

Maths Parent Workshop

-What we Teach, How we Teach it -

Addition and Subtraction

November 2022

Year 2, Year 3 and Year 4



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Concrete, Pictorial, Abstract

The children's understanding of the calculation strategies that they are taught through school will be underpinned by a secure understanding of place value. At Lindow Community we teach through a **CPA (concrete, pictorial, abstract) approach**.

Understanding in all areas of maths will be developed by children using concrete resources and interpreting and using pictorial representations before moving onto solve abstract calculations.

There are a range of place value and counting resources available for the children to use in each classroom. The CPA process/approach will be clearly exemplified on maths working walls for the current maths focus.

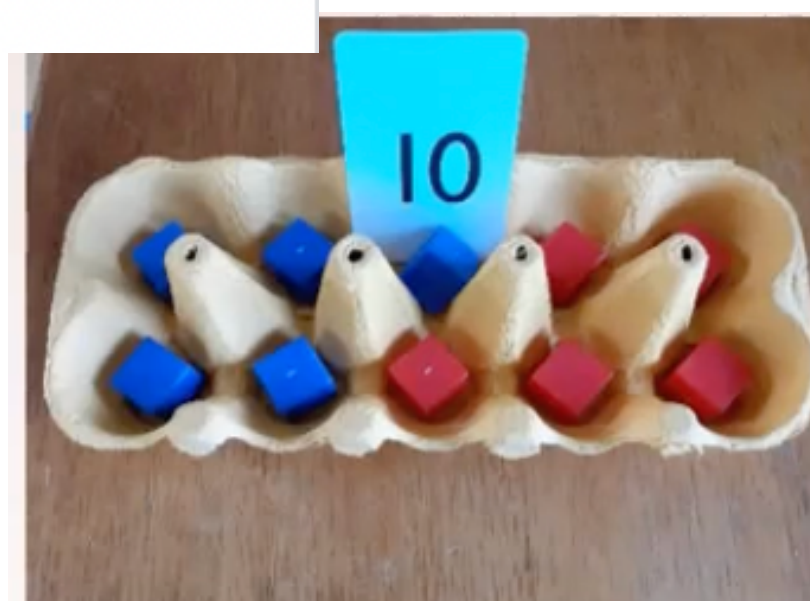
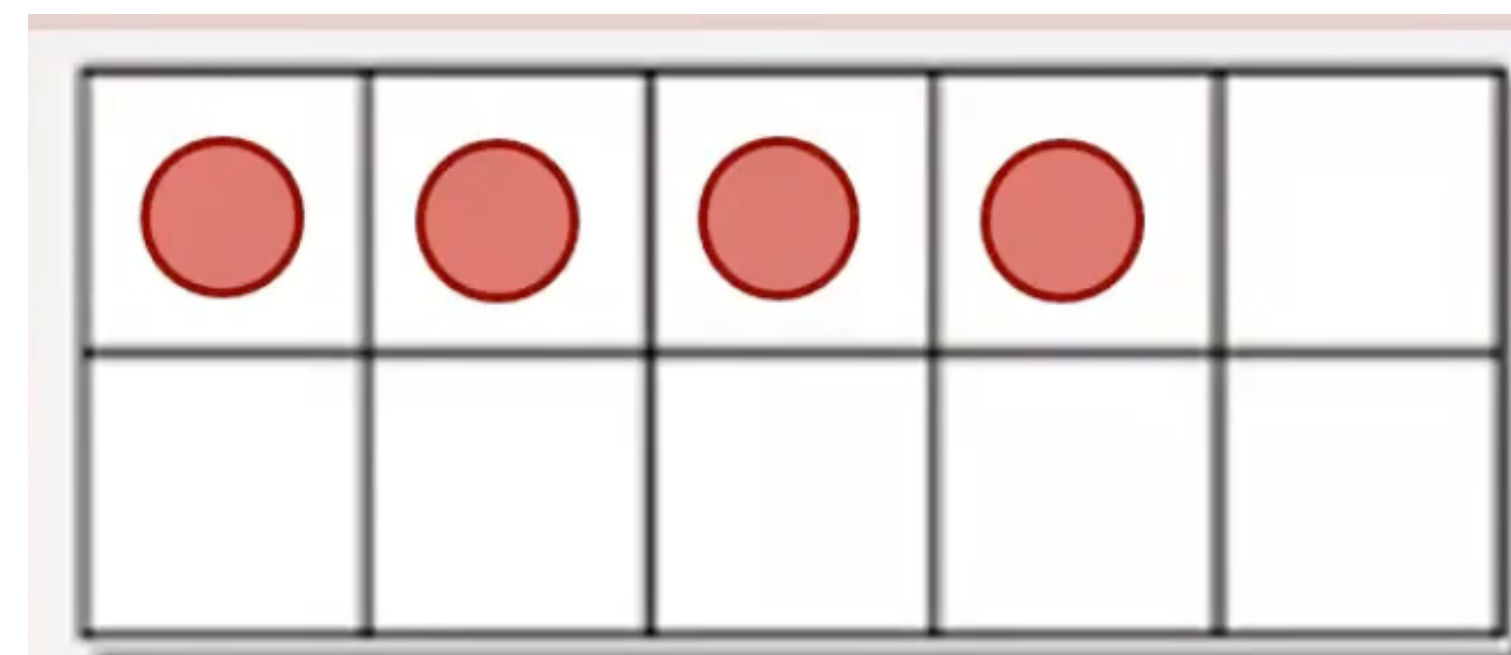


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Useful Resources

Concrete resources are VITAL in the children's early understanding of number and calculation.



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ADDITION

Year 2

National Curriculum Objectives: Addition objectives from Addition and Subtraction Strand	Key Skills/ other linked NC Objectives (Place Value)	Key Vocabulary
Solve problems with addition - Using concrete objects and pictorial representations, including those involving numbers, quantities and measures. - Apply their increasing knowledge of mental and written methods. Add numbers using concrete objects, pictorial representations and mentally: - Add two-digit numbers and ones. - Add two-digit numbers and tens. - Add two, two-digit numbers. - Add three one-digit numbers. - Recall and use addition facts up to 20 fluently and derive and use related facts up to 100. - Show that addition can be done in any order. - Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing box number problems.	- Count in steps of 2, 3 and 5 and count in tens from any number - Understand the place value of 2-digit numbers (tens, ones) - Compare and order numbers to 100 and use $<$, $>$ and $=$ signs. - Read and write numbers to at least 100 in numerals and words. - Identify, represent and estimate numbers using different representations, including the number line.	Addition, add, altogether, put together, sum, and, plus, total Equals, equal to, makes more than, less than, fewer, most, least, double <i>N.B: Same vocabulary as Year 1, to be consolidated and extended in different contexts.</i>



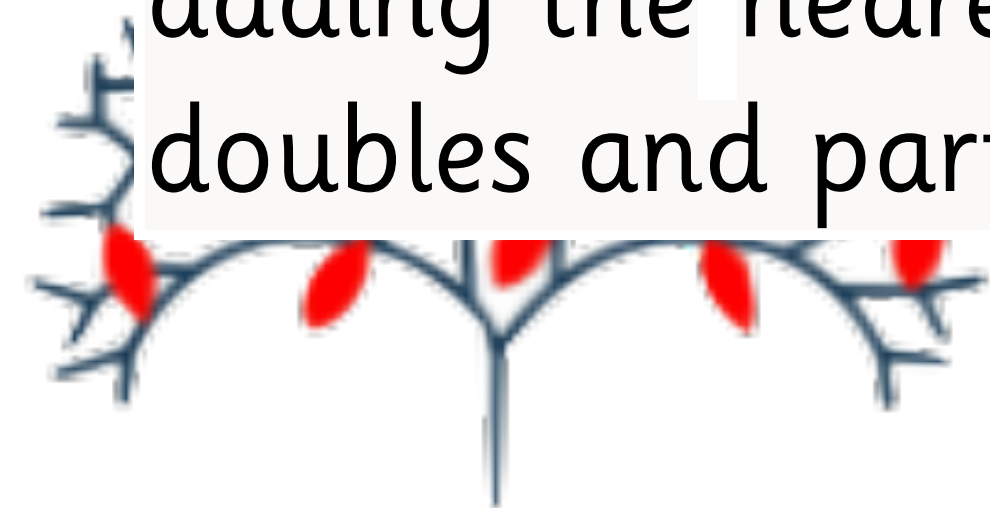
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In school, the children have access to a wide range of practical resources and equipment, counting materials, models and images and are given the opportunity to use these to support their understanding of mental and written methods at all stages.

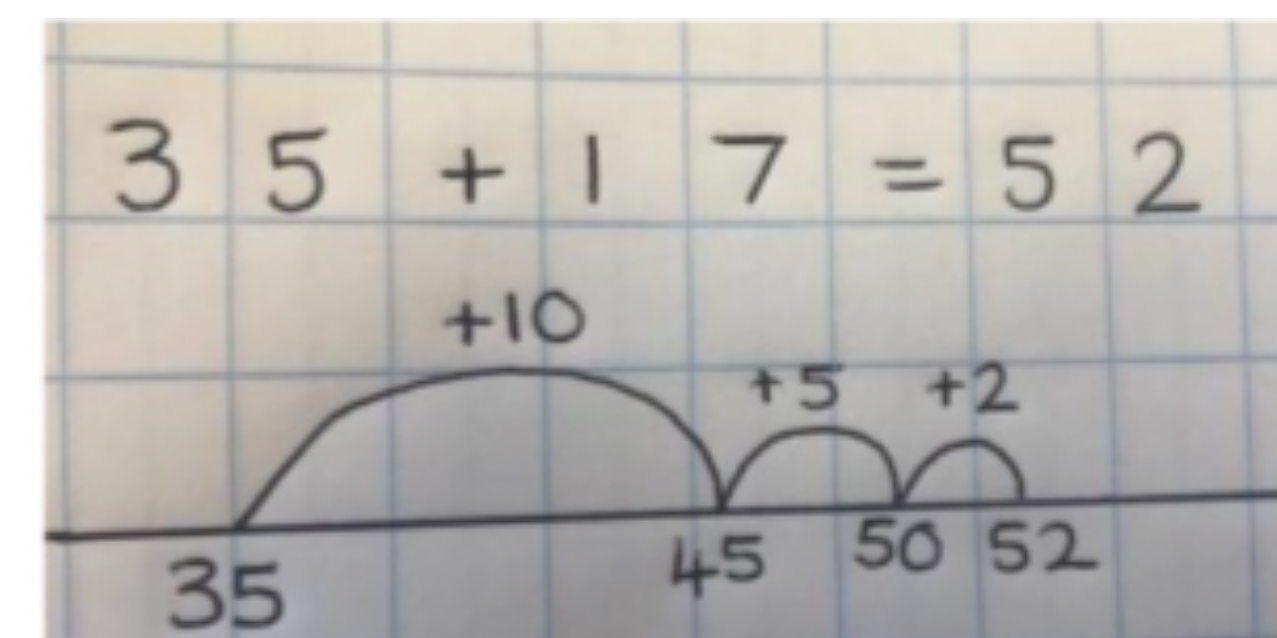
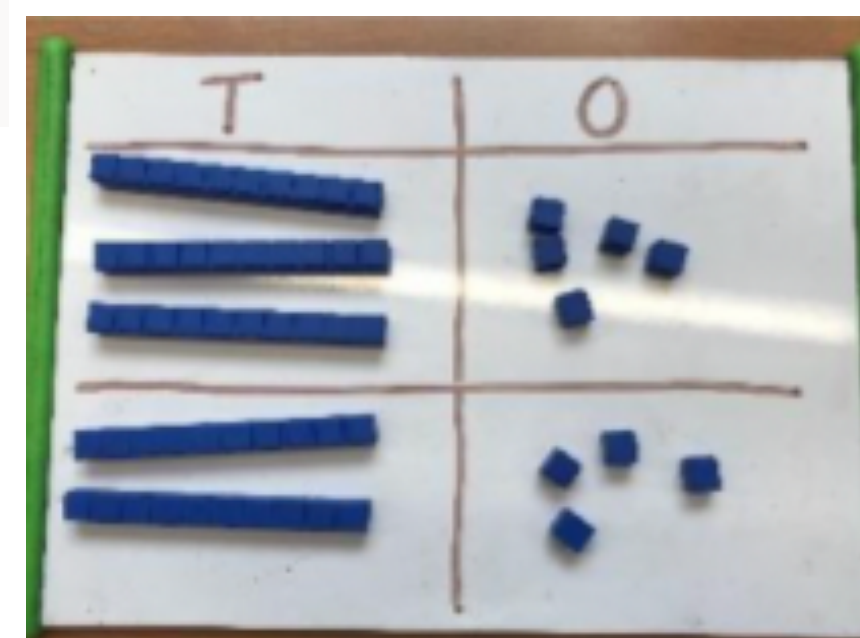
We spend time learning and practising mental methods for addition in a maths and arithmetic lessons to ensure the children gain a secure understanding.

In year 2, we start off with addition and subtraction questions which do not cross boundaries and later progress to those that do. This will include exploring number and different ways to partition number, to support addition strategies as well as adding the nearest multiple of 10 and adjusting (e.g. to add 9, 19 etc.), using near doubles and partitioning and recombining.



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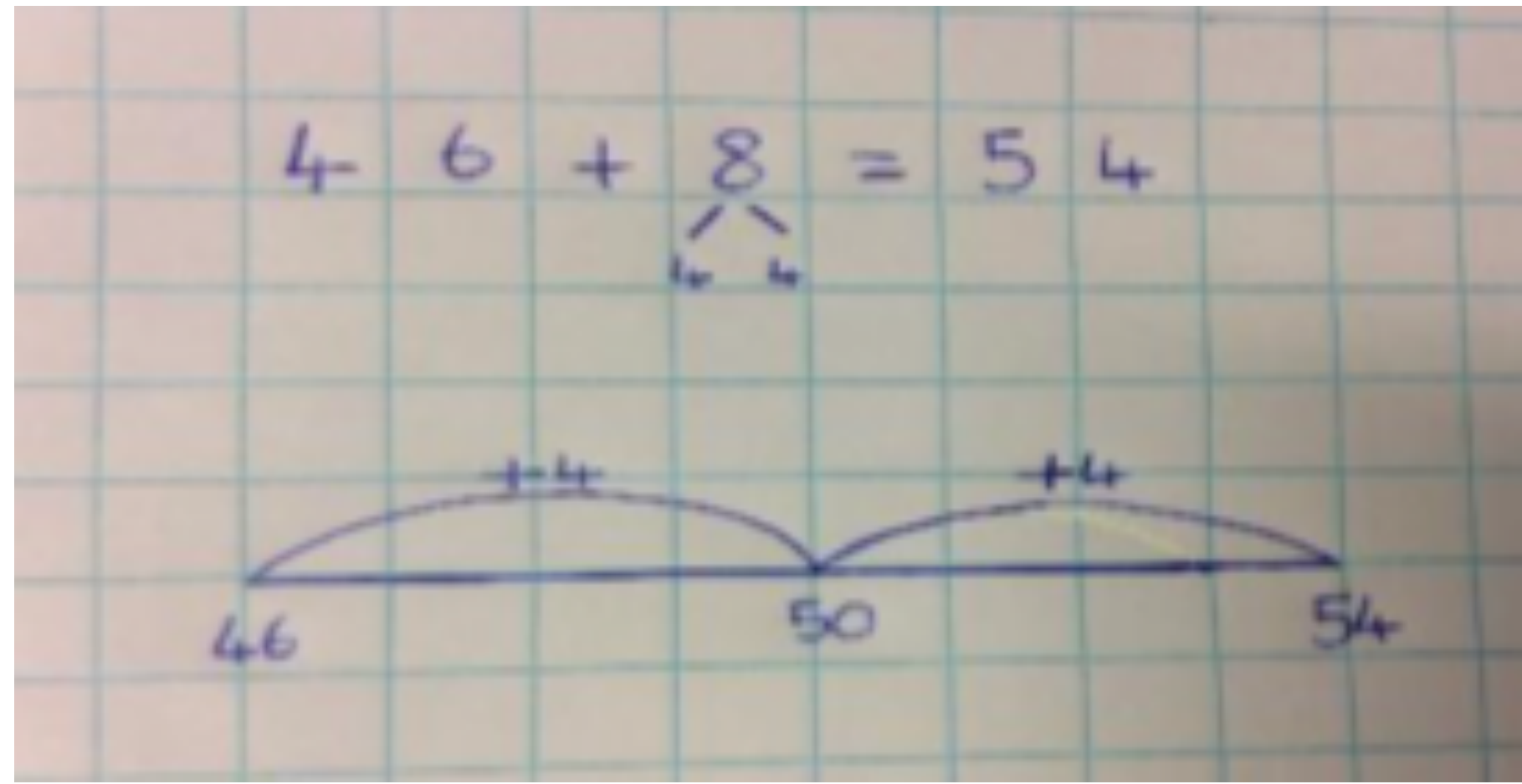
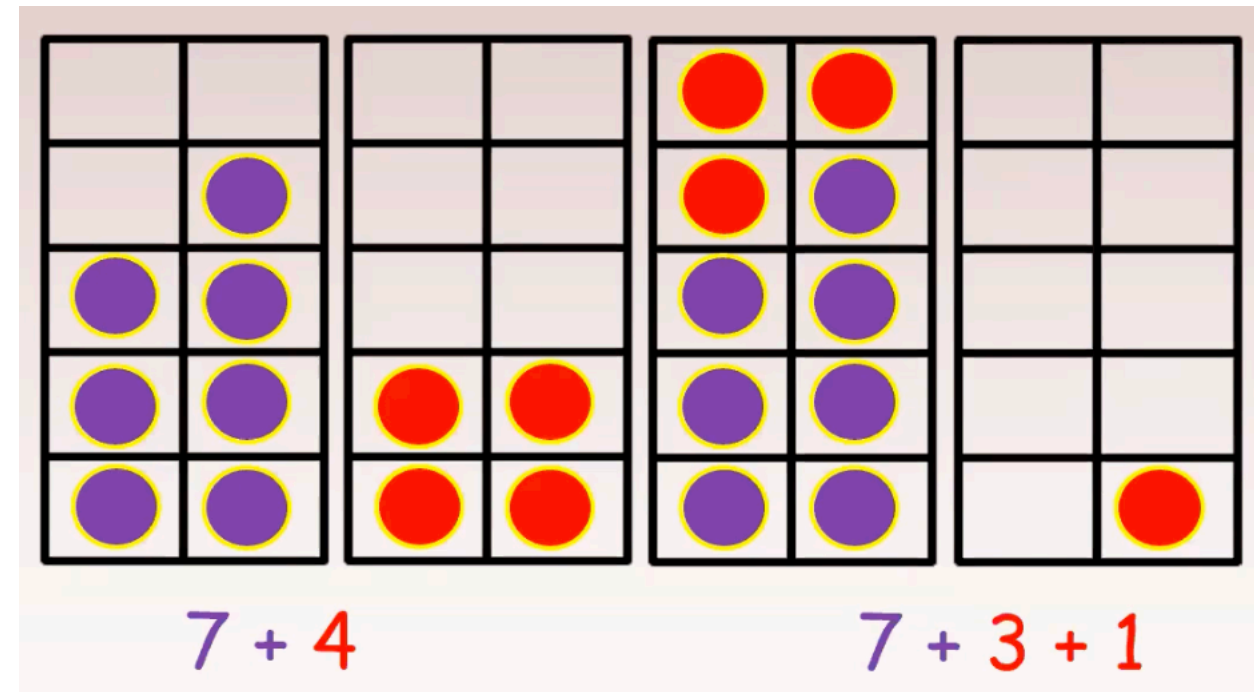


Steps for Written Methods:

All steps are supported in class by concrete resources and pictorial representations , with a focus on Year 2 children becoming confident in using a blank number line as a jotting for their mental method as well as a pictorial representation to prepare them for more formal written methods in the future.

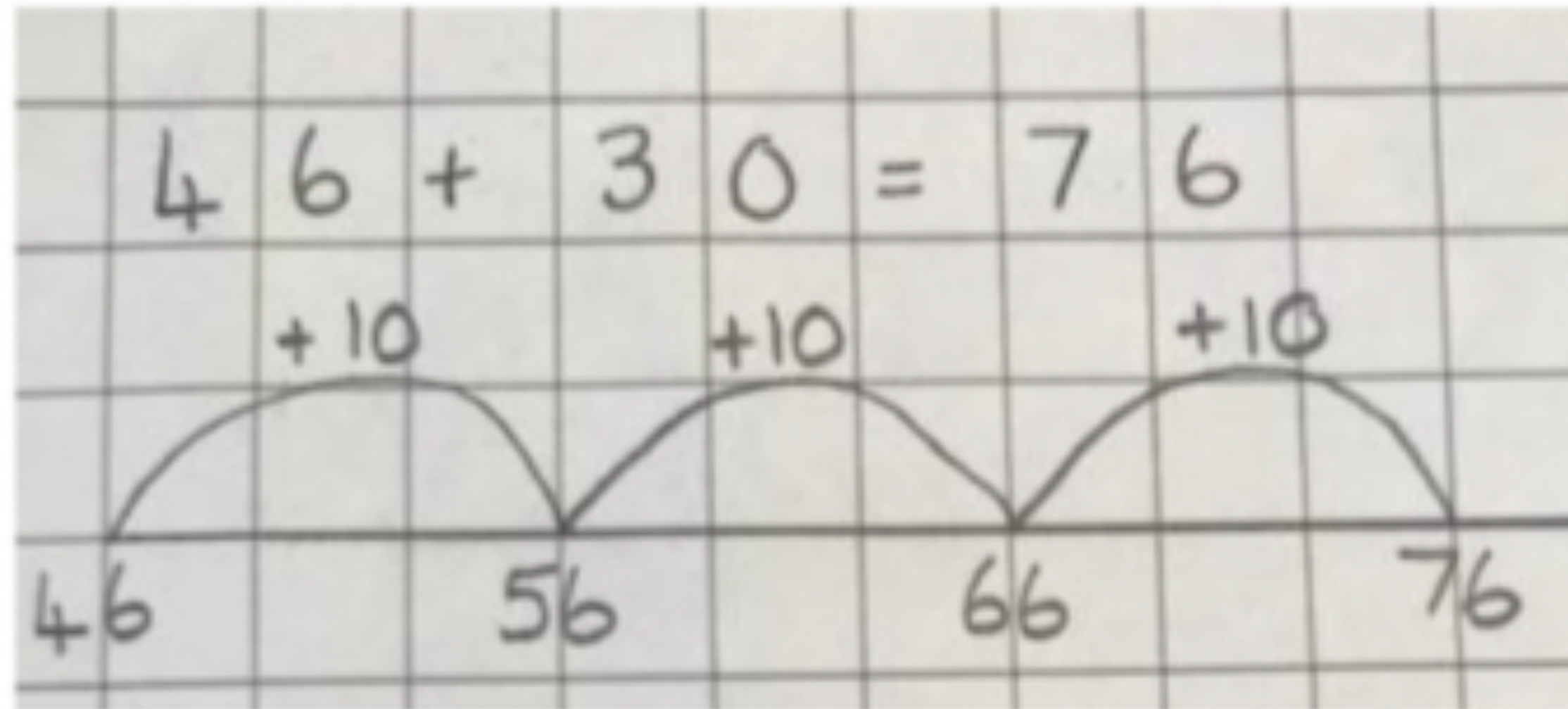
Step 1:

Add two-digit numbers and ones
Children consolidate their learning from year 1



Step 2:

Adding tens to a two - digit number.

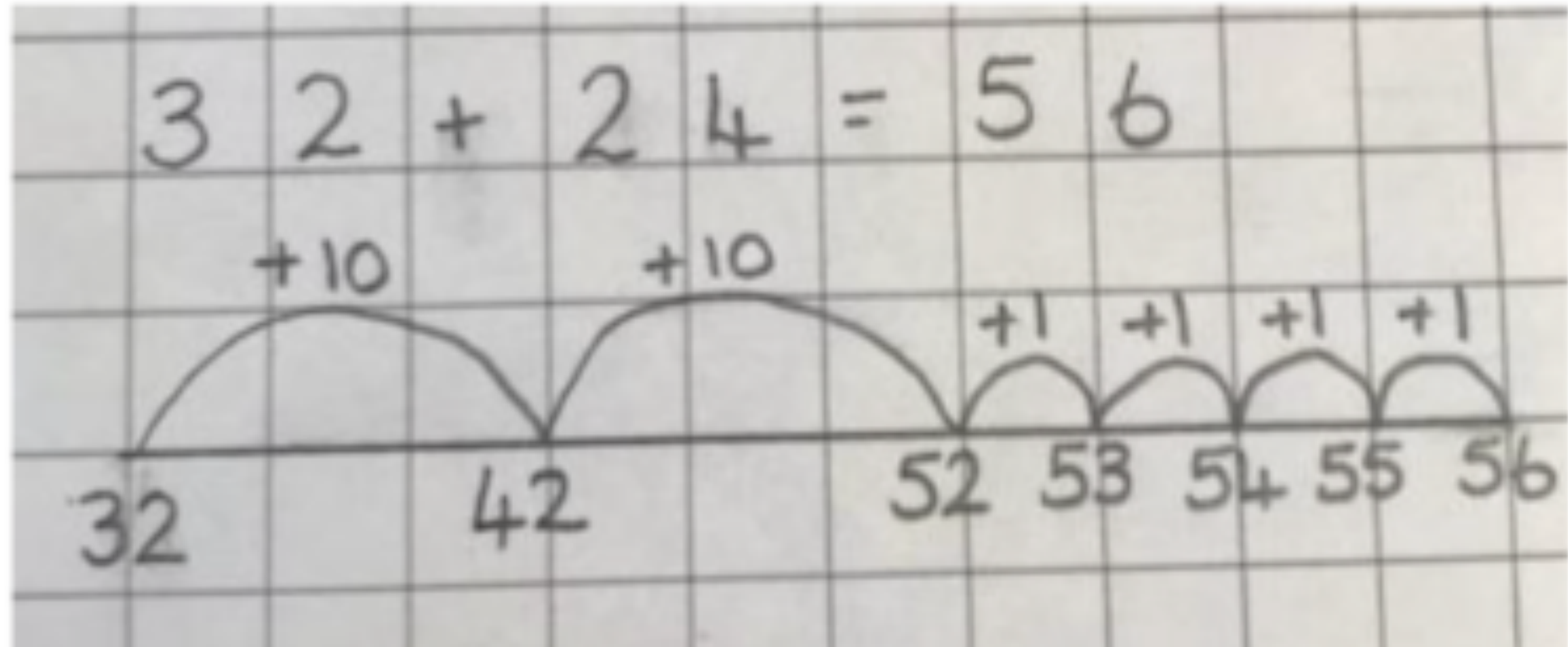


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Step 3:

Adding two, two - digit numbers



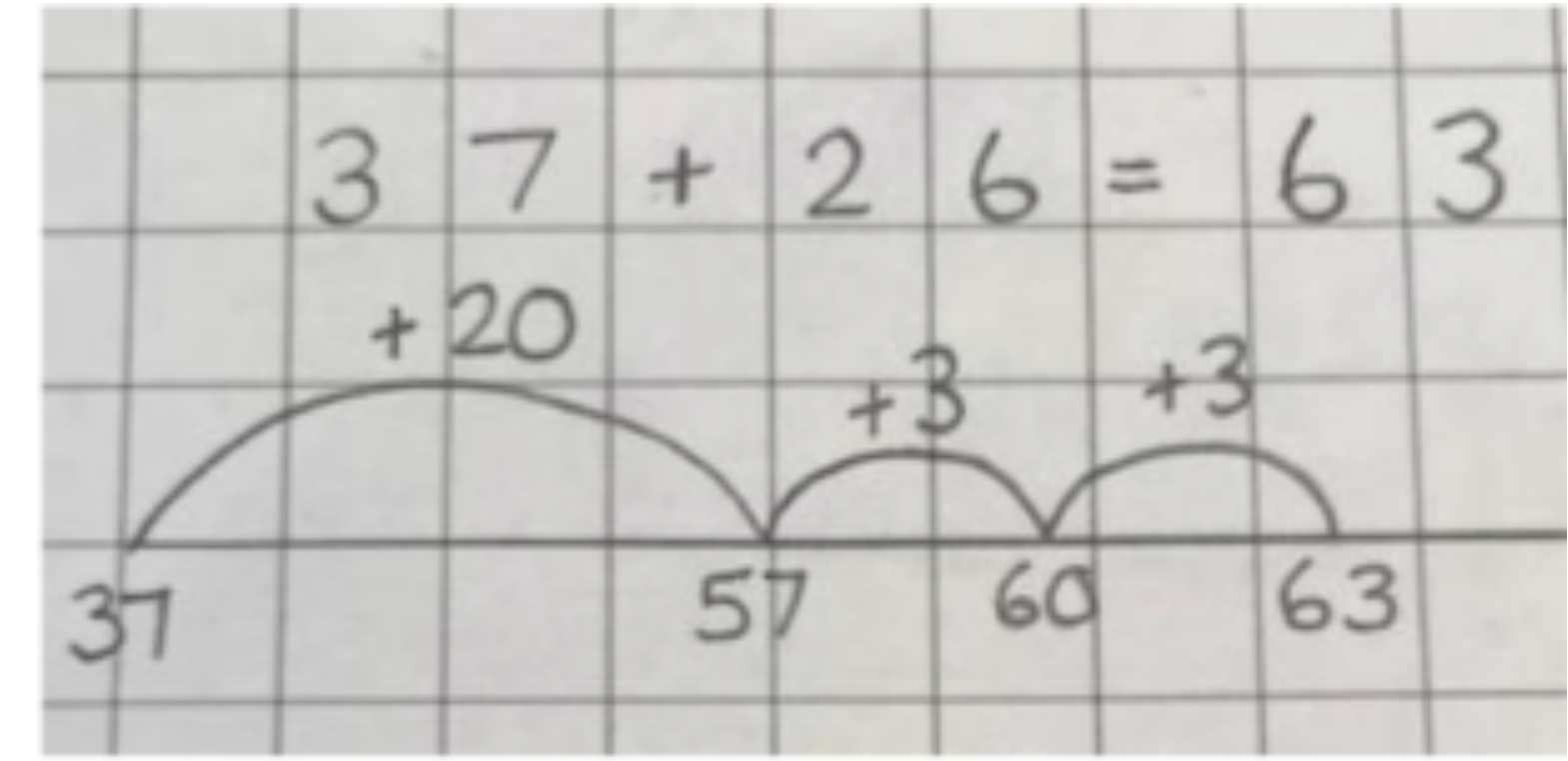
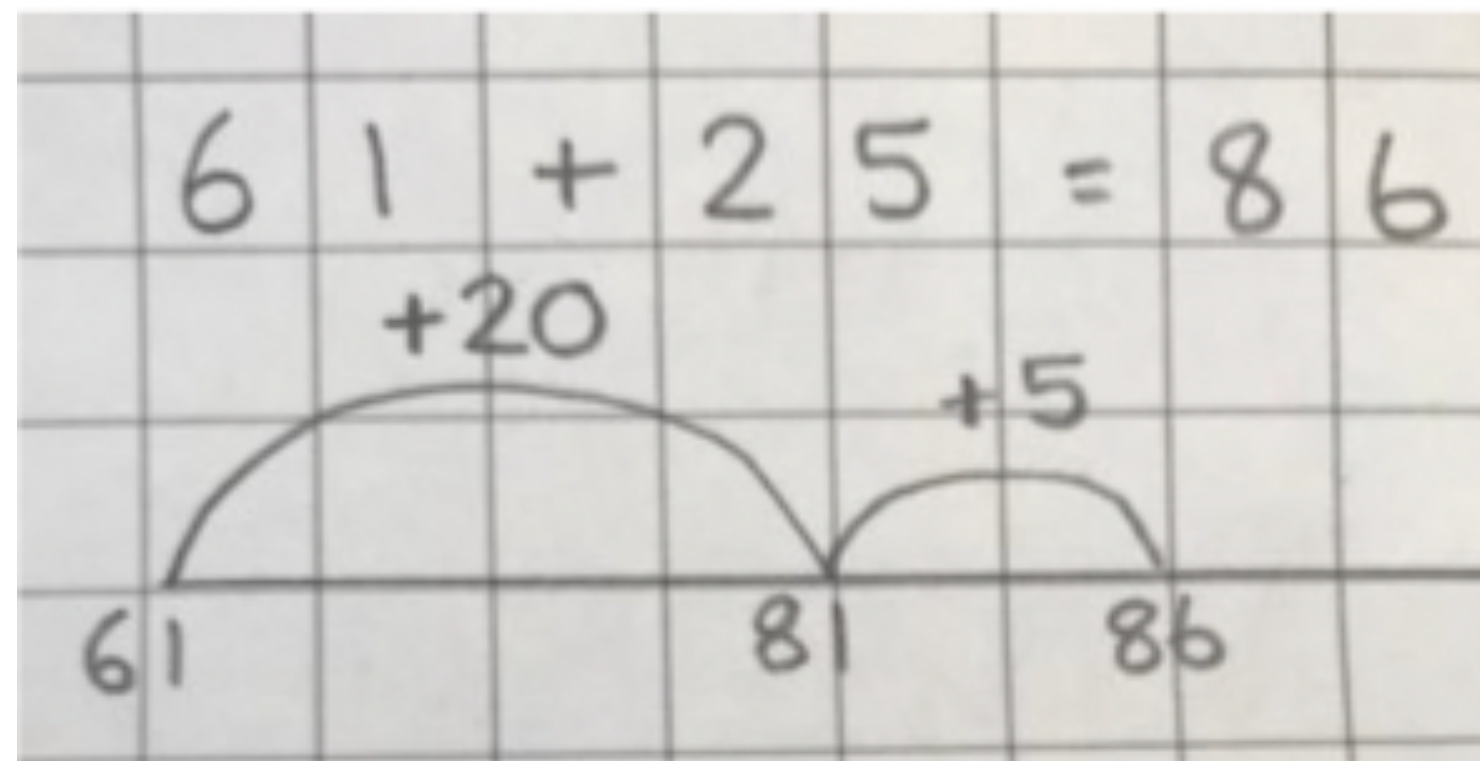
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Step 4:

Using number lines efficiently

Children build on their previous learning and progress from adding one - digit numbers to adding multiples of 10



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Step 5:

Partitioned Column Method (Year 2 and Year 3)

Those children who are ready in year 2, may progress to a partitioned column method. Children to progress only when they have really mastered the previous steps and have shown understanding through their mental methods.

Children to work with examples which do not cross boundaries first and working left to right, before progressing (if they are ready) to those which do and working right to left)

32 + 27

III :
II :
IIII :
50 + 9 = 59

32 + 27

30 + 2
20 + 7
50 + 9 = 59

32
+ 27
59

36 + 25

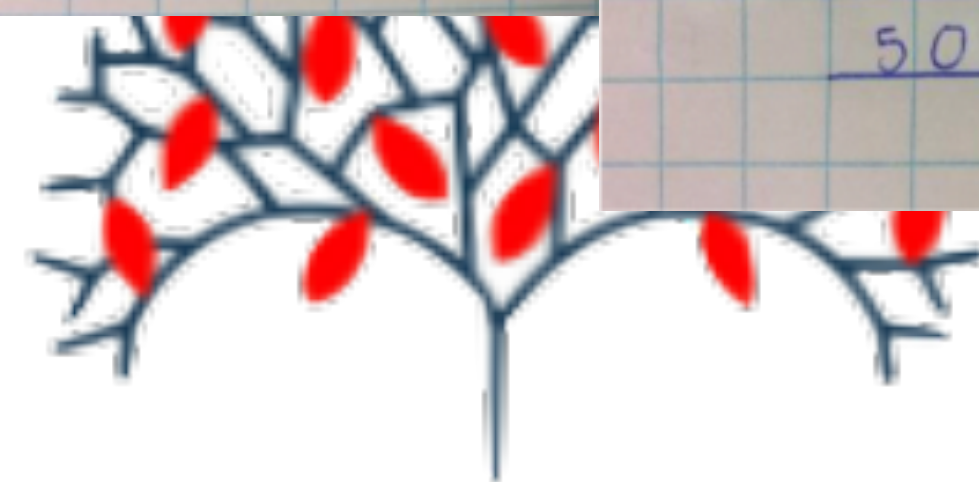
III :
II :
IIII :
50 + 11 = 61

30 + 6
20 + 5
50 + 1 = 61

30 + 6
+ 20 + 5
60 + 1
10

36
+ 25
11 (6 + 5)
+ 50 (30 + 20)
61

36
+ 25
61
1



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Mental Methods:

In year 2, the children will be taught to use the following mental strategies, and to use jottings to support their methods:

- Reordering numbers when adding
- Count on in tens or ones
- Using knowledge of pairs making 10 and place value
- Compensating: add 9, 19, 11 or 21 by rounding and adjusting
- Compensating: doubling and adjusting.
- Partitioning:
- Bridge through 10 when adding
- Partition and combine multiples of tens and ones.
- Looking for number bonds/known facts when adding 3 one-digit numbers.

$$\begin{array}{r} 24 + 9 \\ \diagdown \\ 23 + 1 + 9 \\ \hline 23 + 10 \end{array}$$



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ADDITION

Year 3

National Curriculum Objectives: Addition objectives from Addition and Subtraction Strand	Key Skills/ other linked NC Objectives (Place Value)	Key Vocabulary
• Add numbers mentally, including three-digit numbers and ones. • Add numbers mentally, including three-digit numbers and tens. • Add numbers mentally, including three-digit numbers and hundreds. • Add numbers with up to 3 digits, using formal written method of columnar addition. • Estimate the answer to a calculation and use inverse operations to check answers. • Solve problems including missing number problems, using number facts, place value, and more complex addition.	• Find 10 or 100 more than a given number. • Recognise the place value of each digit in a three-digit number. • Identify, represent and estimate numbers using different representations. • Read and write numbers up to 1000 in numerals in words. • Compare and order numbers up to 1000.	<i>KS1 Vocab plus:</i> Combined, more, column, carrying, expanded, compact



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In year 4, the children also have access to a wide range of practical resources and equipment, counting materials, models and images and should be given the opportunity to use these to support their understanding of mental and written methods at all stages. They are given time to extend their previous work on adding multiples of 10 from year 2 to adding 100's and 1000s too.

We spend time learning and practising mental methods for addition in our arithmetic sessions alongside our maths lessons to secure the children's fluency skills.

This will include exploring number and different ways to partition number, to support addition strategies as well as adding the nearest multiple of 10, 100 and 1000 and adjusting (e.g. to add 9, 49, 99 999 etc), using near doubles and partitioning and recombining.



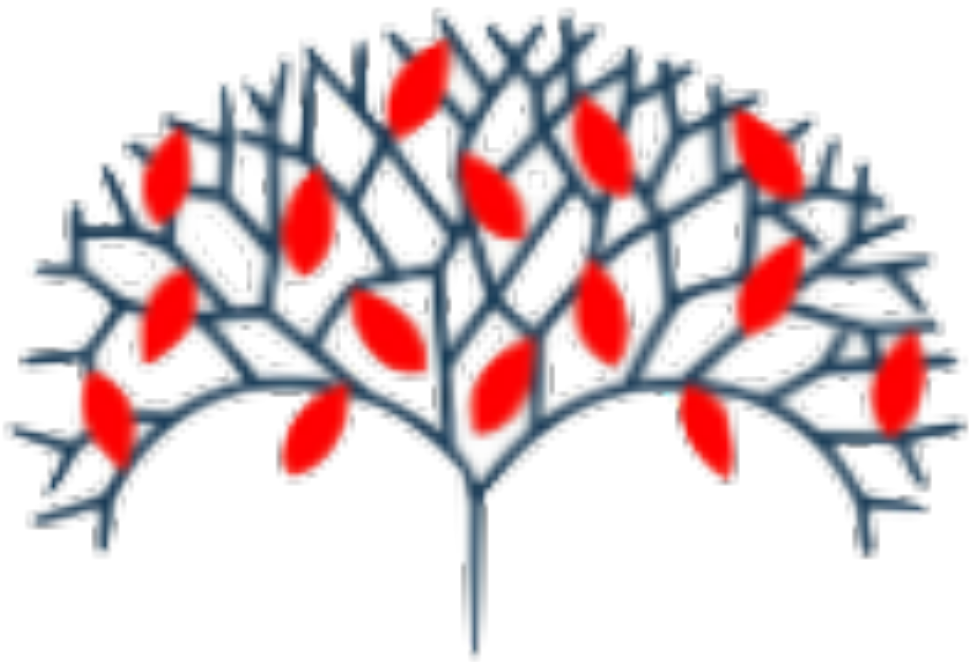
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Steps for Written Methods:
Carrying in the ones column only

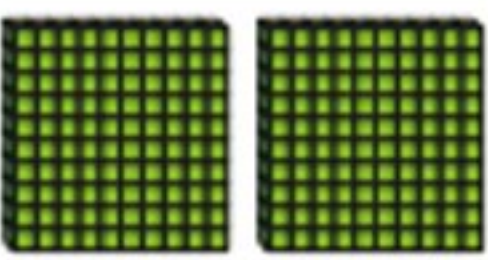
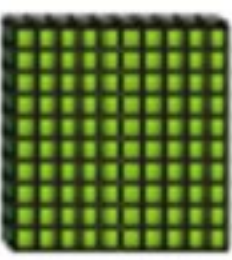
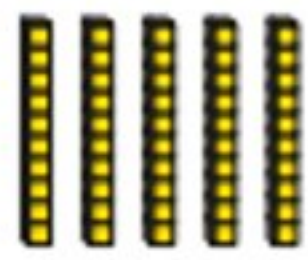
Step 1:
To apply expanded column methods from Year 2 when adding three -digit numbers.

$$\begin{array}{r} 437 \\ + 225 \\ \hline \end{array} = \begin{array}{r} 400 + 30 + 7 \\ 200 + 20 + 5 \\ \hline 600 + 50 + 12 = 662 \end{array}$$



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b)

	Hundreds	Tens	Ones
			
+			

		H	T	O	
		2	3	5	
	+	1	5	7	

Step 2:
 Introduce the expanded column method.
Step 2 and **Step 3** may be taught alongside each other to ensure the children understand the value of the numbers they are adding in the compact method.

$$\begin{array}{r}
 437 \\
 + 225 \\
 \hline
 12 \quad (7+5) \\
 50 \quad (30+20) \\
 600 \quad (400+200) \\
 \hline
 662
 \end{array}$$

Add the ones column first, in preparation for the compact method.



b)

Hundreds	Tens	Ones
100 100 100	10 10 10 10 10 10 10 10 10	1 1
100	10 10 10 10	1 1 1 1

		H	T	O	
		3	9	2	
	+	1	4	4	

Step 3:

Move to the compact column addition, first without carrying and then with.

$$\begin{array}{r} 437 \\ + 225 \\ \hline 662 \\ \hline 1 \end{array}$$

Add the ones first.

Carry numbers
underneath the
bottom line.



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Carrying in the tens column only

Step 1:

To apply expanded column methods from Y2 when adding three - digit numbers.

$$\begin{array}{r} 237 \\ + 82 \\ \hline \end{array} = \begin{array}{r} 200 + 30 + 7 \\ + 80 + 2 \\ \hline 200 + 110 + 9 = 319 \end{array}$$



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Step 2:

Introduce the expanded column method.

Step 2 and Step 3 can be taught alongside each other to ensure the children understand the value of the numbers they are adding in the compact method.

Handwritten expanded column addition on grid paper:

2	3	7	
+	8	2	
		9	(7+2)
1	1	0	(30+80)
2	0	0	(200+0)
3	1	9	

Add the ones column first, in preparation for the compact method.



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Step 3:

Move to the compact column addition, first without carrying and then with.

	2	3	7	
+		8	2	
	3	1	9	
	1			

Add the ones first.

Carry numbers
underneath the
bottom line.

Ensure correct use of vocabulary throughout.

E.g. we are adding 3 tens and 8 tens (30 and 80) to make 11 tens or 110, as opposed to 3 and 8 equals 11.



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Carrying in the ones and the tens column

Step 1:

To apply expanded column methods from Y2 when adding three - digit numbers.

$$\begin{array}{r} 238 \\ + 87 \\ \hline \end{array} = \begin{array}{r} 200 + 30 + 8 \\ + 80 + 7 \\ \hline 200 + 110 + 15 = 325 \end{array}$$



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Carrying in the ones and the tens column

Step 2:

Introduce the expanded column method.

Handwritten expanded column addition on grid paper:

$$\begin{array}{r} 238 \\ + 87 \\ \hline 15 \quad (8 + 7) \\ 110 \quad (30 + 80) \\ + 200 \quad (200 + 0) \\ \hline 325 \end{array}$$

Add the ones column first, in preparation for the compact method.



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Carrying in the ones and the tens column

Step 3:

Move to the compact column addition, first without carrying and then with.

Step 2 and Step 3 may be taught alongside each other to ensure the children understand the value of the numbers they are adding in the compact method.

$$\begin{array}{r} 238 \\ + 87 \\ \hline 325 \\ \hline 1 \quad 1 \end{array}$$

Add the ones first.

Carry numbers underneath the bottom line.



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Mental Methods:

In year 3, the children should be taught to use the following mental strategies, and to use jottings to support their methods, where appropriate:

- Counting on in hundreds, tens and ones to find the total.
- Partitioning into hundreds, tens, and ones in different ways, then recombine ($824 = 800 + 20 + 4$, $824 = 700 + 110 + 14$).
- Reorder the numbers when adding.
- Bridge through a multiple of 10, then adjust.
- Use known facts and place value to add
- Use patterns of similar calculations
- Compensating: add or subtract 10, 20 or 100 and adjust.



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ADDITION

Year 4

National Curriculum Objectives: Addition objectives from Addition and Subtraction Strand	Key Skills/ other linked NC Objectives (Place Value)	Key Vocabulary
• Add numbers with up to 4 digits using the formal methods of columnar addition where appropriate. • Estimate and use the inverse operations to check answers to a calculation. • Solve two-step addition problems in contexts, deciding which operations to use and why.	• Find 1,000 more than a given number. • Recognise the place value of each digit in a four-digit number. • Identify, represent and estimate numbers using different representations. • Compare and order numbers beyond 1000.	<i>All previously taught vocabulary, plus:</i> Inverse, operation, opposite, increase



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In year 4, the children also have access to a wide range of practical resources and equipment, counting materials, models and images and should be given the opportunity to use these to support their understanding of mental and written methods at all stages. They are given time to extend their previous work on adding multiples of 10 and 100 from year 2 and 3 to adding 1000s too.

We spend time learning and practising mental methods for addition in our arithmetic sessions alongside our maths lessons to secure the children's fluency skills.

This will include exploring number and different ways to partition number, to support addition strategies as well as adding the nearest multiple of 10, 100 and 1000 and adjusting (e.g. to add 9, 49, 99 999 etc), using near doubles and partitioning and recombining.



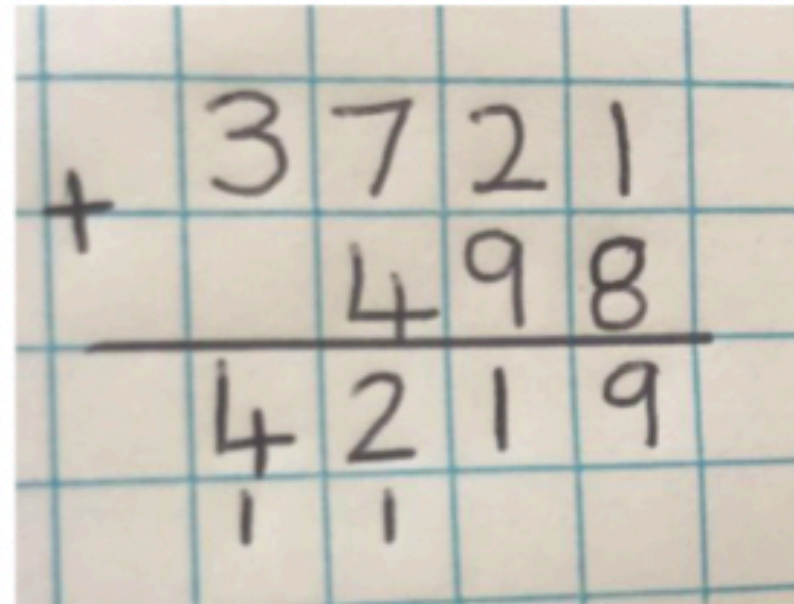
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Written Methods:

We begin in year 4 by recapping the children's understanding of Year 3 calculation strategy, moving to the compact column method adding the ones first and carrying numbers underneath the calculation.





A photograph of a handwritten calculation on blue grid paper. The calculation is 3721 + 498. The numbers are written in a compact column method. The sum, 4219, is written below a horizontal line. Carrying numbers are written below the line: a '1' under the '4' and another '1' under the '2'.

3	7	2	1	
+		4	9	8
4	2	1	9	
1	1			

Ensure correct use of vocabulary throughout. E.g. we are adding 7 hundreds and 4 hundreds, not 7 add 4 for example.



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Written Methods:

Then we teach children to apply their use of the column methods to decimal numbers through money and measurement values to make the link to real life mathematics.

£	2	4	.	3	2
£	1	2	.	8	4
£	3	7	.	1	6
		1			

The decimal point should be aligned in the same way as the other place value columns and must be in the same column in the answer.



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Mental Methods:

In year 4, the children should be taught to use the following mental strategies, and to use jottings to support their methods, where appropriate:

Count in steps of thousands, hundreds, tens and ones.

Reorder numbers in a calculation

Add 3 or 4 small numbers

Partition: adding the most significant digit first

Compensating: doubling and adjusting

Compensating: Adding the nearest multiple of 10 or 100 and then adjust

Using knowledge of place value and related calculations e.g. working out $150 + 140 = 290$ by using $15 + 14 = 29$.



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SUBTRACTION

Year 2

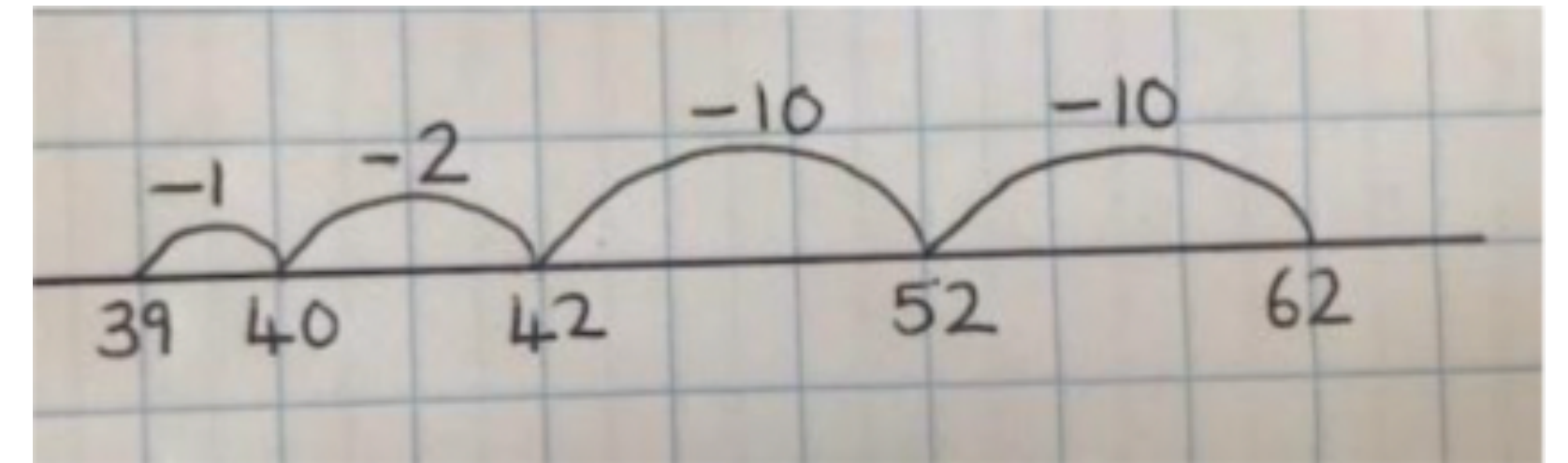
National Curriculum Objectives: Subtraction objectives from Addition and Subtraction Strand	Key Skills/ other linked NC Objectives (Place Value)	Key Vocabulary
Solve problems with subtraction - Using concrete objects and pictorial representations, including those involving numbers, quantities and measures. - Apply their increasing knowledge of mental and written methods. Subtract numbers using concrete objects, pictorial representations and mentally: - Subtract two-digit numbers and ones. - Subtract two-digit numbers and tens. - Subtract two, two-digit numbers. - Recall and use subtraction facts within 20 fluently and derive and use related facts up to 100. - Show that subtraction cannot be done in any order. - Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing box number problems.	- Count in steps of 2, 3 and 5 and count in tens from any number - Understand the place value of 2-digit numbers (tens, ones) - Compare and order numbers to 100 and use $<$, $>$ and $=$ signs. - Read and write numbers to at least 100 in numerals and words. - Identify, represent and estimate numbers using different representations, including the number line.	Subtraction, subtract, take away, minus Halve, half, Difference, distance between Less, least, few, fewest <i>N.B: Same vocabulary as Year 1, to be consolidated and extended in different contexts.</i>



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In year 2, the children continue to have access to a wide range of counting equipment, everyday objects, number tracks and number lines, and be shown numbers in different contexts. They consolidate their understanding of subtraction practically, showing subtraction on bead strings, using cubes etc. They then use practical resources alongside pictures to make the link between concrete and pictorial representations.



Through the year, we read and write the subtraction (-) and equals (=) signs within number sentences. Specific learning should continue, through exploration of number and use of practical resources, around the equals sign, ensuring children understand its role within a number sentence and that it does not always just indicate where the answer goes.

Be introduced to finding the difference, continuing to develop understanding of this e.g. find the distance, how many more, how many less etc. Children to start to develop an understanding of the different methods that can be used for this (counting back, counting on) and when we might use each.



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Interpret addition number sentences and solve missing box problems, using concrete objects and number line subtraction to solve them: $28 - 3 = \square$, $35 - \square = 21$ and $\square = 24 - 9$.



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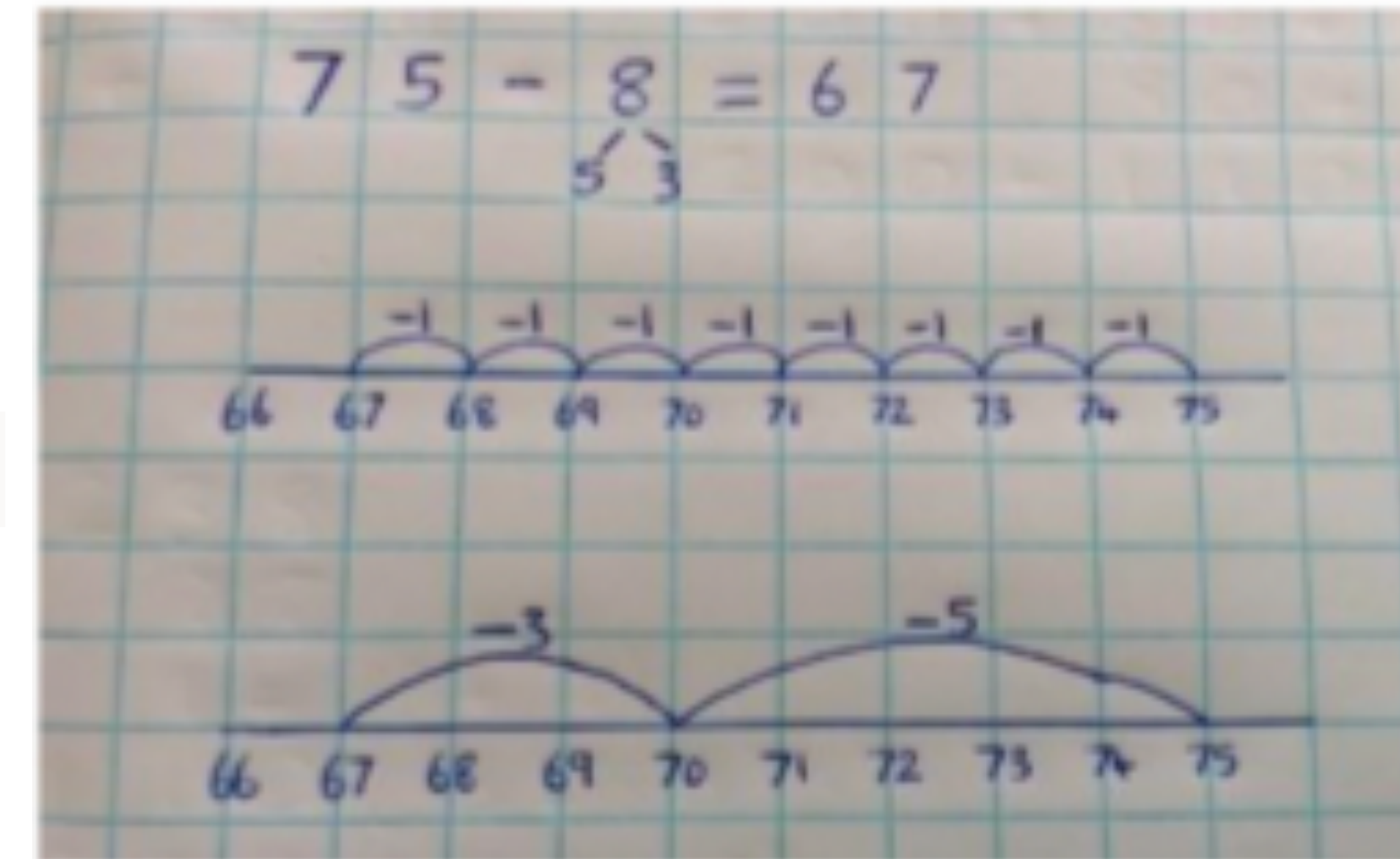
Steps for Written Methods.

All steps to be supported by concrete and pictorial, with a focus on Year 2 children becoming confident in using a blank number line as a jotting for their mental method as well as a pictorial representation to prepare them for more formal written methods in the future.

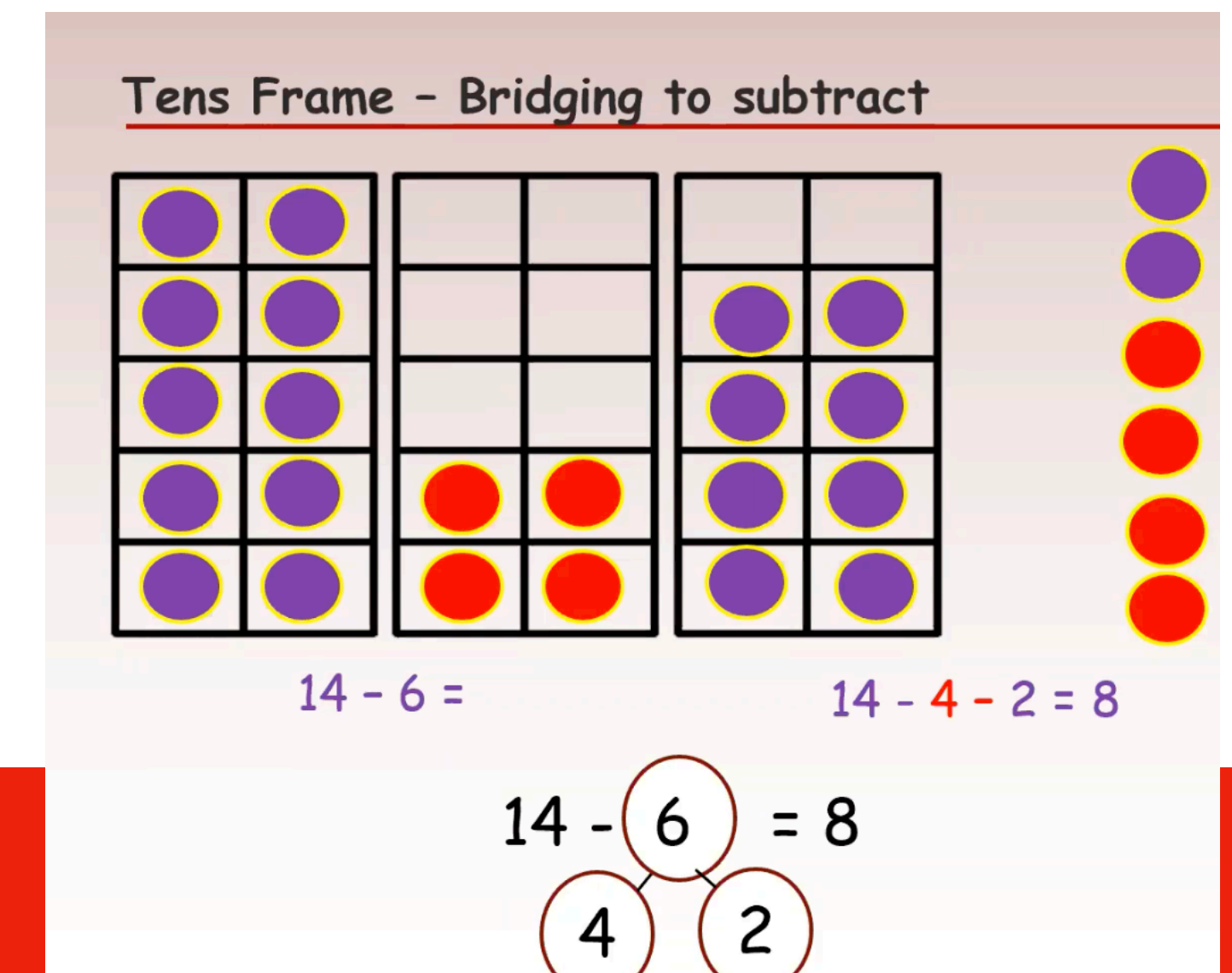
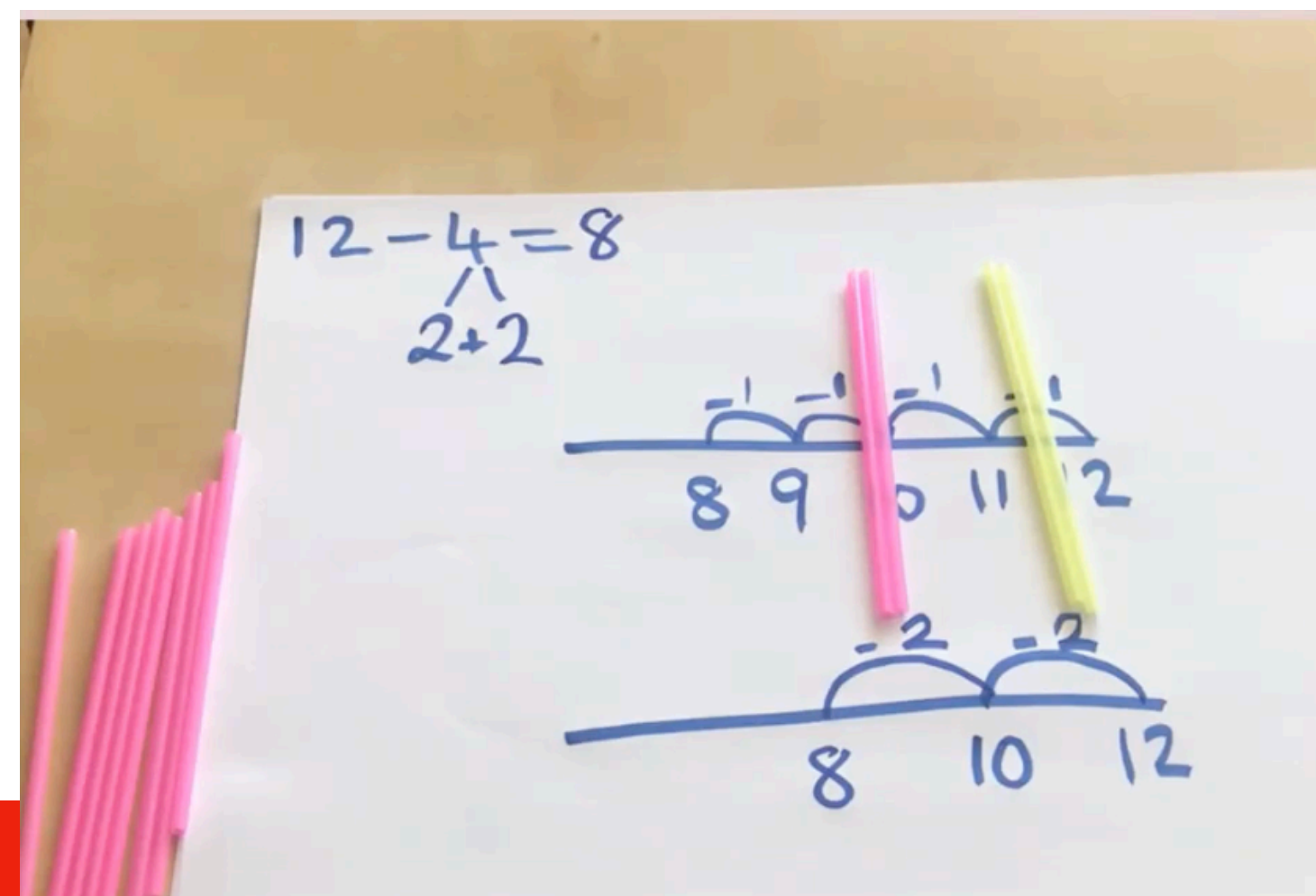
Step 1:

Subtracting ones from a two - digit number

We start with the children consolidating their learning from year 1



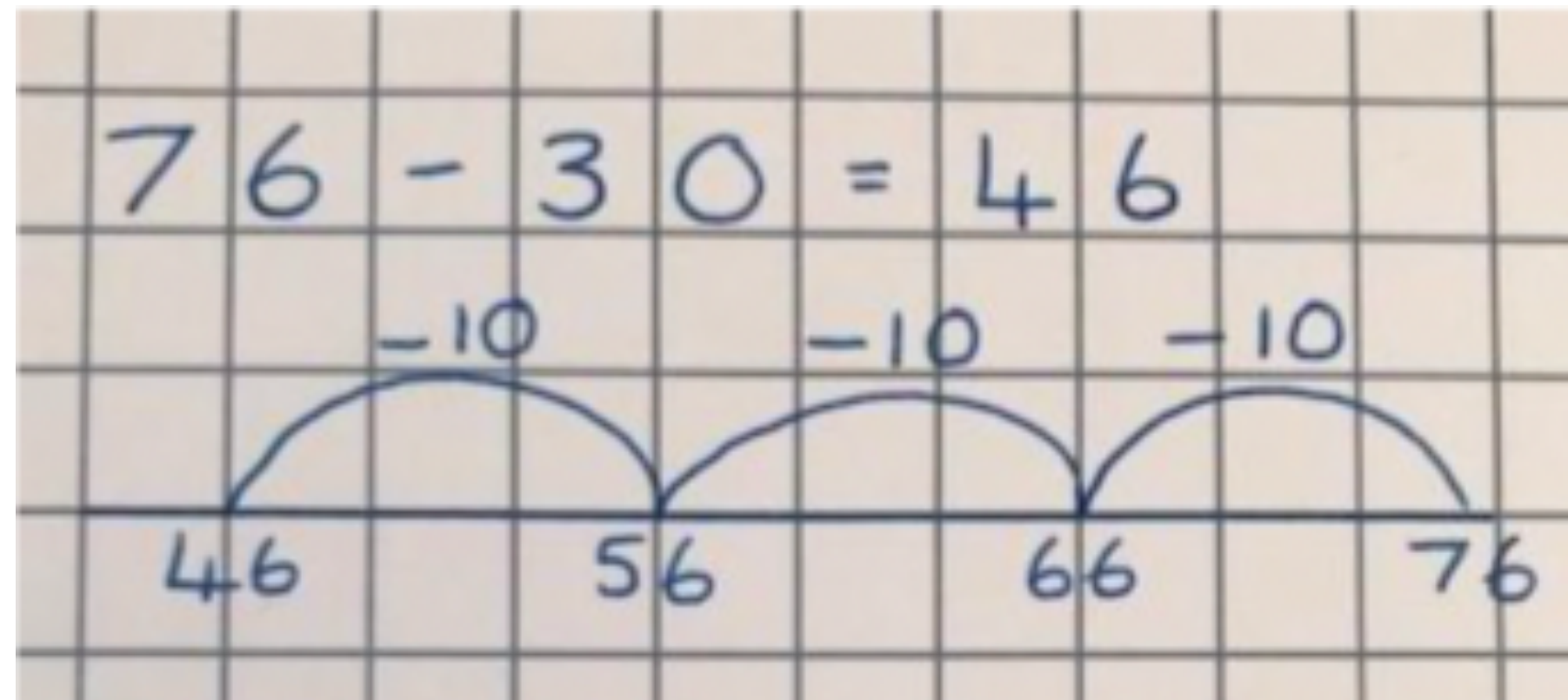
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Step 2:

Subtracting two - digit numbers and tens.

Then the children build on their previous learning and progress from subtracting one-digit numbers to subtracting multiples of 10.



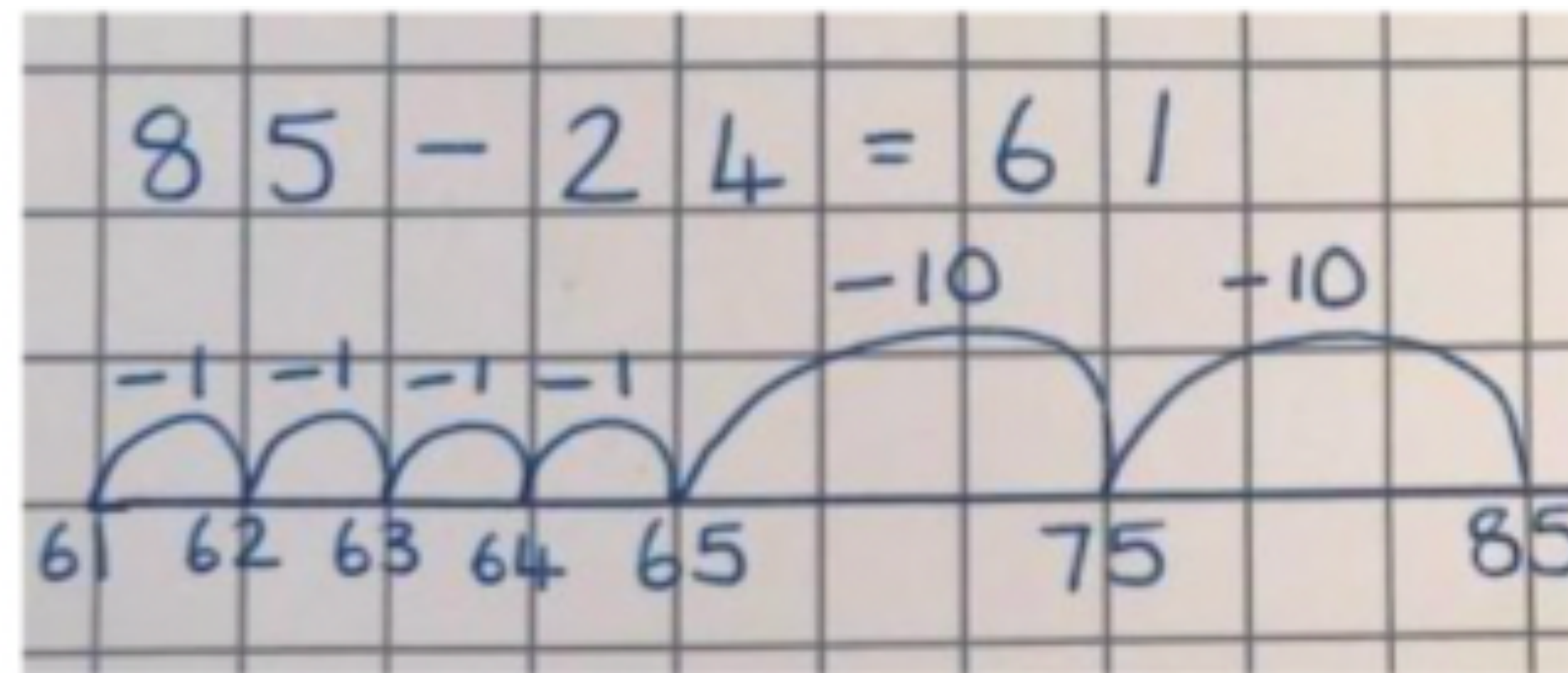
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Step 3:

Subtracting two, two - digit numbers.

Once the children are confident with subtracting multiples of 10, and using their ability to partition two - digit numbers into tens and ones, children subtract a two - digit number from a larger two - digit number on a number line.



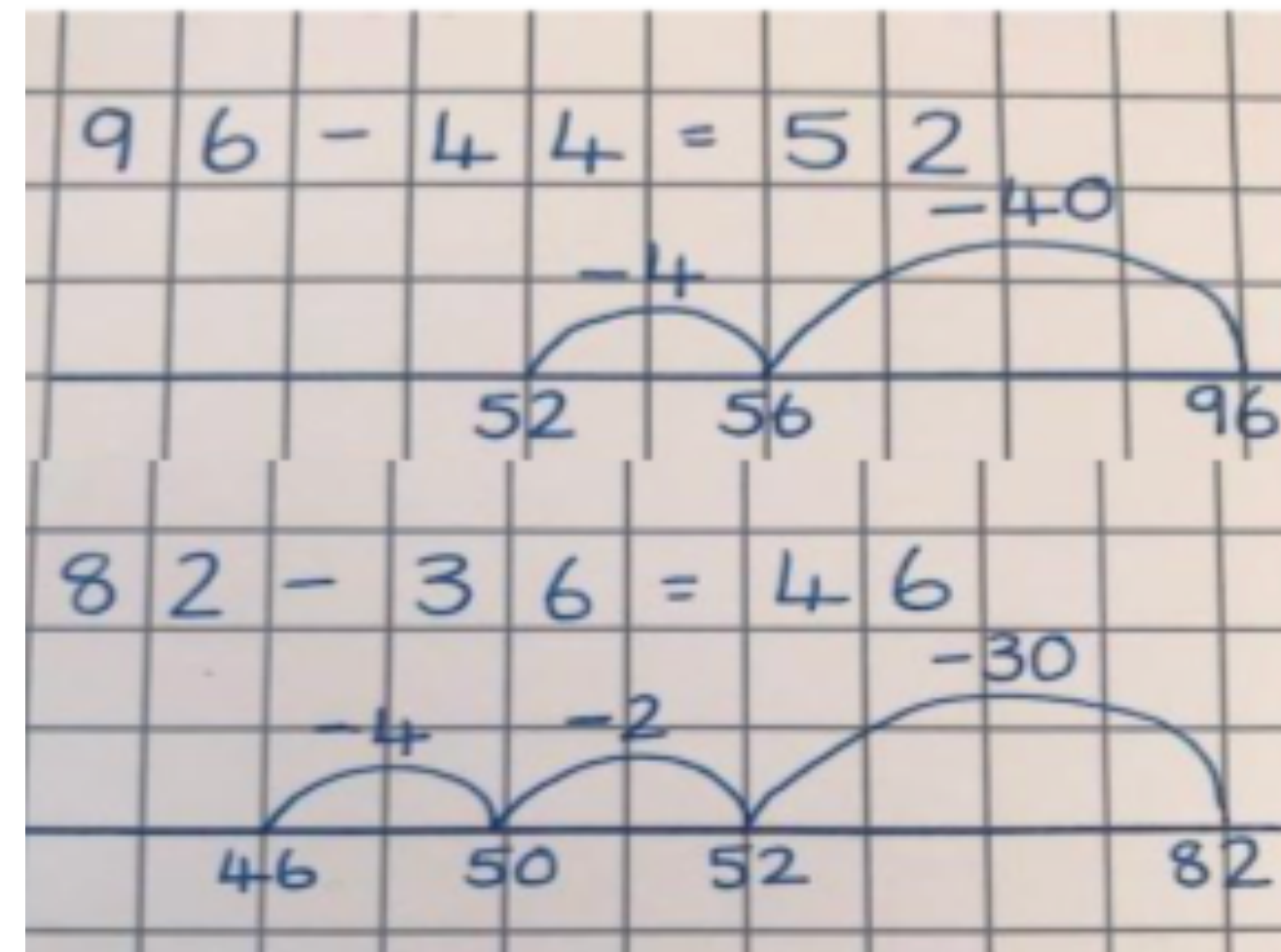
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Step 4:

More efficient methods for subtraction.

When children are showing a secure understanding of the above steps, they should be taught to use number lines to calculate in the most efficient way. This will include partitioning numbers to bridge tens, as in the second example.



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Mental Methods

Counting back in tens and ones.

Subtract mentally a 'near multiple of 10' by subtracting and adjusting

Subtract a small number by counting back.

Find a small difference by counting up from the smaller to the larger number (on a number line)

Recalling subtraction facts for numbers to 20 and using these to derive the related facts up to 100.

Subtract by partitioning the second number and subtracting tens then ones.

Use patterns of similar calculations.



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SUBTRACTION

Year 3

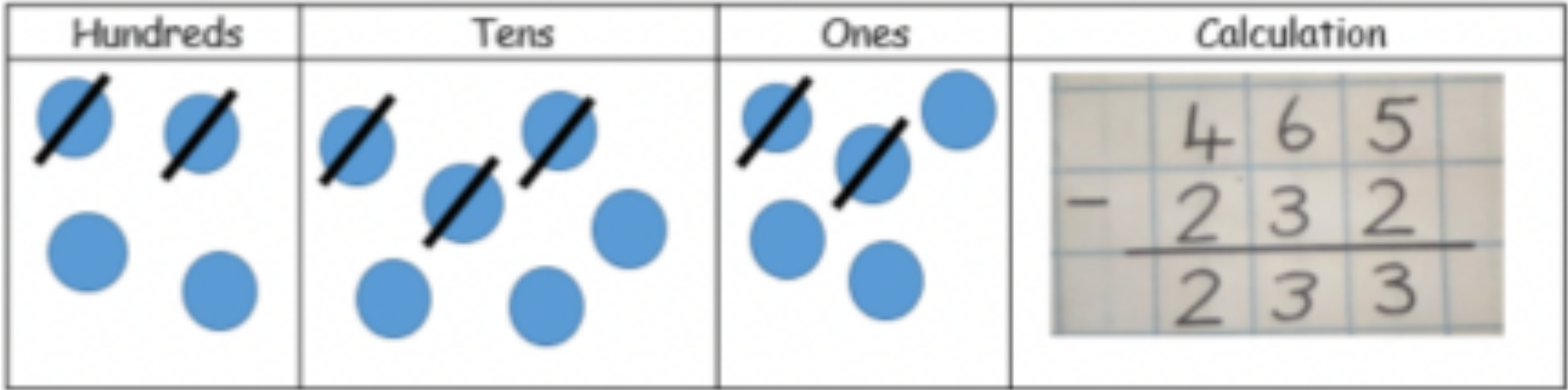
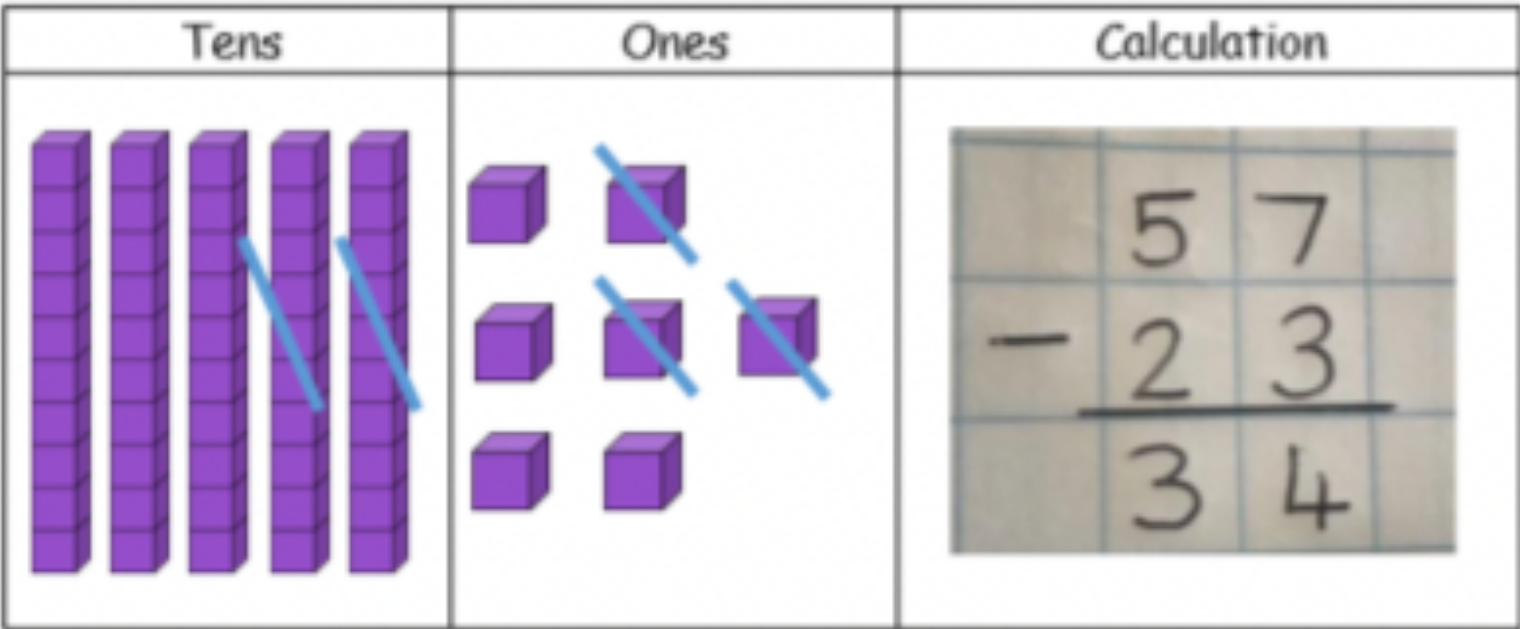
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In year 3, the children will continue to use practical resources alongside the developing calculation strategies. These will include dienes, place value counters, place value charts, digit cards etc and will be appropriate for support children's subtraction with three - digit numbers. Then they will apply their understanding of using concrete resources to using pictorial representations alongside their abstract calculations.



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During the year the children will continue to develop their understanding of finding the difference. They will experience difference contexts and representations for doing this and start to become more secure with choosing the most effective strategy to do this.

Written Methods

Step 1: Working left to right

Introduce this method with examples where no exchanging is required. Use this as an opportunity to reinforce place value and check children's understanding before moving on.

Handwritten subtraction on grid paper:

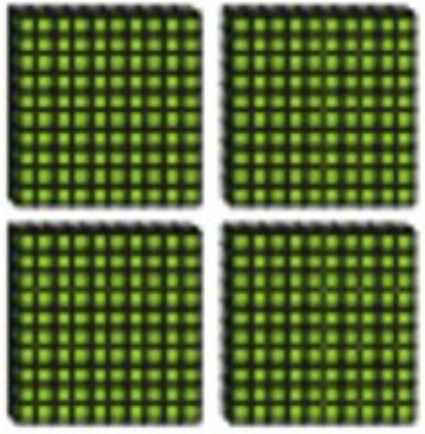
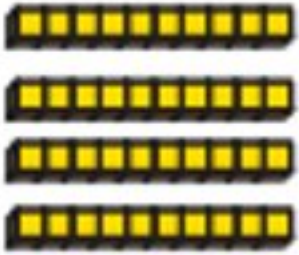
$$\begin{array}{r} 87 - 33 = 54 \\ 80 + 7 \\ - 30 + 3 \\ \hline 50 + 4 = 54 \end{array}$$



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c) 444 – 266

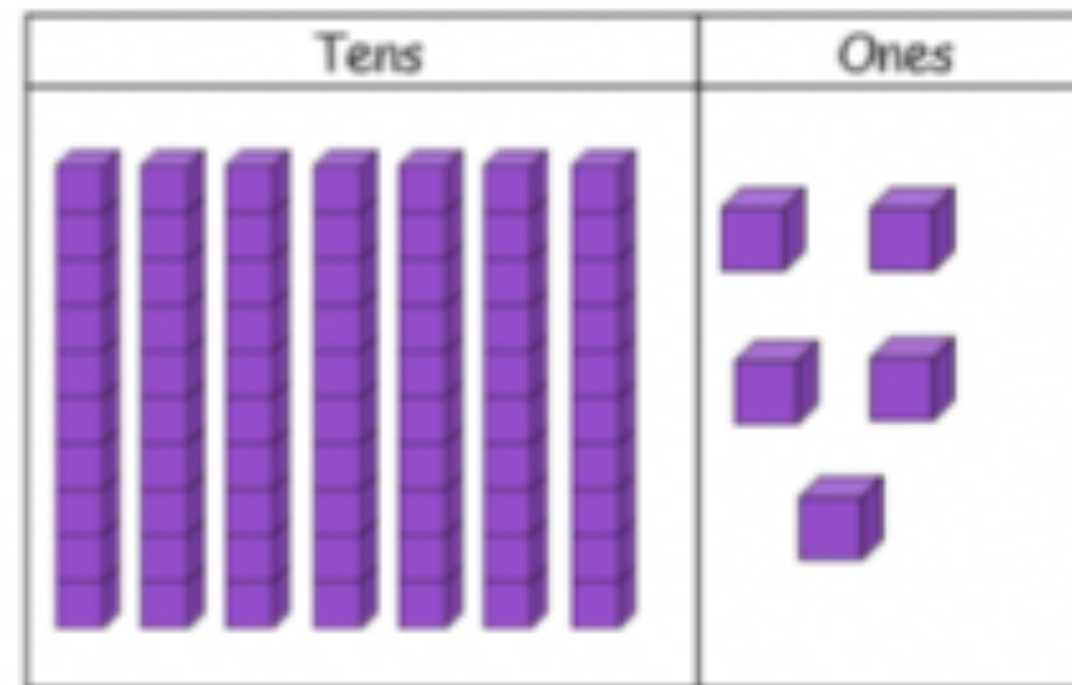
Hundreds	Tens	Ones
		

		H	T	O	
		4	4	4	
	-	2	6	6	

Written Methods

Step 2: Working right to left

Introduce exchanging through practical subtraction. Make the larger number with dienes and then physically exchange a row of 10 for ten ones. Model how to record this



$$\begin{array}{r} 75 - 37 = 38 \\ \begin{array}{r} 60 \\ 70 + 5 \\ - 30 + 7 \\ \hline 30 + 8 = 38 \end{array} \end{array}$$



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Written Methods

Step 3:

Once the children are secure with the 'exchanging' method, they can use this to subtract two and three - digit numbers in a variety of contexts. .

$$\begin{array}{r} 242 - 154 = 88 \\ \begin{array}{r} 100 \\ 200 \end{array} + \begin{array}{r} 30 \\ 40 \end{array} + 2 \\ - \begin{array}{r} 100 \\ 50 \\ 4 \end{array} \\ \hline 0 + 80 + 8 = 88 \end{array}$$



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Written Methods

Step 4:

If children are ready, and have a secure understanding of the maths involved, they may use compact column subtraction for three - digit numbers. However, children must not be moved onto this stage too soon..

$$\begin{array}{r} 542 \\ - 365 \\ \hline 287 \end{array}$$



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Mental Methods

- Counting back in hundreds, tens and ones.
- Counting on as a mental strategy for subtraction when the numbers are close together (e.g. 131-129), and for finding a small difference.
- Compensating: subtract mentally a near multiple of 10 then adjust.
- Bridging through a multiple of 10
- Use knowledge of number facts and place value to subtract pairs of numbers
- Subtract a two-digit number by partitioning it then subtracting tens and ones.
- Use patterns of similar calculations
- Use the relationship between addition and subtraction.



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SUBTRACTION

Year 4

National Curriculum Objectives: Subtraction objectives from Addition and Subtraction Strand	Key Skills/ other linked NC Objectives (Place Value)	Key Vocabulary
- Subtract numbers with up to 4 digits using the formal methods of columnar addition where appropriate. - Estimate and use the inverse operations to check answers to a calculation. - Solve two-step addition problems in contexts, deciding which operations to use and why.	- Find 1,000 more than a given number. - Recognise the place value of each digit in a four-digit number. - Identify, represent and estimate numbers using different representations.	<i>All previously taught vocabulary, plus</i> Reverse, backwards, remove, decrease, inverse



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In year 4, the children will continue to use concrete and pictorial resources to build their understanding as they apply their previous learning to subtracting four-digit numbers. They will be given the opportunity to explore and use different written and mental strategies in a range of contexts, discussing how effective the strategies are and why. Children will be encouraged to start to select the most effective strategies. Throughout the year, they will continue to develop their understanding of finding the difference, choosing the most appropriate strategies to do so.



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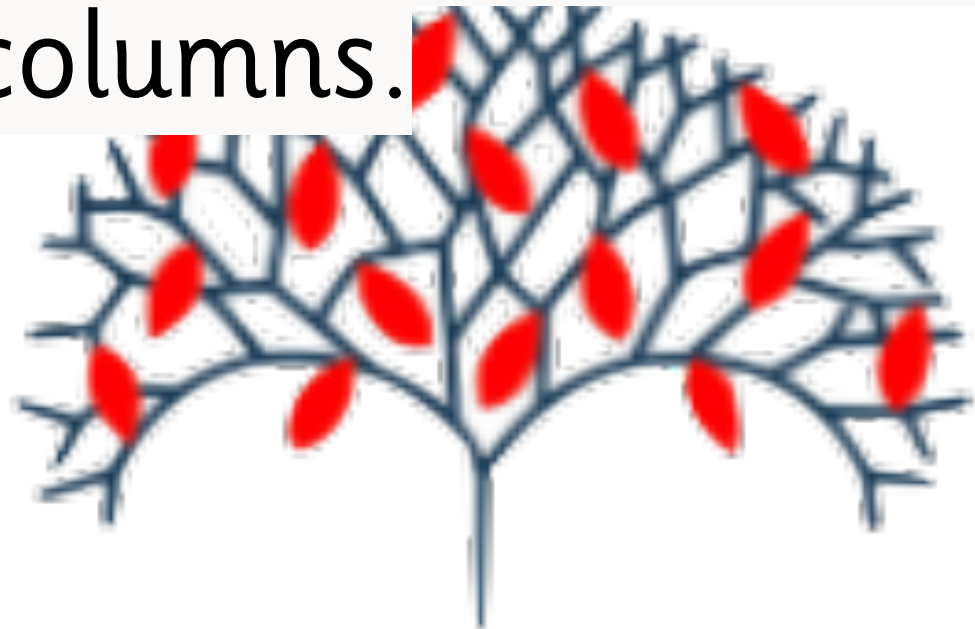
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During the year the children will continue to develop their understanding of finding the difference. They will experience difference contexts and representations for doing this and start to become more secure with choosing the most effective strategy to do this.

Written Methods

Step 1:

At the beginning of the year, the children in year 4 will return to the expanded column method and use practical resources and pictures to reinforce previous learning and extend to subtracting four-digit numbers. Begin with subtracting in the ones column only then subtracting from the tens column only and then from the tens and the ones columns.



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$$\begin{array}{r} 3652 \\ - 1543 \\ \hline \end{array}$$
$$\begin{array}{r} 3000 + 600 + \cancel{50} + 12 \\ - 1000 + 500 + 40 + 3 \\ \hline 2000 + 100 + 00 + 9 = 2109 \end{array}$$

$$\begin{array}{r} 3652 \\ - 1562 \\ \hline \end{array}$$
$$\begin{array}{r} 3000 + \cancel{600} + 150 + 2 \\ - 1000 + 500 + 60 + 2 \\ \hline 2000 + 000 + 90 + 0 = 2090 \end{array}$$

$$\begin{array}{r} 3652 \\ - 1563 \\ \hline \end{array}$$
$$\begin{array}{r} 3000 + \cancel{600} + \cancel{150} + 12 \\ - 1000 + 500 + 60 + 3 \\ \hline 2000 + 000 + 80 + 9 = 2089 \end{array}$$

Written Methods

Step 2:

Compact column subtraction.

Ensure children have the opportunity to apply this method to a variety of different contexts, including money and measures.



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$$\begin{array}{r} 36\overset{4}{8}12 \\ - 1543 \\ \hline 2109 \end{array}$$

$$\begin{array}{r} 3\overset{5}{8}152 \\ - 1562 \\ \hline 2090 \end{array}$$

$$\begin{array}{r} 3\overset{5}{8}\overset{14}{15}12 \\ - 1563 \\ \hline 2089 \end{array}$$

Mental Methods

- Counting on and back in thousands, hundreds, tens, ones.
- Use known facts and place value to subtract
- Counting on to subtract when the numbers are close together.
- Find a difference by counting up through the next multiple of 10, 100 and 1,000
- Compensating: Subtracting the nearest multiple of 1, 10, 100 or 1,000 and adjust.



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Year 2 Practising Number and Calculation Skills at Home

- Building Fluency -

Autumn Term

$10 + \star = \square$
 $20 + \star = \square$
 $30 + \star = \square$
 $40 + \star = \square$

Show $\star$ using Dienes.

T	O

Find the totals of each row and column.

2	3	$\star$	= $\square$
7	$\star$	4	= $\square$
$\star$	7	5	= $\square$
= $\square$	= $\square$	= $\square$	

Count in 2s.

$\star$						
---------	--	--	--	--	--	--

Count in 10s

	$\star$					
--	---------	--	--	--	--	--

$\star$
 (Number range 10 - 100)

$\square + \square = \star$
 $\square + \square + \square = \star$
 $\star = \square - \square$

Complete using more than, less than or equal to:
 $\star$ is _____ 50
 $\star$ is _____ $25 + 7$
 $\star$ is _____ eighteen
 Make the nearest 2-digit number to $\star$ using the digits **5 3 1**



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Summer Term

$\square + \square = \star$
 $\square < \star > \square$

Can you find half of $\star$
 If yes, what is half of $\star$

Create an array that represents $\star$

Is $\star$ in any of the times tables below?
 2 5 10

$\star$
 (Number range up to 100)

_____ is $\star$ cm high

Create a number sequence containing $\star$

	$\star$					
--	---------	--	--	--	--	--

Place $\star$ on the number line.

0	_____	100
---	-------	-----



Spring Term

$\star + \square = 100$
 $100 - \star = \square$

Partition $\star$ in different ways

T	O

Create a fact family for $\star$

Count forwards in 10's

$\star$						
---------	--	--	--	--	--	--

$\star$
 (Number range up to 100)

$\square + 1 = \star + 10 = \square$
 $\square - 1 = \star - 10 = \square$

Make $\star$ using coins

Write $\star$ in words

$\square < \star > \square$



Year 3 Practising Number and Calculation Skills at Home

- Building Fluency -

Autumn Term

Partition  in 5 different ways.

Hundred less
 Ten less



 Ten more
 Hundred more

3	6														
4	8														

 Count on in 3's



 Count on in 4's



Using the digits....

2

7

4

 Make the largest number nearest to 

(Number range 3 - digit numbers)



What is the difference between...

999

 and 

Place  on the number lines.

0

900

0

 + 200

Write  in words



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Summer Term

Draw a shape (not to scale) where  is the perimeter.

What fractions of  can you find?

Multiply 2 or more digits from  to make a product closest to 50

Create a word problem where  is the answer

(Number range 3 - digit numbers)
 Make  with coins in different ways

It would take  minutes to



Spring Term

How many hundreds, tens and ones are in 

Can you now think of more ways to express this?

Double



 Double again

+		
-		

Round  to the nearest 10

(Number range 3 digit number up to 299)
 Round  to the nearest 100


 Add 5 ones →
 Subtract 1 ten →
 Add 2 hundreds →
 Add 5 tens →


 x2 →
 +50 →



 - 10 →
 x 2 → 

Year 4 Practising Number and Calculation Skills at Home

- Building Fluency -

Autumn Term

Summer Term

Spring Term

Complete the grid

25			=	☆
		37	=	☆
	12		=	☆

☆ = ☆ = ☆

How many more numbers can you make using the digits in ☆?
Can you order them?
Can you place them on a number line?

0 _____ 1000

Write <, > or =

2915 - ☆ 1891 + ☆

3215 - ☆ 1735 + ☆

☆ x 3 ☆ + 2452

2000 - ☆ 1421 - ☆

☆ x 10 = ☆ ÷ 10 = ☆ ÷ 100 =

(Number range 3 - digit numbers)

Round ☆ to the nearest 10 _____
nearest 100 _____

Partitioning:

It would take you ☆ minutes to _____

It would take you ☆ seconds to _____

Take each individual digit of ☆ and multiply them together in a variety of ways

Add ☆ to 479
Use the most efficient addition method

Subtract ☆ from 1000
Use the most efficient method

☆ x 6 =
Use written multiplication

1/2 of ☆ =
3/4 of ☆ =

(Number range 3 - digit numbers)

☆ cm = _____ m

☆ minutes = _____ hours

☆ 10ps = £ _____

Divide ☆ by 10

Divide ☆ by 100

Th	H	T	O	.	Tth	Hth
----	---	---	---	---	-----	-----

☆ ÷ 8 =
Use short division

Write a column addition calculation where ☆ is the answer

☆ is the answer, what is the question?

Draw a rectilinear shape (not to scale) with the perimeter of ☆



Helping at Home

- Useful Websites -

- <https://doodlelearning.com>
- <https://www.thenational.academy>
- <https://www.bbc.co.uk/bitesize>
- <https://whiterosemaths.com/parent-resources>
-
- WhiteRose Maths One Minute App for Android and Iphone users



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