

Parent Meeting November 2022

WHY? and HOW?

Hundred	Tens	Ones



T O

Vision



Mathematics and Numeracy at Oldcastle aims:

- To develop children's knowledge and fascination in maths in new and unfamiliar contexts.
- To deepen and broaden children's mastery in number and geometry.
- To give children the tools to access mathematics as a lifelong skill.

Rationale behind the sessions



The reason behind offering these sessions is to give parents and carers an insight into how mathematics is taught at Oldcastle, how we map our skills and the terminology children are encouraged to use. By doing this, we are hoping to open up conversations in school and at home about maths and the mastery of skills.

Mapping across the school

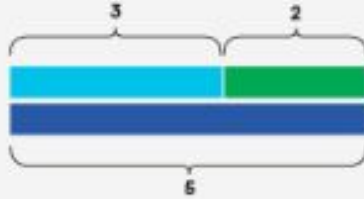


Autumn 1 2022	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
WB / Key events	5/9/22 (INSET 5/9/22)	12/9/22	19/9/22	26/9/22	3/10/22	10/10/22	17/10/22	24/10/22
Year 1	The Number System : Place Value (1-20)	The Number System : Addition and Subtraction	The Number System : Place Value (1-20)	The Number System : Place Value (1-20)	The Number System : Addition	The Number System : Addition & Subtraction	The Number System : Subtraction	Consolidation
Year 2	Familiarity with Numicon 3 days	Place Value	Place Value	Place Value	Place Value	Addition	Addition	Addition
Year 3	The number System,number & place value	The number System,number & place value	The number System,number & place value	The number System,number & place value	The number system addition	The number system subtraction	The number system subtraction	The number system subtraction
Year 4	The number system: Number and Place value	The number system: Number and Place value	The number system: Number and Place value	The number system: Addition	The number system: Subtraction	The number system: Subtraction	The number system: mixed addition and subtraction	Algebra: sequences
Year 5	The Number system: Place Value			The Number system: Addition	The Number system: Subtraction	The Number system: Addition and Subtraction	Geometry: Shape and angles	
Year 6	The Number system: Place Value	The Number system: Place Value	The Number system: Place Value	The Number system: Addition and Subtraction	The Number system: Multiplication	The Number system: Division	The Number system: Multiplication and division	The Number System: Consolidation of half term. All four operations

Mastery through equipment



Concrete



Pictorial

$$3 + 2 = 5$$

Abstract

From Nursery to Year 6, we teach maths mastery through Concrete, Pictorial and Abstract ways.

Terminology

Regrouping:

Changing the
appearance not the
value - only single digit

Numeracy: one's
knowledge and skills in
mathematics and its use
in real life

Digit : A digit is any
one of these symbols: 0,
1, 2, 3, 4, 5, 6, 7, 8, 9. For
example, the number 23
is written with two digits,
2 and 3

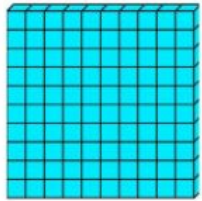
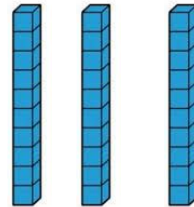
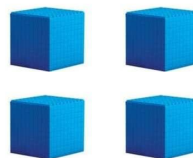
Mathematics:
the broad study of
numbers, quantities,
geometry and forms

Number: A number is
an amount of something.
It can be written with one
or more – or many –
digits.

Sentence stems

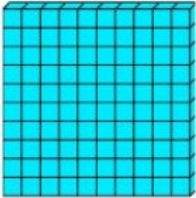
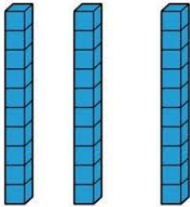
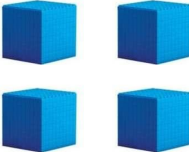
Reception	Year 2	Year 4	Year 6
....plus....equals.... 3 plus 2 equals 5 equals.....plus 5 equals 3 plus 2 equals...add.... 5 equals 3 add 2 is equal to add.... 5 is equal to 3 add 2 ...add ... is equal to 3 add 2 is equal to 5 ...add... is the same value as 3 add 2 is the same value as 5 add is not equal to 3 add 2 is not equal to 4	I think that add.....equals.....because... I think that 10 add 9 equals 19 because 10 add 10 equals 20 The inverse of _____ is _____. The inverse of addition is subtraction	The sum of... and is The sum of 34 and 46 is 80. ...is equal to the sum of and.... 80 is equal to the sum of 34 and 46 is the sum of and 80 is the sum of 34 and 46	 tenths add tenths equals/is equal tenths 2 tenths add 5 tenths equals/is equal to 7 tenths. (3dp)

Addition- no regrouping

Hundreds	Tens	Ones
		
		
		

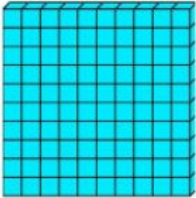
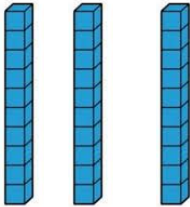
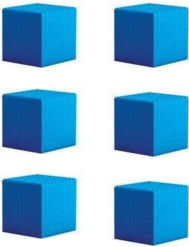
T O
3 2
1 4

+

Hundreds	Tens	Ones
		
		
		

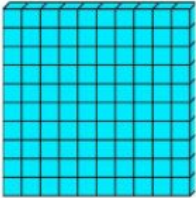
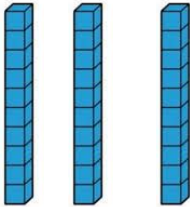
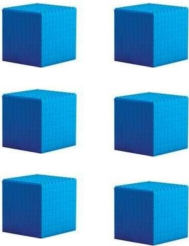
$$\begin{array}{r}
 \text{T O} \\
 32 \\
 14 \\
 + \\
 \hline
 \\
 \hline
 \end{array}$$

Two ones add four ones equals six ones.

Hundreds	Tens	Ones
		
		
		

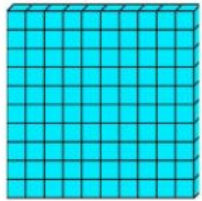
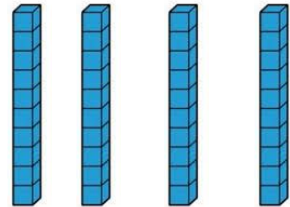
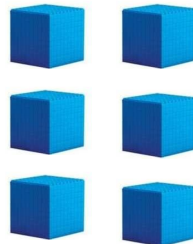
$$\begin{array}{r}
 \text{T O} \\
 32 \\
 14 \\
 \hline
 6 \\
 \hline
 \end{array}
 +$$

Two ones add four
ones equals six ones.

Hundreds	Tens	Ones
		
		
		

$$\begin{array}{r}
 \text{T O} \\
 32 \\
 14 \\
 \hline
 6
 \end{array}
 +$$

Three tens add one ten equals four tens.

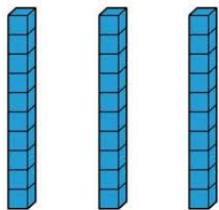
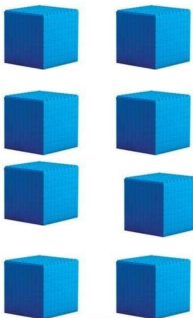
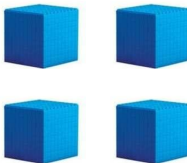
Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T O} \\
 32 \\
 14 \\
 \hline
 46
 \end{array}
 +$$

Therefore 32 add 14 equals 46

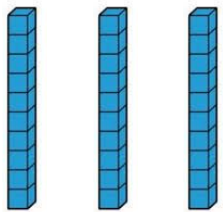
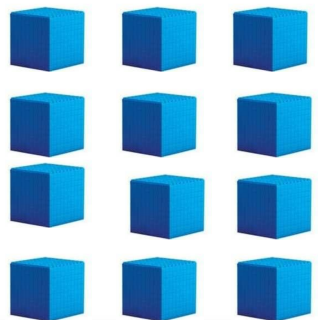
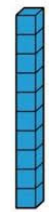
Addition - regrouping



Hundreds	Tens	Ones
		
		

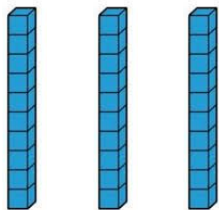
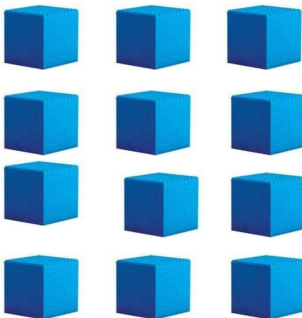
$$\begin{array}{r}
 \text{T O} \\
 38 \\
 + \\
 14 \\
 \hline \\
 \hline
 \end{array}$$

Eight ones add four ones equals twelve ones.

Hundreds	Tens	Ones
		
		

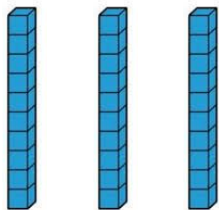
$$\begin{array}{r}
 \text{T O} \\
 38 \\
 + 14 \\
 \hline \\
 \hline
 \end{array}$$

Eight ones add four ones equals twelve ones.

Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T O} \\
 38 \\
 + 14 \\
 \hline
 \\
 \hline
 \end{array}$$

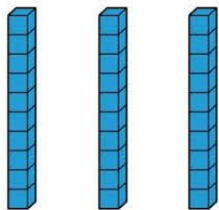
Regroup ten ones for one tens.

Hundreds	Tens	Ones
		
		



$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 2 \\
 \hline
 1
 \end{array}
 +$$

Regroup ten ones for one tens.

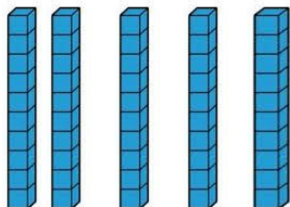
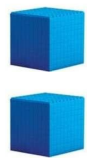
Hundreds	Tens	Ones
		
		



$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 2 \\
 \hline
 1
 \end{array}$$

Three tens add one
 tens add one tens
 equals five tens

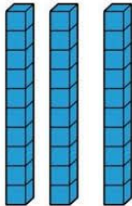
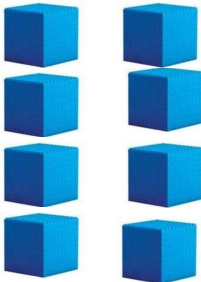


Hundreds	Tens	Ones
		

$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 52 \\
 \hline
 1
 \end{array}$$

Therefore 38 add 14
equals 52

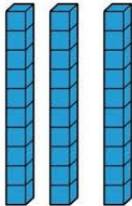
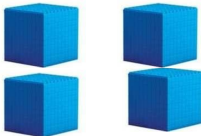
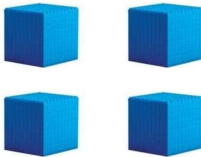
Subtraction - no regrouping

Hundreds	Tens	Ones
		

$$\begin{array}{r}
 \text{T O} \\
 38 \\
 -14 \\
 \hline
 \\
 \hline
 \end{array}$$

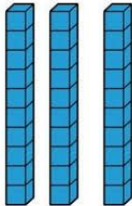
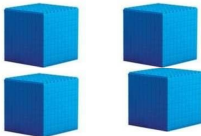
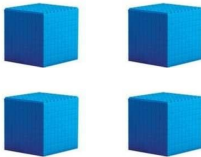
Eight ones subtract
 four ones equals four
 ones.



Hundreds	Tens	Ones
		
		

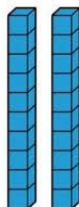
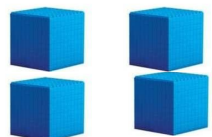
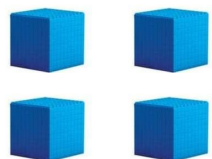
$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 4
 \end{array}$$

Eight ones subtract
four ones equals four
ones.

Hundreds	Tens	Ones
		
		

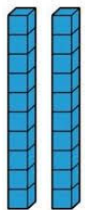
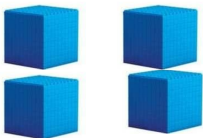
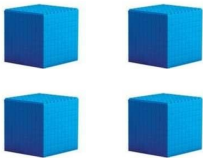
$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 4
 \end{array}$$

Three tens subtract one tens equals two tens.

Hundreds	Tens	Ones
		
		

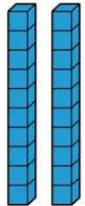
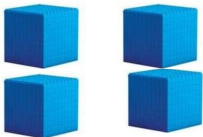
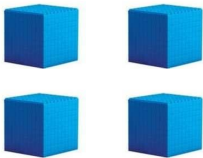
$$\begin{array}{r}
 \text{T O} \\
 38 \\
 14 \\
 \hline
 24
 \end{array}$$

Three tens subtract one tens equals two tens.

Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T O} \\
 38 \\
 -14 \\
 \hline
 24
 \end{array}$$

Therefore 38 subtract
14 equals 24

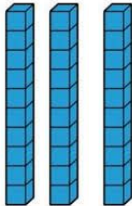
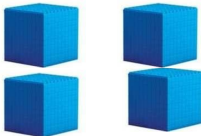
Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T O} \\
 38 \\
 - 14 \\
 \hline
 24
 \end{array}$$

Therefore 38 subtract
14 equals 24

INVERSE

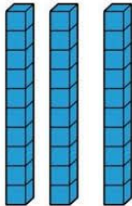
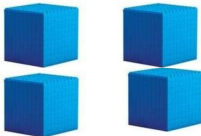
Subtraction - regrouping

Hundreds	Tens	Ones
		

$$\begin{array}{r}
 \text{T O} \\
 34 \\
 - 18 \\
 \hline
 \\
 \hline
 \end{array}$$

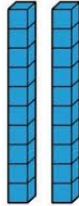
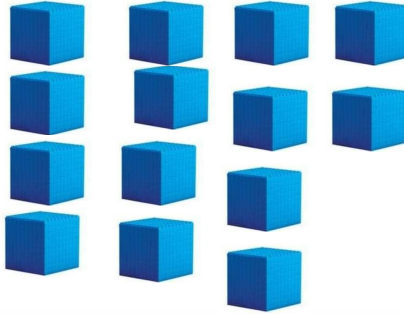
Four ones subtract eight ones.

This can not be done.

Hundreds	Tens	Ones
		

$$\begin{array}{r}
 \text{T O} \\
 34 \\
 -18 \\
 \hline
 \\
 \hline
 \end{array}$$

Regroup one tens for ten ones.

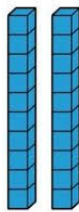
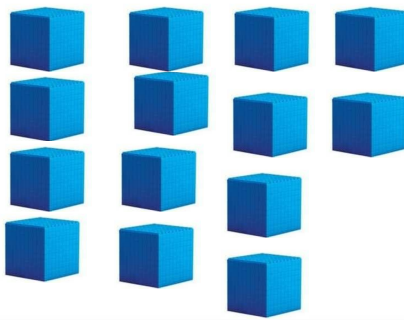
Hundreds	Tens	Ones
		

T O

²3¹4 -

18

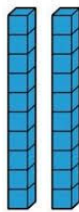
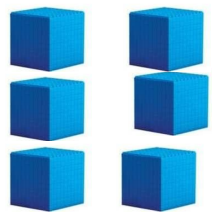
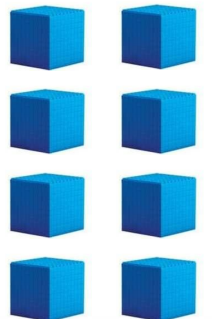
Regroup one tens for ten ones.

Hundreds	Tens	Ones
		

T O

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

Fourteen ones
subtract eight ones
equals six ones

Hundreds	Tens	Ones
		
		

T

O

2

3

1

4

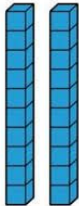
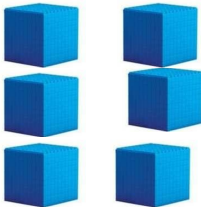
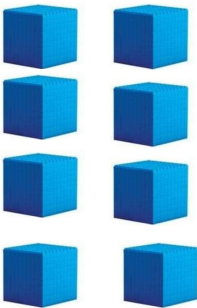
-

1

8

6

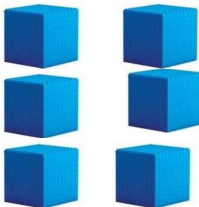
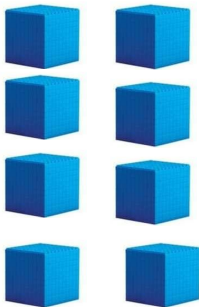
Fourteen ones
subtract eight ones
equals six ones

Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 2 \quad 1 \\
 \cancel{3} \quad 4 \quad - \\
 1 \quad 8 \\
 \hline
 6
 \end{array}$$

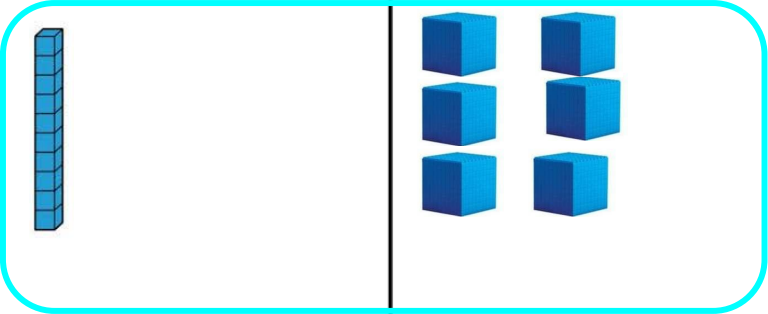
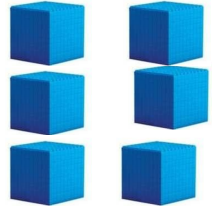
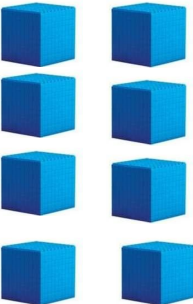
Two tens subtract one tens equals one tens



Hundreds	Tens	Ones
		
		

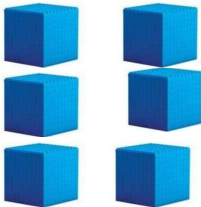
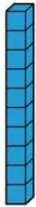
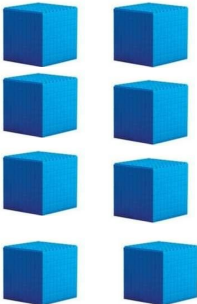
$$\begin{array}{r}
 \text{T O} \\
 \begin{array}{r}
 2 \quad 1 \\
 3 \quad 4 \\
 \hline
 1 \quad 8 \\
 \hline
 1 \quad 6
 \end{array}
 \end{array}$$

Two tens subtract one
tens equals one tens

Hundreds	Tens	Ones
		
		

$$\begin{array}{r}
 \text{T O} \\
 \begin{array}{r}
 2 \quad 1 \\
 34 \\
 \times 18 \\
 \hline
 16
 \end{array}
 \end{array}$$

Therefore 34 subtract 18 equals 16

Hundreds	Tens	Ones
		
		

$$34 - 16 = 18$$

$$16 + 18 = 34$$

$$34 - 18 = 16$$

$$18 + 16 = 34$$

By subtracting, not taking away, you can use inverse.