Maths Parent Workshop

October 2025

Successful Learners Confident Individuals Responsible Citizens

What does Maths learning look like at Somers Heath?

Our curriculum is based on the National Curriculum.

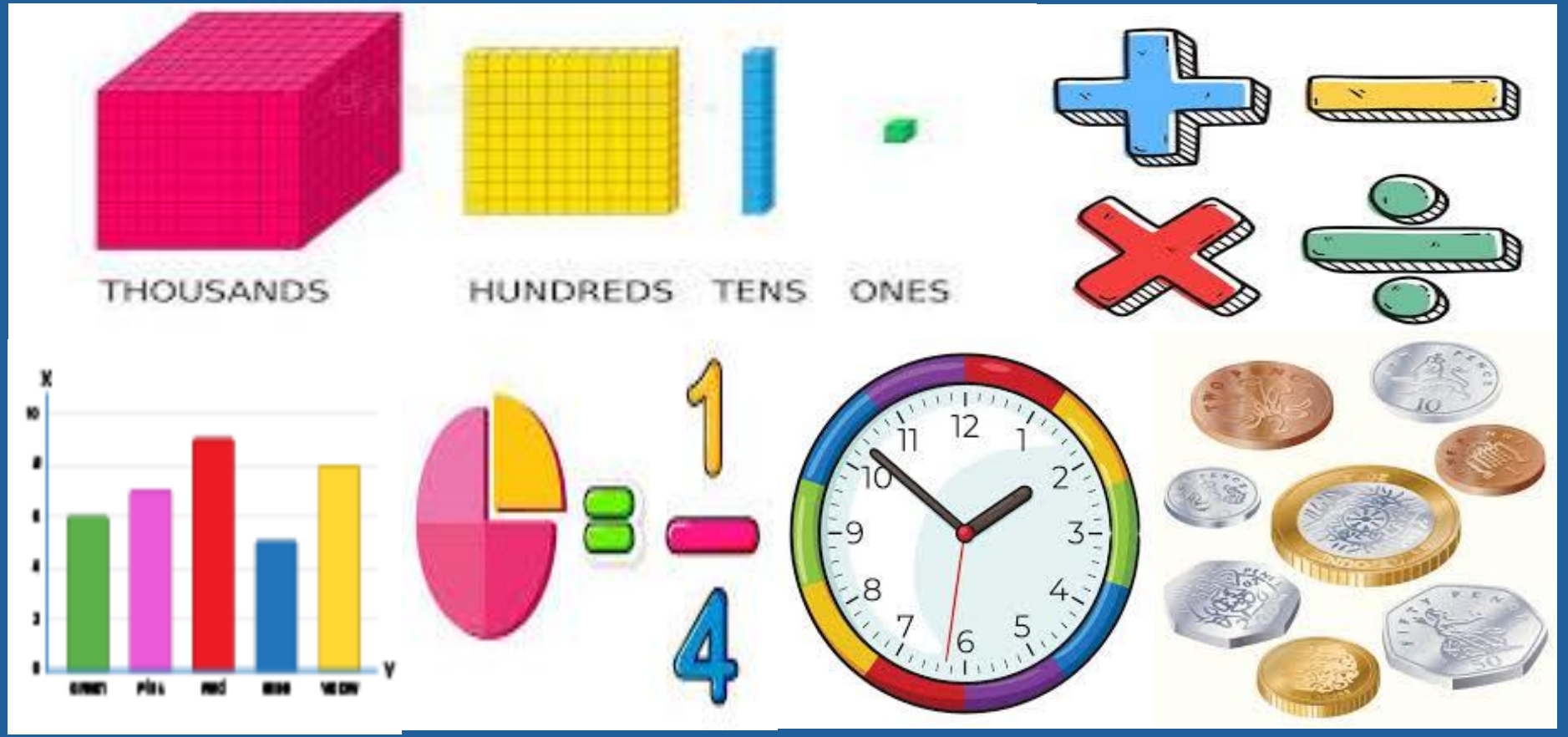
We used various resource to support the delivery of the curriculum.

Lesson Structure:

Starter	Rapid recall of mental maths facts (numberbonds/ multiplication facts) Address misconceptions from previous lesson Check understanding of a topic
Main Input	Teacher will model the learning for the lesson Introduce new content
Activity	Children apply the new learning to various problems (calculations as well as worded problems and problem solving)
Plenary	Review learning Address any misconceptions Provide further challenges linked to the main learning

Current Topics for Autumn

Place Value
Addition
Subtraction
Multiplication
Division
Money
Time
Fractions
Data Handling

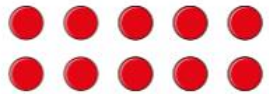


Fluency

Students will be able to use their skills to know the best way to figure out a Maths problem. It also means developing number sense and it means using those skills in a variety of contexts.

6 x 2 =

Make this array.



Complete the sentences.

a) There are ☐ counters in each row.

There are ☐ rows.

There are ☐ counters altogether.

126 x 22 =

Write >, < or = to make the statements true.

a) 78 × 10 ◯ 78 × 100

b) 100 × 56 ◯ 65 × 100

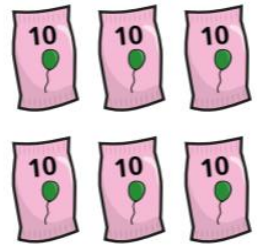
c) 930 × 10 ◯ 100 × 93

Reasoning

Reasoning in Maths is the ability to make logical links and connections, which help students tackle a new Maths problem. The skill of reasoning equips students not only with the ability to say how they will attempt to work out an answer, but why and how they can be sure it will work.

Reasoning is about using what you already know to help you deduce, reason or predict what will happen and the best way to go about facing a problem, with this knowledge in mind.

Tom has these balloons.



He needs 60 balloons for a party.

Does Tom have enough balloons? _____

How do you know?

I know... so...

40 ÷ 4 = 10

32 ÷ 4 = 8

72 ÷ 4 = ☐

76 ÷ 4 = ☐

Mrs Hall owns a bookshop.

- In January, she sold 145 books.
- In February she sold 10 times as many books.
- In March she sold 10 times as many books as in February.

How many books did Mrs Hall sell in March?

Show your workings.

1b. Beau and Selina are working on the same calculation. They get different answers.

Beau

	2	2	4	
x		3	1	
			4	(1 x 4)
			2	(1 x 20)
			2	(1 x 200)
	1	2	0	(30 x 4)
	6	0	0	(30 x 20)
6	0	0	0	(30 x 200)
6	7	2	8	

Selina

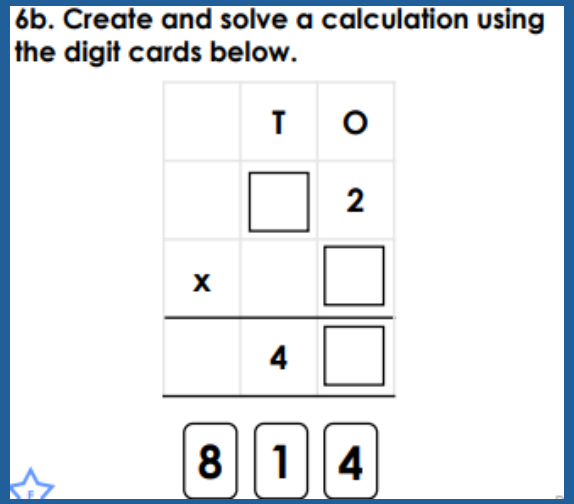
	2	2	4	
x		3	1	
			4	(1 x 4)
		2	0	(1 x 20)
	2	0	0	(1 x 200)
	1	2	0	(30 x 4)
	6	0	0	(30 x 20)
6	0	0	0	(30 x 200)
6	9	4	4	

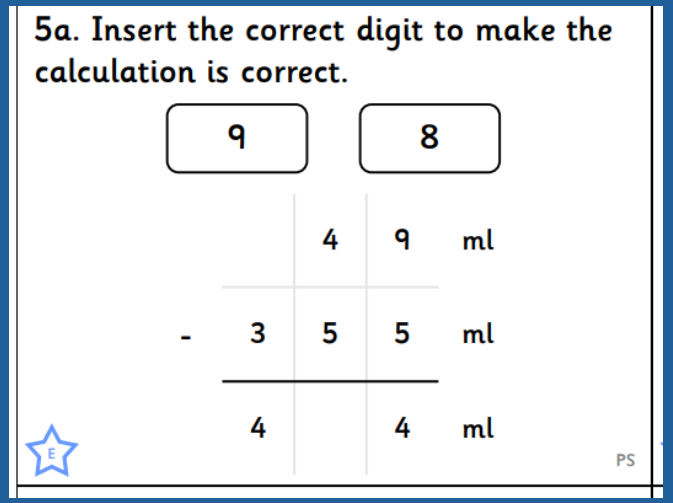
Who is correct?

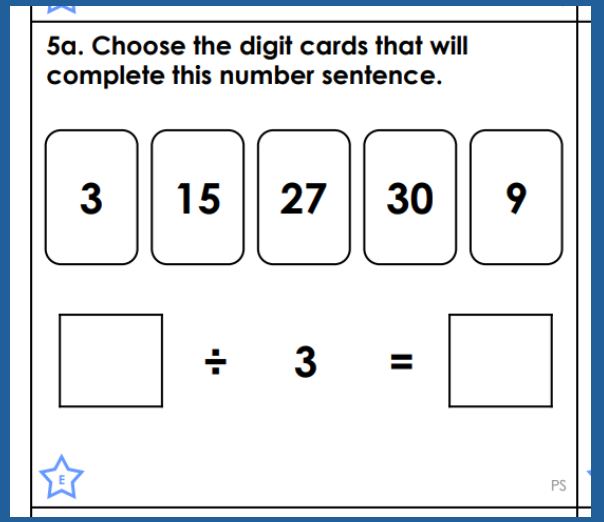
Problem Solving

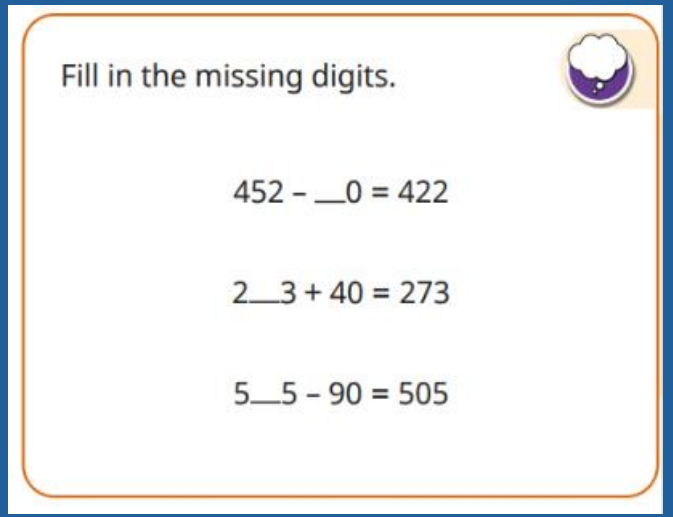
Problem-solving in Maths is the ability to make choices, interpret, formulate, model, investigate problems and communicate solutions effectively.

Problem-solving is about applying existing strategies to seek solutions and verify that answers are reasonable. Problem-Solving involves using the knowledge gained in understanding, along with the experience gained from Fluency and reasoning to formulate a strategy and solve the problem.









Calculation Policy - Catalyst Academies Trust – YouTube

Example: Progression in multiplication from Year 1 to Year 6

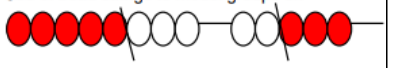
Multiplication

Pictures and symbols

There are 3 sweets in one bag.
How many sweets are there in 5 bags?

(Recording on a number line modelled by the teacher when solving problems)

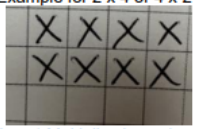
Use of bead strings to model groups of.



Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

Arrays and repeated addition

Example for 2 x 4 or 4 x 2



Calculation Policy Year 1 Multiplication using arrays

Also through the use of pictures and hands on activities

Grouping and sharing

Introduce mathematical vocabulary of multiply and divide.

Doubles up to 10

Children to learn number bonds

Informal jottings only - no formal written methods at Year 1

Counting in 2s, 5s and 10s

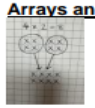
Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the

Multiplication

x = signs and missing numbers

7 x 2 = □ □ = 2 x 7
7 x □ = 14 14 = □ x 7
□ x 2 = 14 14 = 2 x □
□ x ∇ = 14 14 = □ x ∇

Arrays and repeated addition



or 2 + 2 + 2 + 2

Calculation Policy Year 2 Multiplication using arrays
Calculation Policy Year 2 Multiplication as repeated addition
Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.

Show that multiplication of 2 numbers can be done in any order (commutative).

Solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Doubling multiples of 5 up to 50

15 x 2 = 30

Partition

15 x 2

20 + 10 = 30

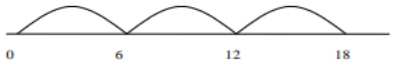
Times table facts to be learnt: 3s, 4s, 6s and 8s.

Multiplication

x = signs and missing numbers

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

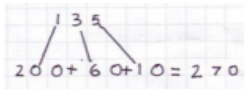
Number lines
6 x 3



Arrays and repeated addition
Continue to understand multiplication as repeated addition and continue to use arrays (as in Year 2).

Doubling multiples of 5 up to 50
35 x 2 = 70

Doubling three digit numbers and multiples of 5, 10 and 100



Partition
35 x 2 = 70

30 x 2 = 60
5 x 2 = 10

60
+10
70

Calculation Policy Year 3 Multiplication - Expanded Column Method

Times table facts to be learnt: 7s, 9s and 12s.

Multiplication

x = signs and missing numbers

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

Partition
23 x 4 = 92

23 x 4 = (20 x 4) + (3 x 4)
= (80) + (12)
= 92

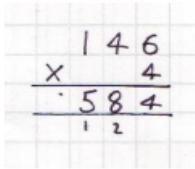
OR

Pencil and paper procedures
Extend to column method

324
x 7
28 = 7 x 4
140 = 7 x 20
2100 = 7 x 300
2268

Calculation Policy Year 4 Column Multiplication

Multiply two-digit and three-digit numbers by a one-digit number using formal written layout



multiplying together 3 numbers

Recall multiplication and division facts for multiplication tables up to 12 × 12

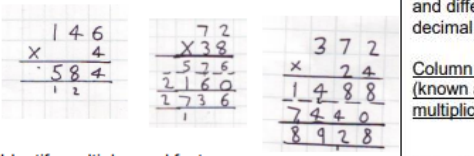
x = signs and missing numbers
Continue using a range of equations as in Year 2 but with appropriate numbers

Pencil and paper procedures

Partition
47 x 6 = 92

47 x 6 = (40 x 6) + (7 x 6)
= (240) + (42)
= 282

Column method (known as long multiplication)
Calculation Policy Year 5 Column Multiplication



Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers

By the end of Year 5 children should have progressed to working with simple decimals with one decimal place.

Multiply whole numbers and those involving decimals by 10, 100 and 1,000

Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)

Counting in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s and 10s and in multiples of 10

Recall multiplication and division facts for multiplication tables up to 12 × 12

Extend to simple decimals with one decimal place.

12.5
x 2
1.0 (2.0 x 0.5)
4.0 (2.0 x 2.0)
20.0 (2.0 x 10.0)
25.0

Moving to formal methods of multiplication for decimals. Carrying numbers underneath.

Multiplication

x = signs and missing numbers
Doubling as in Year 5 with appropriate numbers and decimals

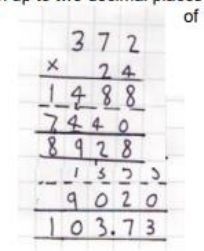
Pencil and paper procedure

372 x 24 is approximately 400 x 20 = 8000

372 x 24 = 8,928

Extend to decimals with up to two decimal places and different numbers of decimal places

Column method (known as long multiplication)



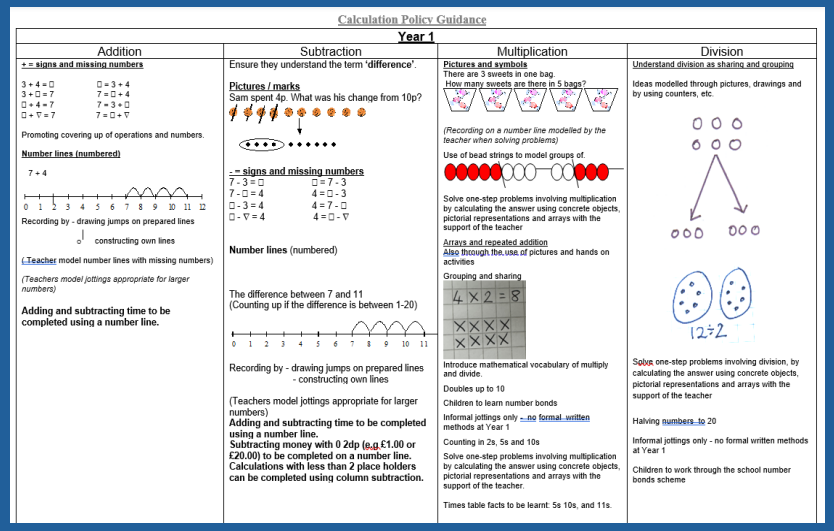
372 x 24= 8,928
4.51 x 23 = 103.73

Calculation Policy Year 6 Column Multiplication
Extend to working with up to two decimal places and with numbers with a different number of decimal places.
Count the decimal places and put the decimal point in after the calculation. E.g.
23 x 451 = 10373
2.3 x 4.51 = will have 3dp so 10.373
23 x 4.51 = will have 2dp so 103.73
0.23 x 45.1 = will have 3dp so 10.373

Counting in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s and 10s and in multiples of 10, 0.1, 100, etc.

BRACKETS & MULTIPLICATION – BODMAS
Pupils explore the order of operations using brackets; for example, 2 + 1 x 3 = 5 and (2 + 1) x 3 = 9.

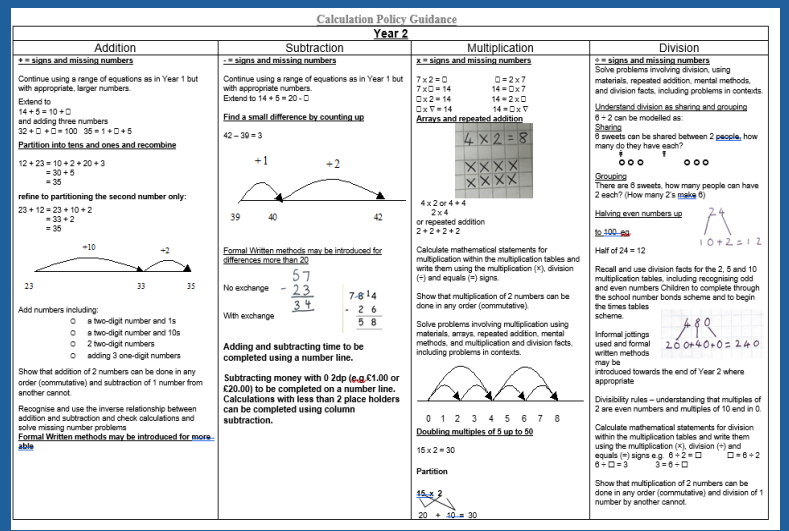
Calculation Policy – Years 1 to 6



Calculation Policy Guidance

Year 1

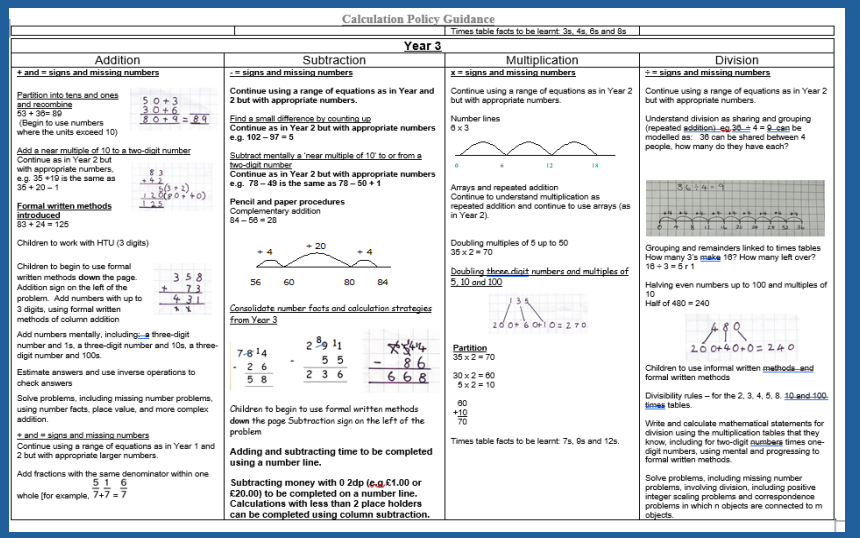
Addition	Subtraction	Multiplication	Division
+ = signs and missing numbers 3 + 4 = □ 3 + □ = 7 □ + 4 = 7 □ + ▽ = 7 □ = 3 + 4 7 = □ + 4 7 = 3 + □ 7 = □ + ▽ Promoting covering up of operations and numbers. **Number lines (numbered)** 7 + 4 Recording by - drawing jumps on prepared lines constructing own lines (Teacher model number lines with missing numbers) *(Teachers model jottings appropriate for larger numbers)* **Adding and subtracting time to be completed using a number line.**	Ensure they understand the term **'difference'.** **Pictures / marks** Sam spent 4p. What was his change from 10p? **- = signs and missing numbers** 7 - 3 = □ □ = 7 - 3 7 - □ = 4 4 = □ - 3 □ - 3 = 4 4 = 7 - □ □ - ▽ = 4 4 = □ - ▽ **Number lines** (numbered) The difference between 7 and 11 (Counting up if the difference is between 1-20) Recording by - drawing jumps on prepared lines - constructing own lines (Teachers model jottings appropriate for larger numbers) **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.**	**Pictures and symbols** There are 3 sweets in one bag. How many sweets are there in 5 bags? *(Recording on a number line modelled by the teacher when solving problems)* Use of bead strings to model groups of. Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Arrays and repeated addition** Also through the use of pictures and hands on activities Grouping and sharing Introduce mathematical vocabulary of multiply and divide. Doubles up to 10 Children to learn number bonds Informal jottings only - no formal written methods at Year 1 Counting in 2s, 5s and 10s Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Times table facts to be learnt: 5s 10s, and 11s.	**Understand division as sharing and grouping** Ideas modelled through pictures, drawings and by using counters, etc. Solve one-step problems involving division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher Halving numbers to 20 Informal jottings only - no formal written methods at Year 1 Children to work through the school number bonds scheme



Calculation Policy Guidance

Year 2

Addition	Subtraction	Multiplication	Division
+ = signs and missing numbers Continue using a range of equations as in Year 1 but with appropriate, larger numbers. Extend to 14 + 8 = 10 + □ and adding three numbers 32 + □ + □ = 100 35 = 1 + □ + 5 **Partition into tens and ones and recombine** 12 + 23 = 10 + 2 + 20 + 3 = 30 + 5 = 35 **refine to partitioning the second number only:** 23 + 12 = 23 + 10 + 2 = 33 + 2 = 35 Add numbers including: ○ a two-digit number and 1s ○ a two-digit number and 10s ○ 2 two-digit numbers ○ adding 3 one-digit numbers Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot. Recognise and use the inverse relationship between addition and subtraction and check calculations and solve missing number problems **Formal Written methods may be introduced for more able**	**- = signs and missing numbers** Continue using a range of equations as in Year 1 but with appropriate numbers. Extend to 14 + 5 = 20 - □ **Find a small difference by counting up** 42 – 39 = 3 **Formal Written methods may be introduced for differences more than 20** No exchange With exchange **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.**	**x = signs and missing numbers** 7 x 2 = □ □ = 2 x 7 7 x □ = 14 14 = □ x 7 □ x 2 = 14 14 = 2 x □ □ x 7 = 14 14 = □ x ▽ **Arrays and repeated addition** 4 x 2 or 4 + 4 2 x 4 or repeated addition 2 + 2 + 2 + 2 Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. Show that multiplication of 2 numbers can be done in any order (commutative). Solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. **Doubling multiples of 5 up to 50** 15 x 2 = 30 **Partition** 15 x 2 20 + 10 = 30	**÷ = signs and missing numbers** Solve problems involving division, using materials, repeated addition, mental methods, and division facts, including problems in contexts. **Understand division as sharing and grouping** 6 ÷ 2 can be modelled as: Sharing 6 sweets can be shared between 2 people, how many do they have each? Grouping There are 6 sweets, how many people can have 2 each? (How many 2's make 6) **Halving even numbers up to 100 eg.** Half of 24 = 12 Recall and use division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Children to complete through the school number bonds scheme and to begin the times tables scheme. Informal jottings used and formal written methods may be introduced towards the end of Year 2 where appropriate Divisibility rules – understanding that multiples of 2 are even numbers and multiples of 10 end in 0. Calculate mathematical statements for division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs e.g. 6 ÷ 2 = □ □ = 6 ÷ 2 6 = □ = 3 3 = 6 ÷ □ Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot.

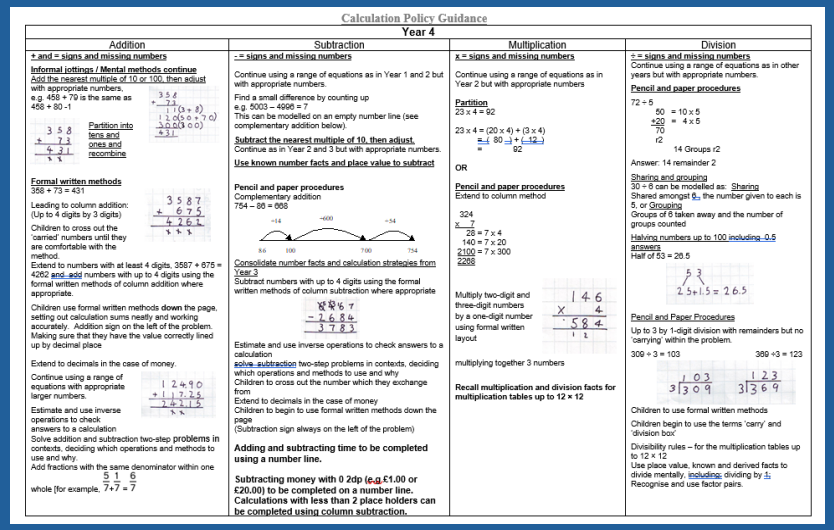


Calculation Policy Guidance

Times table facts to be learnt: 3s, 4s, 6s and 8s

Year 3

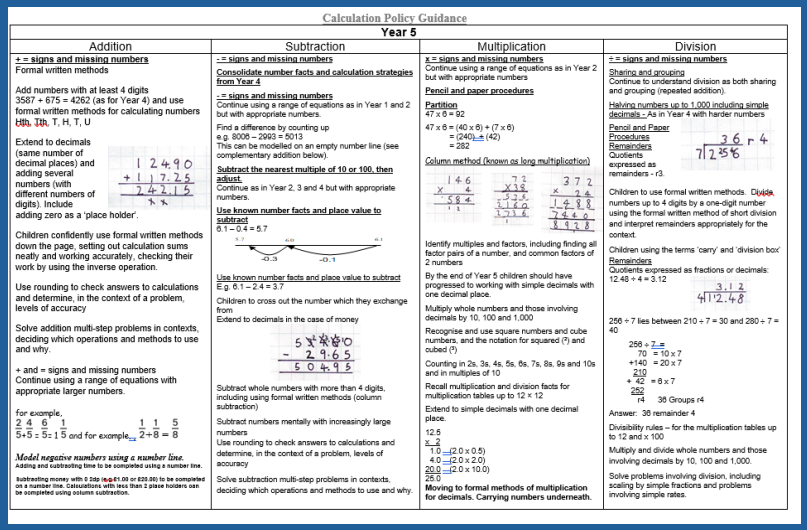
Addition	Subtraction	Multiplication	Division
+ and = signs and missing numbers **Partition into tens and ones and recombine** 53 + 36= 89 (Begin to use numbers where the units exceed 10) **Add a near multiple of 10 to a two-digit number** Continue as in Year 2 but with appropriate numbers, e.g. 35 +19 is the same as 35 + 20 – 1 **Formal written methods introduced** 83 + 24 = 125 Children to work with HTU (3 digits) Children to begin to use formal written methods down the page. Addition sign on the left of the problem. Add numbers with up to 3 digits, using formal written methods of column addition Add numbers mentally, including: – a three-digit number and 1s, a three-digit number and 10s, a three-digit number and 100s. Estimate answers and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition. **+ and = signs and missing numbers** Continue using a range of equations as in Year 1 and 2 but with appropriate larger numbers. Add fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]	**- = signs and missing numbers** **Continue using a range of equations as in Year and 2 but with appropriate numbers.** **Find a small difference by counting up** **Continue as in Year 2 but with appropriate numbers e.g. 102 – 97 = 5** **Subtract mentally a 'near multiple of 10' to or from a two-digit number** **Continue as in Year 2 but with appropriate numbers e.g. 78 – 49 is the same as 78 – 50 + 1** **Pencil and paper procedures** Complementary addition 84 – 56 = 28 *Consolidate number facts and calculation strategies from Year 3* Children to begin to use formal written methods down the page Subtraction sign on the left of the problem **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.**	**x = signs and missing numbers** Continue using a range of equations as in Year 2 but with appropriate numbers. Number lines 6 x 3 Arrays and repeated addition Continue to understand multiplication as repeated addition and continue to use arrays (as in Year 2). Doubling multiples of 5 up to 50 35 x 2 = 70 Doubling three digit numbers and multiples of 5, 10 and 100 **Partition** 35 x 2 = 70 30 x 2 = 60 5 x 2 = 10 60 +10 70 Times table facts to be learnt: 7s, 9s and 12s.	**÷ = signs and missing numbers** Continue using a range of equations as in Year 2 but with appropriate numbers. Understand division as sharing and grouping (repeated addition) eg 36 ÷ 4 = 9 can be modelled as: 36 can be shared between 4 people, how many do they have each? Grouping and remainders linked to times tables How many 3's make 19? How many left over? 18 ÷ 3 = 6 r 1 Halving even numbers up to 100 and multiples of 10 Half of 480 = 240 Children to use informal written methods and formal written methods Divisibility rules – for the 2, 3, 4, 5, 8, 10 and 100 times tables. Write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Solve problems, including missing number problems, involving division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.



Calculation Policy Guidance

Year 4

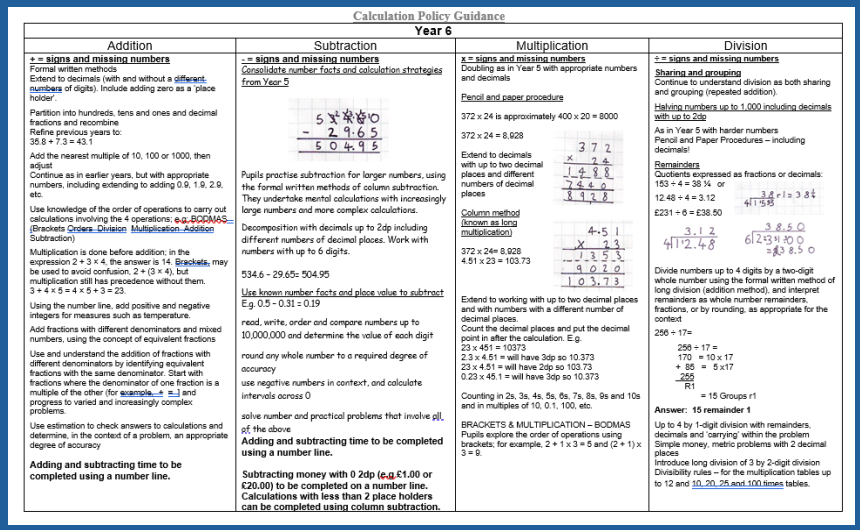
Addition	Subtraction	Multiplication	Division
+ and = signs and missing numbers **Informal jottings / Mental methods continue** Add the nearest multiple of 10 or 100, then adjust with appropriate numbers, e.g. 458 + 79 is the same as 458 + 80 -1 Partition into tens and ones and recombine **Formal written methods** 368 + 73 = 431 Leading to column addition: (Up to 4 digits by 3 digits) Children to cross out the 'carried' numbers until they are comfortable with the method. Extend to numbers with at least 4 digits, 3587 + 675 = 4262 and - add numbers with up to 4 digits using the formal written methods of column addition where appropriate. Children use formal written methods down the page, setting out calculation sums neatly and working accurately. Addition sign on the left of the problem. Making sure that they have the value correctly lined up by decimal place Extend to decimals in the case of money. Continue using a range of equations with appropriate larger numbers. Estimate and use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. Children to cross out the number which they exchange from Extend to decimals in the case of money Children to begin to use formal written methods down the page (Subtraction sign always on the left of the problem) **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.** Add fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]	**- = signs and missing numbers** Continue using a range of equations as in Year 1 and 2 but with appropriate numbers Find a small difference by counting up e.g. 5003 – 4996 = 7 This can be modelled on an empty number line (see complementary addition below). **Subtract the nearest multiple of 10, then adjust.** Continue as in Year 2 and 3 but with appropriate numbers. **Use known number facts and place value to subtract** **Pencil and paper procedures** Complementary addition 754 – 86 = 668 Consolidate number facts and calculation strategies from Year 3 Subtract numbers with up to 4 digits using the formal written methods of column subtraction where appropriate Estimate and use inverse operations to check answers to a calculation solve subtraction two-step problems in contexts, deciding which operations and methods to use and why Children to cross out the number which they exchange from Extend to decimals in the case of money Children to begin to use formal written methods down the page (Subtraction sign always on the left of the problem) **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.**	**x = signs and missing numbers** Continue using a range of equations as in Year 2 but with appropriate numbers **Partition** 23 x 4 = 92 23 x 4 = (20 x 4) + (3 x 4) = 80 + 12 = 92 OR **Pencil and paper procedures** Extend to column method Multiply two-digit and three-digit numbers by a one-digit number using formal written layout multiplying together 3 numbers **Recall multiplication and division facts for multiplication tables up to 12 × 12**	**÷ = signs and missing numbers** Continue using a range of equations as in other years but with appropriate numbers. **Pencil and paper procedures** 72 ÷ 5 Sharing and grouping 30 ÷ 6 can be modelled as: Sharing Shared amongst 6, the number given to each is 5, or Grouping Groups of 6 taken away and the number of groups counted Halving numbers up to 100 including 0.5 answers Half of 53 = 26.5 Pencil and Paper Procedures Up to 3 by 1-digit division with remainders but no 'carrying' within the problem. 309 ÷ 3 = 103 369 ÷3 = 123 Children to use formal written methods Children begin to use the terms 'carry' and 'division box' Divisibility rules – for the multiplication tables up to 12 × 12 Use place value, known and derived facts to divide mentally, including dividing by 5; Recognise and use factor pairs.



Calculation Policy Guidance

Year 5

Addition	Subtraction	Multiplication	Division
+ = signs and missing numbers Formal written methods Add numbers with at least 4 digits 3587 + 675 = 4262 (as for Year 4) and use formal written methods for calculating numbers tth, Th, T, H, T, U Extend to decimals (same number of decimal places) and adding several numbers (with different numbers of digits). Include adding zero as a 'place holder'. Children confidently use formal written methods down the page, setting out calculation sums neatly and working accurately, checking their work by using the inverse operation. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition multi-step problems in contexts, deciding which operations and methods to use and why. + and = signs and missing numbers Continue using a range of equations with appropriate larger numbers. for example, 2 4 6 1 5+5 = 5□1 5 and for example, 1 1 5 2+8 = 8 *Model negative numbers using a number line.* Adding and subtracting time to be completed using a number line. Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.	**- = signs and missing numbers** **Consolidate number facts and calculation strategies from Year 4** **- = signs and missing numbers** Continue using a range of equations as in Year 1 and 2 but with appropriate numbers Find a difference by counting up e.g. 8006 – 2993 = 5013 This can be modelled on an empty number line (see complementary addition below). **Subtract the nearest multiple of 10 or 100, then adjust.** Continue as in Year 2, 3 and 4 but with appropriate numbers. **Use known number facts and place value to subtract** Use known number facts and place value to subtract E.g. 6.1 – 2.4 = 3.7 Children to cross out the number which they exchange from Extend to decimals in the case of money Subtract whole numbers with more than 4 digits, including using formal written methods (column subtraction) Subtract numbers mentally with increasingly large numbers Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	**x = signs and missing numbers** Continue using a range of equations as in Year 2 but with appropriate numbers **Pencil and paper procedures** **Partition** 47 x 6 = 92 47 x 6 = (40 x 6) + (7 x 6) = (240) + (42) = 282 *Column method (known as long multiplication)* Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers By the end of Year 5 children should have progressed to working with simple decimals with one decimal place. Multiply whole numbers and those involving decimals by 10, 100 and 1,000 Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) Counting in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s and 10s and in multiples of 10 Recall multiplication and division facts for multiplication tables up to 12 × 12 Extend to simple decimals with one decimal place. **Moving to formal methods of multiplication for decimals. Carrying numbers underneath.**	**÷ = signs and missing numbers** Sharing and grouping Continue to understand division as both sharing and grouping (repeated addition). Halving numbers up to 1,000 including simple decimals - As in Year 4 with harder numbers Pencil and Paper Procedures Remainders Quotients expressed as remainders - r3. Children to use formal written methods. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Children using the terms 'carry' and 'division box' Remainders Quotients expressed as fractions or decimals: 12.48 ÷ 4 = 3.12 256 ÷ 7 lies between 210 ÷ 7 = 30 and 280 ÷ 7 = 40 Divisibility rules – for the multiplication tables up to 12 and x 100 Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. Solve problems involving division, including scaling by simple fractions and problems involving simple rates.



Calculation Policy Guidance

Year 6

Addition	Subtraction	Multiplication	Division
+ = signs and missing numbers Formal written methods Extend to decimals (with and without a different numbers of digits). Include adding zero as a 'place holder'. Partition into hundreds, tens and ones and decimal fractions and recombine Refine previous years to: 35.8 + 7.3 = 43.1 Add the nearest multiple of 10, 100 or 1000, then adjust Continue as in earlier years, but with appropriate numbers, including extending to adding 0.9, 1.9, 2.9, etc. Use knowledge of the order of operations to carry out calculations involving the 4 operations, e.g. BODMAS (Brackets Orders Division Multiplication Addition Subtraction) Multiplication is done before addition; in the expression 2 + 3 × 4, the answer is 14. Brackets, may be used to avoid confusion, 2 + (3 × 4), but multiplication still has precedence without them. 3 + 4 × 5 = 4 × 5 + 3 = 23. Using the number line, add positive and negative integers for measures such as temperature. Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions Use and understand the addition of fractions with different denominators by identifying equivalent fractions with the same denominator. Start with fractions where the denominator of one fraction is a multiple of the other (for example, 4 + 1/2) and progress to varied and increasingly complex problems. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy **Adding and subtracting time to be completed using a number line.**	**- = signs and missing numbers** *Consolidate number facts and calculation strategies from Year 5* Pupils practise subtraction for larger numbers, using the formal written methods of column subtraction. They undertake mental calculations with increasingly large numbers and more complex calculations. Decomposition with decimals up to 2dp including different numbers of decimal places. Work with numbers with up to 6 digits. 534.6 - 29.65= 504.95 Use known number facts and place value to subtract E.g. 0.5 - 0.31 = 0.19 read, write, order and compare numbers up to 10,000,000 and determine the value of each digit round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across 0 solve number and practical problems that involve all of the above **Adding and subtracting time to be completed using a number line.** **Subtracting money with 0 2dp (e.g £1.00 or £20.00) to be completed on a number line. Calculations with less than 2 place holders can be completed using column subtraction.**	**x = signs and missing numbers** Doubling as in Year 5 with appropriate numbers and decimals Pencil and paper procedure 372 x 24 is approximately 400 x 20 = 8000 372 x 24 = 8,928 Extend to decimals with up to two decimal places and different numbers of decimal places Column method (known as long multiplication) 372 x 24= 8,928 4.51 x 23 = 103.73 Extend to working with up to two decimal places and with numbers with a different number of decimal places. Count the decimal places and put the decimal point in after the calculation. E.g. 23 x 451 = 10373 2.3 x 4.51 = will have 3dp so 10.373 23 x 4.51 = will have 2dp so 103.73 0.23 x 45.1 = will have 3dp so 10.373 Counting in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s and 10s and in multiples of 10, 0.1, 100, etc. BRACKETS & MULTIPLICATION – BODMAS Pupils explore the order of operations using brackets; for example, 2 + 1 x 3 = 5 and (2 + 1) x 3 = 9.	**÷ = signs and missing numbers** **Sharing and grouping** Continue to understand division as both sharing and grouping (repeated addition). Halving numbers up to 1,000 including decimals with up to 2dp As in Year 5 with harder numbers Pencil and Paper Procedures – including decimals! Remainders Quotients expressed as fractions or decimals: 153 ÷ 4 = 38¼ or 12.48 ÷ 4 = 3.12 £231 ÷ 6 = £38.50 Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division (addition method), and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context 256 ÷ 17= 256 ÷ 17 = 170 = 10 x 17 + 85 = 5 x17 255 R1 = 15 Groups r1 **Answer: 15 remainder 1** Up to 4 by 1-digit division with remainders, decimals and 'carrying' within the problem Simple money, metric problems with 2 decimal places Introduce long division of 3 by 2-digit division Divisibility rules – for the multiplication tables up to 12 and 10, 20, 25 and 100 times tables.