

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

I'm thinking of a number ...
Can you find them?



St Leonard's CE Primary Academy

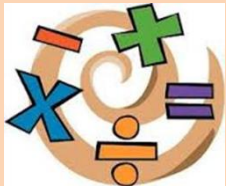
Living and Learning Together with God's Help

Aims of today

To get an insight into the way Maths is taught at St. Leonard's.

To take away some ideas to support your children at home.

To see written calculation methods.





The New Maths Curriculum

Children should:

Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

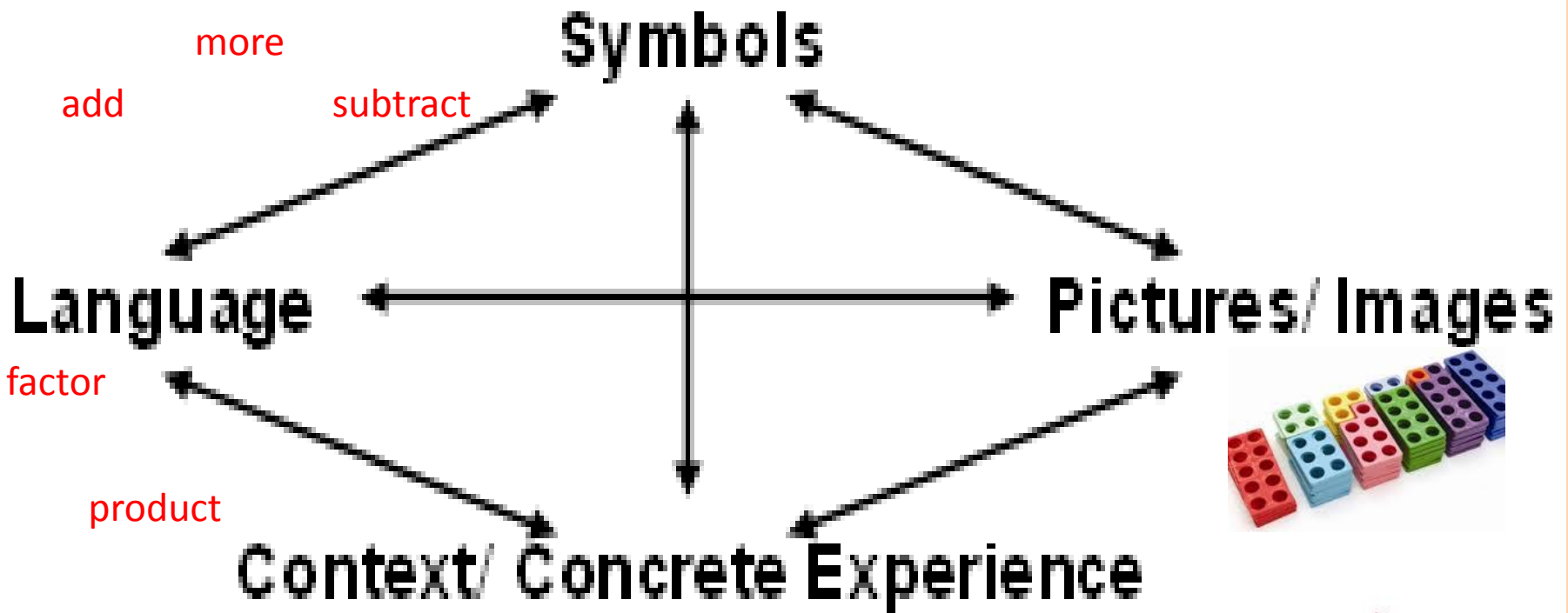
Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.

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 St. Leonard's

= + x ÷



Here is a receipt for some shopping. How much did I spend? How much change did I get from £20?



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.





Recalling facts

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

10

$7 + 3$



$6 + 4$



$6 + 2$

8

$5 + 3$



$6 + 3$

6

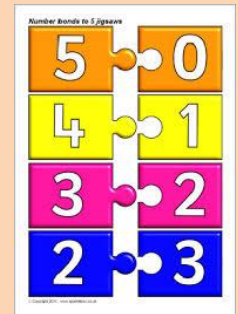
$5 + 4$

$3 + 3$

$3 + 2$

5

$1 + 4$



$6 + 1$

7

$3 + 4$

9




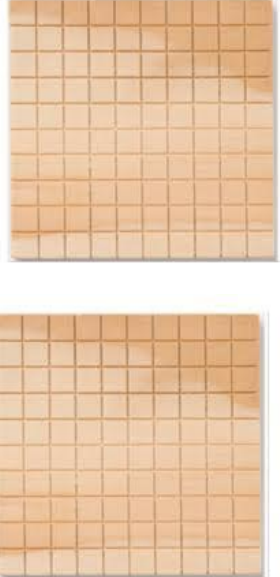
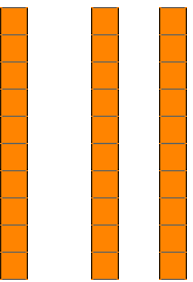
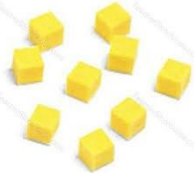
Place Value



Place value is at the heart of the number system. All digits have a value and a secure understanding of this will enable children to use and understand different calculation methods.





thousands	hundreds	tens	ones
<p>1</p> 	<p>2</p> 	<p>3</p> 	<p>9</p> 



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.

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

$$\begin{array}{r} 8 \cancel{9} 48 \\ - 263 \\ \hline 685 \end{array}$$

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



Multiplication

When we start multiplication and division we will use real life contexts and practical objects.

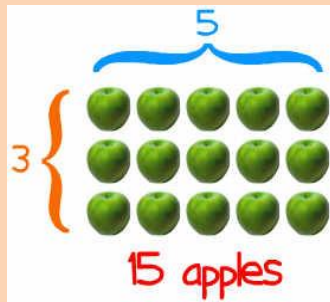
As an array

$$6 \times 2 = 12$$



$$2 \times 6 = 12$$

As repeated addition



$$3 \times 5 = 3 + 3 + 3 + 3 + 3$$

$$5 \times 3 = 5 + 5 + 5$$

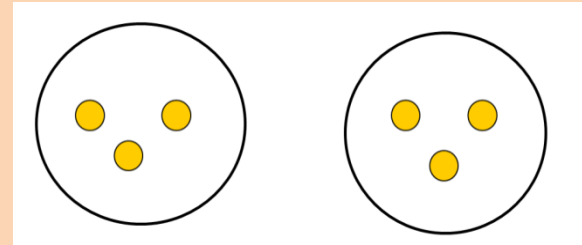


Division

$$6 \div 2 = 3$$

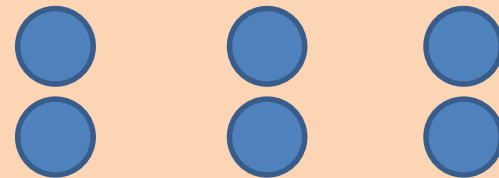
Division by sharing

6 shared equally between 2 groups.



Division by grouping

6 divided into groups of 2

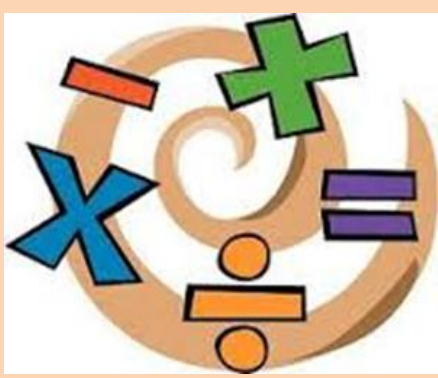




During Key Stage 2:

Children will be introduced to formal written methods of calculation. Mental methods and jottings will still be encouraged.

In Years 5 and 6, all children need to be proficient at written methods for addition, subtraction, multiplication and division.



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Thank you



Thank you for coming

If you have any questions or comments about information you have received this evening, please let us know.

For parents whose children will be in Year 3 or 4 next year, could you go to Class 3 please?

For Year 5 and 6 parents, could you go to Class 5 please?