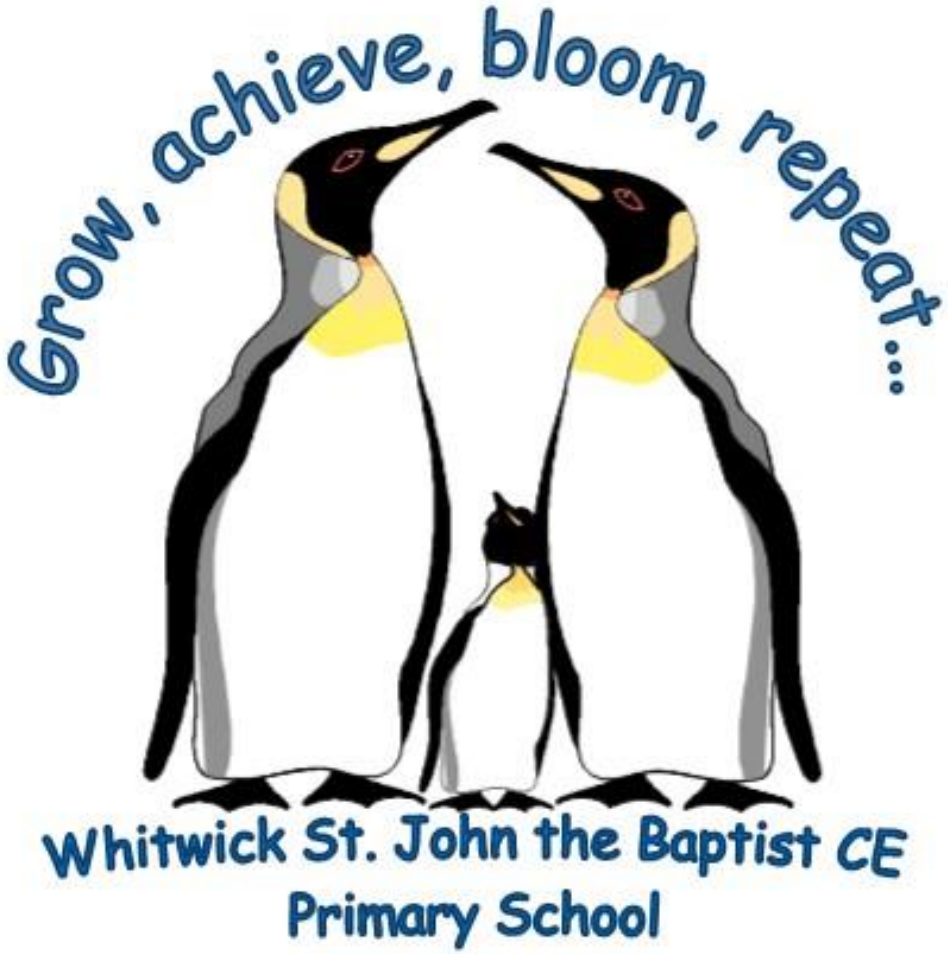


Calculation Policy

Agreed by Staff:

Agreed by Governors:

Signed (Chair): _____ **Date:** _____

Addition

Year 1

Mental Methods:

+ = signs and missing numbers

Children need to understand the concept of equality before using the '=' sign. Calculations should be written either side of the equality sign so that the sign is not just interpreted as 'the answer'.

2 = 1+ 1

2 + 3 = 4 + 1

Missing numbers need to be placed in all possible places.

3 + 4 = □ □ = 3 + 4

3 + □ = 7 7 = □ + 4

Understanding of counting on with a numberline (supported by models and images).

Children can use numberlines to support their mental strategies when counting on.

7+ 4

Towards a Written Method

Counting and Combining sets of Objects

Combining two sets of objects (aggregation) which will

Year 2

Mental Methods:

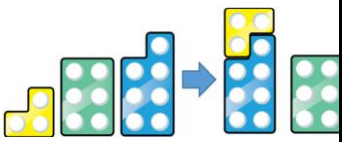
Missing number problems e.g.

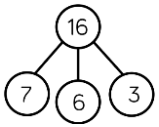
14 + 5 = 10 + □ 32 + □ + □ = 100 35 = 1 + □ + 5

It is valuable to use a range of representations (also see Y1) to develop understanding of:

Adding 3 one digit numbers

Children should be encouraged to look for number bonds to 10 or doubles to become more efficient.





Partitioning and bridging through 10.

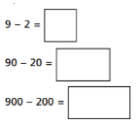
The steps in addition often bridge through a multiple of 10 e.g. Children should be able to partition the 7 to relate adding the 2 and then the 5.

8 + 7 = 15

Year 3

Mental Methods

Missing number problems using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.



Partition into tens and ones

Partition both numbers and recombine.

Children need to be secure adding multiples of 100 and 10 to any three-digit number including those that are not multiples of 10.

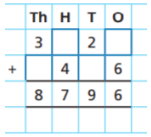
Towards a Written Method

Introduce column addition

Year 4

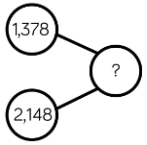
Mental methods

Missing number/digit problems

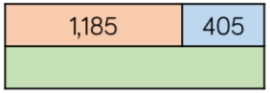


	Th	H	T	O
	3		2	
+		4		6
	8	7	9	6

Children should continue to develop, supported by a range of models and images. Eg part – whole models



The bar model should continue to be used to help with problem solving.



Year 5

Mental methods

Missing number/digit problems

	Th	H	T	O
	6	?	?	8
+	?	?	8	?
	9	3	2	5

Children should continue to develop their mental strategies, supported by a range of models and images. The bar model should continue to be used to help with problem solving. Children should practise with increasingly large numbers to aid fluency e.g. 12462 + 2300 = 14762

Written methods (progressing to more than 4-digits)

Year 6

Mental methods

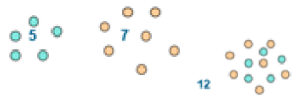
Missing number/digit problems

1,026 + □ = 10,000

□ + 23,245 = 35,490

Children should continue to develop their mental strategies, supported by a range of models and images. The bar model should continue to be used to help with problem solving.

progress onto adding on to a set (augmentation)



Number Bonds to 20 Children can use Numicon to support the learning of their number bonds e.g. 'How many ways can you make 12?' Children will be encouraged to answer this mentally.

Adding 1 and 2 digit numbers

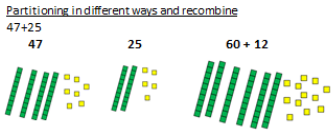
Children will use their knowledge of place value to create 1 digit and 2 digit numbers. They will learn to represent '10' as a bundle of 10 straws. They will then use their straws to add 1 and 2 digit numbers using their 'tens and ones' grid.

Problem Solving

The above strategies should be applied in problem solving contexts

Towards a Written Method

Children should find their answer by adding the ones first, followed by the tens.



Once confident with the practical method children should be introduced to an informal written method alongside the manipulatives.

56 + 23 = ?

50	6	20	3

50 + 20 = 70

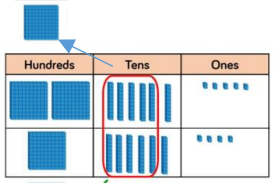
6 + 3 = 9

70 + 9 = 79

Problem Solving

The above strategies should be applied in problem solving contexts

modelled with Base 10 equipment. Place value counters could be used for those who are ready for a more abstract representation.



$$\begin{array}{r} {\scriptstyle 1} \\ 247 \\ +\ 125 \\ \hline 372 \end{array}$$

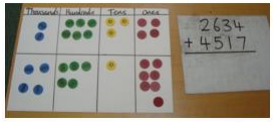
Leading to children understanding the exchange between tens and ones or hundreds and tens.

Problem Solving

The above strategies should be applied in problem solving contexts

Written methods (progressing to 4-digits)

Introduce column addition modelled with (place value) counters on a place value grid. Progressing to calculations with 4-digit numbers.



$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 2634 \\ +\ 4517 \\ \hline 7151 \end{array}$$

Extend to up to two places of decimals (same number of decimals places) and adding several numbers (with different numbers of digits).

$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 72.8 \\ +\ 54.6 \\ \hline 127.4 \end{array}$$

Problem Solving

The above strategies should be applied in problem solving contexts

As year 4, progressing when understanding of the method is secure, children will move on to the formal columnar method for whole numbers and decimal numbers as an efficient written algorithm.

$$\begin{array}{r} {\scriptstyle 1\ \ 1\ 1} \\ 172.83 \\ +\ \ 54.68 \\ \hline 227.51 \end{array}$$

*Children should be encouraged to move away from using the counters alongside the columnar method – if necessary they should create their own jotting of a PV grid and draw in counters etc.

Problem Solving

The above strategies should be applied in problem solving contexts

Written methods

As year 5, progressing to larger numbers, aiming for both conceptual understanding and procedural fluency with columnar method to be secured.

Continue calculating with decimals, including those with different numbers of decimal places. Eg 172.8 + 54.680 =

$$\begin{array}{r} {\scriptstyle 1\ \ 1} \\ 172.800 \\ +\ \ 54.680 \\ \hline 226.580 \end{array}$$

Problem Solving

Teachers should ensure that pupils have the opportunity to apply their knowledge in a variety of contexts and problems (exploring cross curricular links) to deepen their understanding.

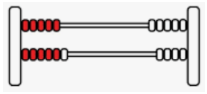
Year	1	2	3	4	5	6
Foundations	1 more	10 more Number bonds: 20, 12, 13	Add multiples of 10, 100	Add multiples of 10s , 100s, 1000s	Add multiples of 10s , 100s, 1000s, tenths,	Add multiples of 10s , 100s, 1000s, tenths, hundredths
	Number bonds: 5, 6	Number bonds: 14,15 Add 1 digit to 2 digit by bridging.	Add single digit bridging through boundaries	Fluency of 2 digit + 2 digit	Fluency of 2 digit + 2 digit including with decimals	Fluency of 2 digit + 2 digit including with decimals
	Largest number first. Number bonds: 7, 8	Partition second number, add tens then ones	Partition second number to add Pairs of 100	Partition second number to add Decimal pairs of 10 and 1	Partition second number to add	Partition second number to add
	Add 10. Number bonds: 9, 10	Add 10 and multiples. Number bonds: 16 and 17	Use near doubles to add	Use near doubles to add	Use number facts, bridging and place value	Use number facts, bridging and place value
	Ten plus ones. Doubles up to 10	Doubles up to 20 and multiples of 5 Add near multiples of 10.	Add near multiples of 10 and 100 by rounding and adjusting	Adjust both numbers before adding Add near multiples	Adjust numbers to add	Adjust numbers to add
	Use number bonds of 10 to derive bonds of 11	Number bonds: 18, 19 Partition and recombine	Partition and recombine	Partition and recombine	Partition and recombine	Partition and recombine

Subtraction

Year 1

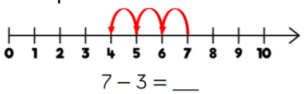
Mental methods

Missing number problems e.g.
7 = □ - 9; 20 - □ = 9;
15 – 9 = □; □ - □ = 11;
Use concrete objects and pictorial representations.



Number tracks to be used to physically move along.

Understand subtraction as take-away. Use bead strings or number tracks to reinforce and support teaching of the concept:



Know subtraction facts to 20.
Use of models and images to support this e.g.

Towards a written method

The above model would be introduced with concrete objects which children can move including cards with pictures as well as straws (see picture) before progressing to pictorial representation.

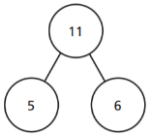
The use of other images is also valuable for modelling subtraction e.g. Numicon.

Year 2

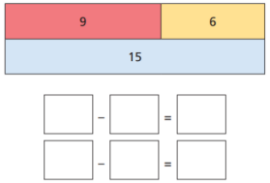
Mental Methods

Missing number problems e.g.
52 – 8 = □; □ – 20 = 25;
22 = □ – 21; 6 + □ + 3 = 11

It is valuable to use a range of representations (also see Y1).

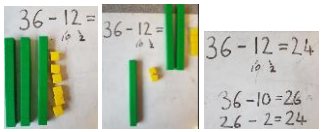


The bar model should continue to be used, as well as images in the context of **measures**.



Towards written methods

Children use Base 10 apparatus to carry out the subtraction of 2 digit by 2 digit numbers. They then move onto recording using partitioning where the number being subtracted is partitioned.



Problem Solving
The above strategies should be applied in problem solving contexts

Year 3

Mental methods

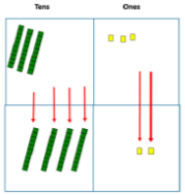
Missing number problems e.g.
□ = 43 – 27; 145 – □ = 138;
274 – 30 = □; 245 – □ = 195;
532 – 200 = □; 364 – 153 = □

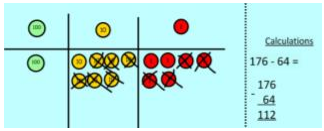
Children should continue to develop mental methods, supported by a range of models and images. The bar model should continue to be used to help with problem solving (see Y1 and Y2).

Children should make choices about whether to use complementary addition or counting back, depending on the numbers involved.

Written methods (progressing to 3-digits)

Introduce column subtraction with no decomposition, modelled with place value counters (Base 10 could be used for those who need a less abstract representation)



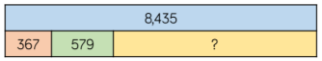


Year 4

Mental methods

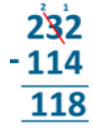
Missing number/digit problems:
456 + □ = 710; 1□7 + 6□ = 200;
60 + 99 + □ = 340; 225 - □ = 150;
200 – 90 – 80 = □; □ – 25 = 67;
3450 – 1000 = □; □ - 2000 = 900

Children should continue to develop mental methods, supported by a range of models and images, including the bar model.



Written methods (progressing to 4-digits)

Place value counters can still be used as an aid to reinforce conceptual understanding. However, most children will move away from it and use the formal, efficient written method as seen below.



Problem Solving
The above strategies should be applied in problem solving contexts

Year 5

Mental methods

Missing number/digit problems:
6.45 = 6 + 0.4 + □; 119 - □ = 86;
1 000 000 - □ = 999 000;
600 000 + □ + 1000 = 671 000;
12 462 – 2 300 = □

Children should continue to develop mental methods, supported by a range of models and images, including the bar model.

Written methods (progressing to more than 4-digits)

Children will use the efficient written method of subtraction as seen below. They will also progress to examples including decimals.

Problem Solving
The above strategies should be applied in problem solving contexts

Year 6

Mental methods

Missing number/digit problems:
□ and # each stand for a different number. # = 34.
+ # = □ + □ + #. What is the value of □? What if # = 28? What if # = 21

10 000 000 = 9 000 100 + □
7 – 2 x 3 = □; (7 – 2) x 3 = □; (□ - 2) x 3 = 15

Children should continue to develop, supported by a range of models and images. The bar model should continue to be used to help with problem solving.

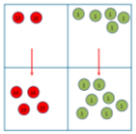
Written methods

Children will now confidently use the efficient written method for any numbers, including those with different numbers of decimal places.

They should now choose to use the method in a range of problem solving situations.

Problem Solving

The above strategies should be applied in problem solving contexts

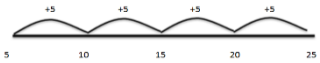
Problem Solving The above strategies should be applied in problem solving contexts		For some children this will progress to exchanging, modelled using place value counters/ Base 10  6 1 ~~7~~2 - 47 25 Problem Solving The above strategies should be applied in problem solving contexts			

Year	1	2	3	4	5	6
Foundations	1 less	10 less Number bonds, subtraction: 20, 12, 13	Subtract multiples of 10 and 100	Subtract multiples of 10s , 100s, 1000s	Subtract multiples of 10s , 100s, 1000s, tenths,	Subtract multiples of 10s , 100s,1000s, tenths, hundredths
	Number bonds, subtraction: 5, 6	Number bonds, subtraction: 14, 15 Subtract 1 digit from 2 digit by bridging	Subtract single digit by bridging through boundaries	Fluency of 2 digit subtract 2 digit	Fluency of 2 digit - 2 digit including with decimals	Fluency of 2 digit - 2 digit including with decimals
	Count back Number bonds, subtraction: 7, 8	Partition second number, count back in10s then 1s	Partition second number to subtract	Partition second number to subtractDecimal subtraction from 10 or 1	Partition second number to subtract	Partition second number tosubtract
	Subtract 10. Number bonds, subtraction: 9, 10	Subtract 10 and multiples of 10 Number bonds, subtraction: 16, 17	Difference between	Difference between	Difference between	Use number facts bridging andplace value
	Teens subtract 10.	Subtract near multiples of 10	Subtract near multiples of 10 and 100 by rounding and adjusting	Subtract near multiples by rounding and adjusting	Adjust numbers to subtract	Adjust numbers to subtract
	Difference between	Difference between Number bonds, subtraction: 18, 19				Difference between

Multiplication

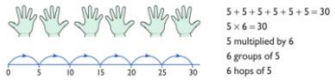
Year 1

Children should experience regular counting on and back from different numbers in multiples of 1s, 2s, 5s and 10s.



Understand multiplication is related to doubling and combing groups of the same size (repeated addition)

Practical resources for counting objects: washing line, Numicon, bundles of straws and bead strings.



Children should memorise and reason with numbers in 2, 5 and 10 multiplication tables.

Problem solving with concrete objects (including money and measures).

Use Numicon and bar method to develop the vocabulary relating to 'times' – Pick up five, 4 times

Year 2

Expressing multiplication as a number sentence using x

Using understanding of the inverse and practical resources to solve missing number problems.

7 x 2 = □ □ = 2 x 7

7 x □ = 14 14 = □ x 7

□ x 2 = 14 14 = 2 x □

□ x ◯ = 14 14 = □ x ◯

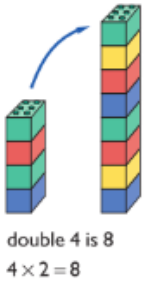
Develop understanding of multiplication using arrays and jottings (repeated addition). Include multiplications in the 2, 5 or 10 times tables.

Begin to develop understanding of multiplication as scaling (3 times bigger/taller)

_____ x1

_____ x3

Doubling numbers up to 10 + 10



Year 3

Missing number problems

Continue with a range of equations as in Year 2 but with appropriate numbers.

Doubling 2 digit numbers using partitioning

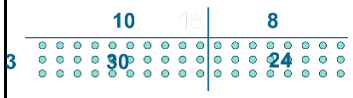
Demonstrating multiplication on a number line – jumping in larger groups of amounts

13 x 4 = 10 groups 4 = 3 groups of 4

Written methods (progressing to 2 digit x 1 digit)

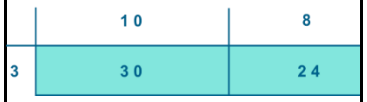
Developing written methods using understanding of visual images.

***Start by multiplying the ones**



Developing onto the grid method

***Start by multiplying the ones**



Give children opportunities for children to explore this and deepen understanding using Dienes apparatus and place value counters

Problem Solving
The above strategies should be

Year 4

Continue with a range of equations as in Year 2 but with appropriate numbers. Also include equations with missing digits □2 x 5 = 160

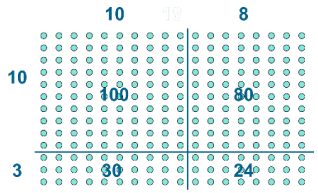
Mental methods
Counting in multiples of 6, 7, 9, 25 and 1000, and steps of 1/100.

Solving practical problems where children need to scale up. Relate to known number facts. (e.g. how tall would a 25cm sunflower be if it grew 6 times taller?)

Use jottings to support mental methods.

Written methods (progressing to 3 digit x 2 digit)
Children to embed and deepen their understanding of the grid method to multiply up 2 digit x 2 digit. Ensure this is still linked back to their understanding of arrays and place value counters.

***Start by multiplying the ones**



Year 5

Continue with a range of equations as in Year 2 but with appropriate numbers. Also include equations with missing digits

Mental methods
X by 10, 100, 1000

Use practical resources and jottings to explore equivalent statements (e.g. 4 x 35 = 2 x 2 x 35)

Learn and recall of prime numbers up 19 and identify prime numbers up to 100 (with reasoning)

Solving practical problems where children need to scale up. Relate to known number facts.

Identify factor pairs for numbers

Use jottings to support mental methods.

Written methods (progressing to 4 digit x 2 digit)

Children to explore how the grid method supports an understanding of long multiplication (for 2 digit x 2 digit)

Year 6

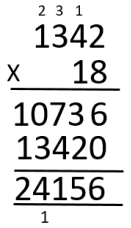
Continue with a range of equations as in Year 2 but with appropriate numbers. Also include equations with missing digits

Mental methods
Identifying common factors and multiples of given numbers

Solving practical problems where children need to scale up. Relate to known number facts.

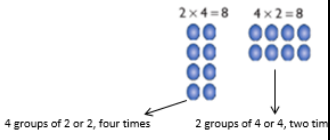
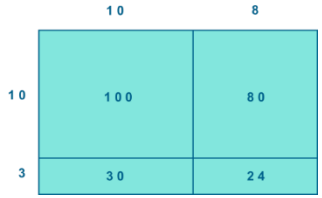
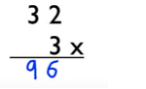
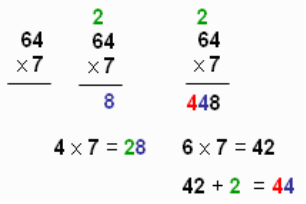
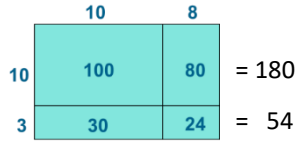
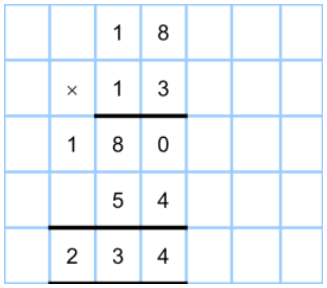
Use jottings to support mental methods.

Written methods
Continue to refine and deepen understanding of written methods including fluency for using long multiplication



Ensure children begin by multiplying digits in the **ones** column, as demonstrated here.

Problem Solving
The above strategies should be applied in problem solving contexts

Use arrays to understand multiplication can be done in any order (commutative  Problem Solving The above strategies should be applied in problem solving contexts.	Link with understanding scaling, using known doubles to work out double 2 digit numbers eg double 15 = double 10 + double 5  3, four times OR 4 groups of 3 3 x 4 4, 3 times OR 3 groups of 4  4 x 3 Problem Solving The above strategies should be applied in problem solving contexts	applied in problem solving contexts	 Children to explore how the grid method supports an understanding of short multiplication (for 2/3 digit x 1 digit) 32 x 3 =  3 2 3 x 9 6  64 × 7 2 64 × 7 8 2 64 × 7 448 4 × 7 = 28 6 × 7 = 42 42 + 2 = 44 Problem Solving The above strategies should be applied in problem solving contexts	  1 8 × 1 3 1 8 0 5 4 2 3 4 Problem Solving The above strategies should be applied in problem solving contexts	

Year	1	2	3	4	5	6
Foundations	Count in 2s	2 x table	Review 2x, 5x and 10x	4x, 8x tables 10 times bigger	Multiplication facts up to 12 x 12	Multiplication facts up to 12 x 12
	Count in 10s	10 x table	4x table	3x, 6x and 12x tables	100, 1000 times bigger 10, 100, 1000 times smaller	Partition to multiply mentally
	Doubles up to 10	Doubles up to 20 & multiples of 5	Double two digit numbers	Double larger numbers & decimals	Double larger numbers and decimals	Double larger numbers and decimals
	Count in 5s	5 x table	8 x table	3x, 9x tables		Multiplication facts up to 12 x 12
	Double multiples of 10	Count in 3s	3 x table	11x, 7 x tables	Partition to multiply mentally	Partition to multiply mentally
	Count in 2s, 5s and 10s	2 x, 5 x and 10 x tables	6 x table or review others	6x, 12 x tables		Double larger numbers and decimals

Division

Year 1

Children must have secure counting skills- being able to confidently count in 2s, 5s and 10s.

Children should be given opportunities to reason about what they notice in number patterns.

Group AND **share small quantities- understanding the difference between the two concepts.**

Sharing
Develops importance of one-to-one correspondence.

Children should be taught to share using concrete apparatus.

Grouping
Children should apply their counting skills to develop some understanding of grouping.

Year 2

÷ = signs and missing numbers

6 ÷ 2 = □ □ = 6 ÷ 2

6 ÷ □ = 3 3 = 6 ÷ □

□ ÷ 2 = 3 3 = □ ÷ 2

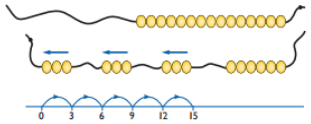
□ ÷ ∇ = 3 3 = □ ÷ ∇

Know and understand sharing and grouping- introducing children to the ÷ sign.

Children should continue to use grouping and sharing for division using practical apparatus, arrays and pictorial representations.

Grouping using a numberline (mental method)
Group from zero in jumps of the divisor to find our 'how many groups of 3 are there in 15?'.

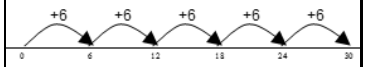
15 ÷ 3 = 5



Year 3

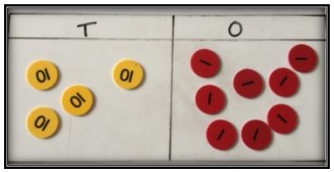
÷ = signs and missing numbers
Continue using a range of equations as in year 2 but with appropriate numbers.

Grouping
How many 6's are in 30?
30 ÷ 6 can be modelled as:

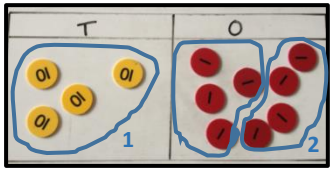


Becoming more efficient

48 ÷ 4 = 12



Becomes:
48 ÷ 4 = 12



Remainders
49 ÷ 4 = 12 r1

Once children are secure with division as grouping and can

Year 4

÷ = signs and missing numbers
Continue using a range of equations as in year 3 but with appropriate numbers.

Sharing and Grouping
Children will continue to explore division as sharing and grouping until they have a secure understanding. Children should progress in their use of written division calculations:
Using tables facts with which they are fluent

Experiencing a logical progression in the numbers they use, for example:

*Dividend just over 10x the divisor, e.g. 84 ÷ 7
*Dividend just over 10x the divisor when the divisor is a teen number, e.g. 173 ÷ 15
*Dividend over 100x the divisor, e.g. 840 ÷ 7
*Dividend over 20x the divisor, e.g. 168 ÷ 7

All of the above stages should include calculations with remainders as well as without. Remainders should be interpreted according to the context. (i.e. rounded up or down to relate to the answer to the problem)

Problem Solving
The above strategies should be applied in problem solving contexts

Year 5

÷ = signs and missing numbers
Continue using a range of equations as in year 3 but with appropriate numbers.

Sharing and Grouping
Children will continue to explore division as sharing and grouping until they have a secure understanding. Children should progress in their use of written division calculations:
Using tables facts with which they are fluent

Experiencing a logical progression in the numbers they use, for example:

*Dividend just over 10x the divisor, e.g. 84 ÷ 7
*Dividend just over 10x the divisor when the divisor is a teen number, e.g. 173 ÷ 15
*Dividend over 100x the divisor, e.g. 840 ÷ 7
*Dividend over 20x the divisor, e.g. 168 ÷ 7

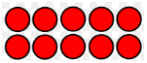
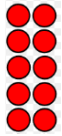
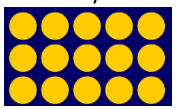
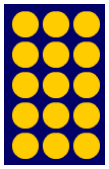
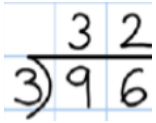
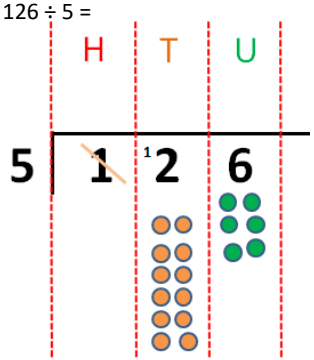
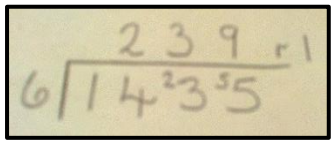
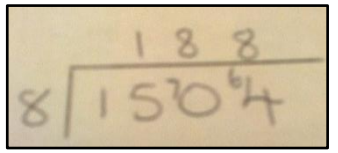
All of the above stages should include calculations with remainders as well as without. Remainders should be interpreted according to the context. (i.e. rounded up or down to relate to the answer to the problem)

Problem Solving
The above strategies should be applied in problem solving contexts

Year 6

÷ = signs and missing numbers
Continue using a range of equations but with appropriate numbers

Sharing and Grouping
Children will continue to explore division as sharing and grouping, and to represent on a place value grid with counters where appropriate.
Quotients should be expressed as decimals and fractions

Use of arrays as a pictorial representation for division. 10 ÷ 2 = 5. (2 groups of 5).  10 ÷ 5 = 2. (5 groups of 2).  Children should be able to find ½ and ¼ and simple fractions of objects, numbers and quantities. <u>Problem Solving</u> The above strategies should be applied in problem solving contexts	Continue work on arrays. Support children to understand how multiplication and division are inverse. Look at an array – what do you see?  15 ÷ 3 = 5  15 ÷ 5 = 3 <u>Problem Solving</u> The above strategies should be applied in problem solving contexts	demonstrate using place value counters and arrays, short division for larger numbers should be introduced. Numbers should initially be limited so that there are no remainders and no exchanging.  <u>Problem Solving</u> The above strategies should be applied in problem solving context	**<u>Formal Written Methods</u>** Formal short division should be introduced once children have a good understanding of division, its links with multiplication and the idea of 'chunking up' to find a target number. Short division to be modelled for understanding using place value counters as shown below. Calculations with 2 and 3-digit dividends. 126 ÷ 5 =  	**<u>Formal Written Methods</u>** Continued as shown in Year 4, leading to the efficient use of a formal method. The language of grouping to be used E.g. 1435 ÷ 6  Children begin to practically develop their understanding of how express the remainder as a decimal or a fraction. Ensure practical understanding allows children to work through this (e.g. what could I do with this remaining 1? How could I share this between 6 as well?) <u>Problem Solving</u> The above strategies should be applied in problem solving contexts	**<u>Formal Written Method - short division</u>** E.g. 1504 ÷ 8  Using short methods, allow opportunities for remainders to be shown in a variety of ways: 37 r8 37 ½ 37.5 Also use the short written method to calculate when the divisor is a 2 digit number. Children to use jottings to list multiples of the divisor (partitioned for accuracy) <u>Problem Solving</u> The above strategies should be applied in problem solving contexts

Year	1	2	3	4	5	6
Foundations	Count back in 2s	Division facts (2 x table)	Review division facts (2x, 5x, 10x table)	Division facts (4x, 8x tables) 10 times smaller	Division facts (4x, 8x tables) 100, 1000 times smaller	Division facts (up to 12 x 12)
	Count back in 10s	Division facts (10 x table)	Division facts (4 x table)	Division facts (3x, 6 x, 12x tables)	Division facts (3x, 6 x, 12x tables) Partition to divide mentally	Partition to divide mentally
	Halves up to 10	Halves up to 20	Halve two digit numbers	Halve larger numbers and decimals	Halve larger numbers and decimals	Halve larger numbers and decimals
	Count back in 5s	Division facts (5 x table)	Division facts (8 x table)	Division facts (3x, 9x tables)	Division facts (3x, 9x tables) 100, 1000 times smaller	Division facts (up to 12 x 12)
	Halve multiples of 10	Count back in 3s	Division facts (3 x table)	Division facts (11x, 7x tables)	Review division facts (11x, 7x tables) Partition decimals to divide mentally	Partition to divide mentally
	How many 2s? 5s? 10s?	Review division facts (2x, 5x, 10x table)	Division facts (6 x table) or review others	Division facts (6x, 12x tables)	Review division facts (6x, 12x tables) Halve larger numbers and decimals	Halve larger numbers and decimals