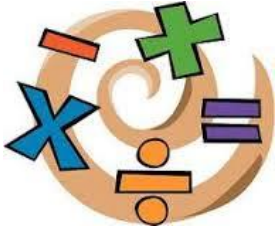
Column Methods

- Children with a secure understanding of place value will better understand the column method for addition and subtraction.

$$\begin{array}{r} 342 \\ + 77 \\ \hline 419 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 8948 \\ - 263 \\ \hline 685 \end{array}$$

- Understanding place value will help children see the relationship between the columns.



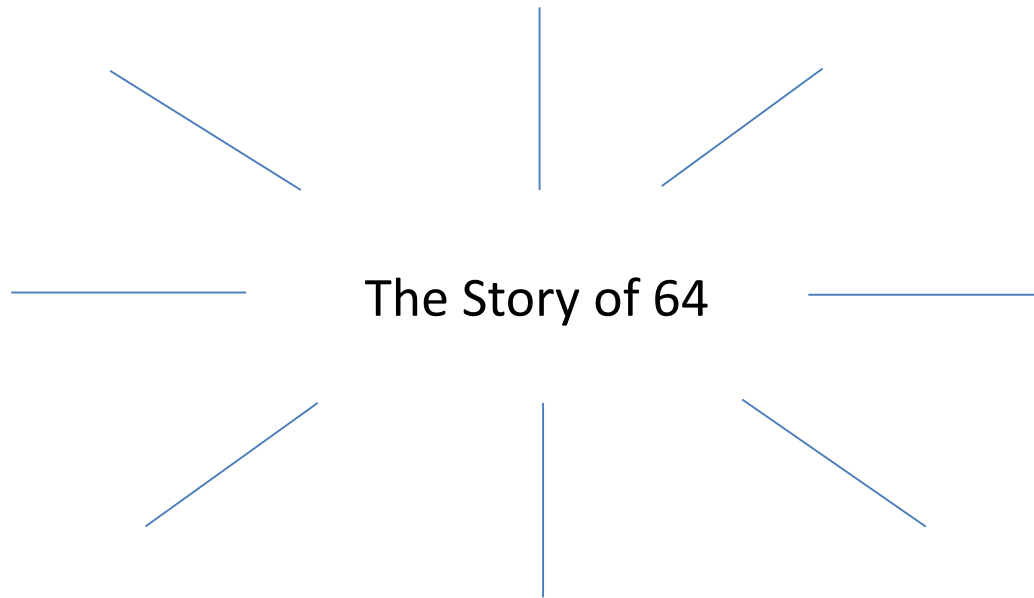
How you can help at home?

- Booklets on website
- KIRFs on website
- A focus on **mental calculations**.
- The ability to **estimate**.
- To use maths in a **real life context**.
- To ask children to **explain** how they have calculated something using a method that suits them.
- Teach children **written calculations** following the progression in the calculations policy (given as a handout).
- Ensure children are confident with their **addition bonds and multiplication tables (up to 12x12)** – and make sure they can use the related inverse facts too!

Focus

- Our Focus for this year is mathematical reasoning.
- During lessons children will be focused on
 - Explaining
 - Using correct vocabulary
 - Proving Things

Maths Stories



What else do you know?

If $3 \times 2 = 6$ what else do you
know?

What do you notice?

What do you notice about multiples of 2?

How could you investigate you are correct?

What do you notice about



Odd One Out

2, 4, 5, 6, 8

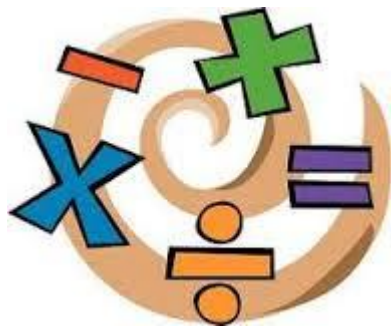
Which one is the odd one out?

Why is it the odd one out?

45, 89, 90, 180, 225

Which one is the odd one out?

Why is it the odd one out?



Thinking is at the heart of Mathematics and therefore should be at the heart of mathematical teaching and learning.

