

HIAS MOODLE+ RESOURCE

Year 5 Unit Plan 5.5

Number and Place Value

Addition and Subtraction

Autumn Term

HIAS Maths Team
September 2026
Final version

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Overview

This document contains...

Year 5 Unit Plans linked to the Hampshire Medium Term Overview

Points to consider when using this resource:

These unit plans provide an example of how medium-term planning could be developed into units of work. These unit plans will need to be adapted to meet the needs of pupils. The unit plan provides an outline of a possible learning journey with suggestions of types of tasks that could be used. They also identify required prior learning, some common misconceptions and an indication of key skills pupils need to secure competency. It is assumed that teachers will make use of appropriate mathematical representations (manipulatives, visuals and symbolic) to support conceptual understanding for pupils alongside procedural fluency.

National Curriculum Links:

Number and Place Value

- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- solve number problems and practical problems that involve all of the above
- read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Addition and Subtraction

- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- add and 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 addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

<p>This unit develops pupils' understanding of place value within numbers up to six digits and applies this to counting, comparing, positioning numbers on number lines, and rounding to progressively larger place values. Pupils also extend their addition and subtraction skills to larger numbers, choosing efficient mental or written strategies as appropriate, and checking using inverse operations. Throughout the unit, emphasis is placed on reasoning, whole-part understanding, and high-quality problem-solving through both routine and non-routine contexts.</p>	<p>Notional Time: 15 sessions</p>	
<p>Check and Refresh - <i>skills and knowledge that pupils need to know</i></p>	<p>Verbal coding- <i>precise mathematical language to model during worked examples</i></p>	<p>Mastering Key Facts in Key Stage 2 – developing fluency and automaticity</p>
<p>Secure understanding of place value up to 4 digits. Counting forwards and backwards in 10, 100 and 1000 up to 10,000.</p> <p>Rounding to the nearest 10 and 100 using number lines and an understanding of midpoints.</p> <p>Secure mental and written methods for adding and subtracting up to four-digit numbers.</p>	<p>The digit in the ____ place is ____. It has a value of ____.</p> <p><i>The digit in the ten-thousands place is 5. It has a value of 50 000.</i></p> <p>The previous multiple of ____ is ____. The next multiple of ____ is ____. The midpoint is ____.</p>	<p>Y4 Recap: Number bonds and related number bonds to 1,000,000</p> <p>Addition by partitioning up to 4-digit numbers (e.g. 2235 + 1054)</p> <p>Subtraction by partitioning up to 4-digit numbers (e.g. 9627 – 4015)</p> <p>Recall multiplication and division facts for multiplication tables up to 12 × 12</p>
<p>Mathematical Concepts- <i>important pieces of information learners should take away from the unit</i></p>	<p>Watch out for</p>	<p>DfE Ready -to- progress criteria</p>
<p>Secure understanding of place value up to six digits.</p> <p>Rounding to different place values based on multiples and midpoints.</p> <p>Fluency in mental addition and subtraction with larger numbers.</p> <p>Secure written methods for addition and subtraction with larger numbers.</p>	<p>Pupils with an insecure understanding of zero as a placeholder in larger numbers.</p> <p>Pupils who make errors when bridging across place-value boundaries.</p> <p>Pupils who round based on a remembered 'rule' rather than understanding multiples and midpoints.</p> <p>Pupils who make errors when regrouping and exchanging.</p> <p>Pupils who fail to recognise that a calculation could be solved more efficiently using a mental strategy, particularly where no regrouping or exchange is needed.</p>	<p>4NPV-2 4NPV-3</p> <p>4NF -3 5NPV-3</p> <p>Formative assessment questions - <i>key questions to support pupil reasoning and teacher assessment</i></p> <ul style="list-style-type: none"> • What is the same and what is different? • What if I change...? • Can you give me an example of... and another...and another? • Which is harder and which is easier...? • If I know this, then what else do I know?

Visual coding: key representations

Previous
multiple of 10

Next
multiple of 10

$$\boxed{30} < 34 < \boxed{40}$$

$$\boxed{390} < 398 < \boxed{400}$$

$$\boxed{7500} < 7501 < \boxed{7510}$$

10,000s	1,000s	100s	10s	1s
●	● 1,000	● 100	● 10	● 1
●	● 1,000	● 100		● 1
●	● 1,000	● 100		● 1
	● 1,000	● 100		● 1
	● 1,000	● 100		
	● 1,000	● 100		
	● 1,000	● 100		



Addition and subtraction

789 + 642 becomes

$$\begin{array}{r} 789 \\ + 642 \\ \hline 1431 \\ \small{1 \quad 1} \end{array}$$

Answer: 1431

874 - 523 becomes

$$\begin{array}{r} 874 \\ - 523 \\ \hline 351 \end{array}$$

Answer: 351

932 - 457 becomes

$$\begin{array}{r} 8 \quad 12 \quad 1 \\ 932 \\ - 457 \\ \hline 475 \end{array}$$

Answer: 475

932 - 457 becomes

$$\begin{array}{r} 1 \quad 1 \\ 932 \\ - 457 \\ \hline 475 \\ \small{5 \quad 6} \end{array}$$

Answer: 475

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Learning Journey – Number and Place Value

Autumn unit 5.1 (1 week)	Autumn unit 5.5 (2 weeks)	Spring 5.10 (1 week)
<p>I can read roman numerals to 1000. I can recognise years written in Roman numerals.</p>		
<p>I can count forwards and backwards in 10s from any given number up to 1 000 000.</p> <p>I can count forwards and backwards in 100s from any given number up to 1 000 000.</p> <p>I can count forwards and backwards in 1000s from any given number up to 1 000 000.</p> <p>I can count forwards and backwards in 10 000s from any given number up to 1 000 000.</p> <p>I can count forwards and backwards in 100 000s from any given number up to 1 000 000.</p> <p>I can read, write, order and compare numbers to at least 1000 and determine the value of each digit.</p> <p>I can read, write, order and compare numbers to at least 10 000 and determine the value of each digit.</p> <p>I can read, write, order and compare numbers to at least 100 000 and determine the value of each digit.</p> <p>I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.</p>	<p>I can recognise the place value of each digit in a four-digit number.</p> <p>I can reason about the location of a four-digit number on a number line.</p> <p>I can recognise the place value of each digit in a five-digit number.</p> <p>I can reason about the location of a five-digit number on a number line.</p> <p>I can recognise the place value of each digit in a six-digit number.</p> <p>I can reason about the location of a six-digit number on a number line.</p> <p>I can round any number up to 1 000 000 to the nearest 10.</p> <p>I can round any number up to 1 000 000 to the nearest 100.</p> <p>I can round any number up to 1 000 000 to the nearest 1 000.</p> <p>I can round any number up to 1 000 000 to the nearest 10 000.</p> <p>I can round any number up to 1 000 000 to the nearest 100 000.</p>	<p>I can count forwards and backwards with positive and negative whole numbers, including through zero.</p> <p>I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</p> <p>I can interpret negative numbers in context.</p> <p>I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.</p> <p>I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</p> <p>I can solve number problems and practical problems.</p>

Learning Journey – Addition and Subtraction			
Autumn unit 5.1 (2 weeks)	Autumn unit 5.5 (1 week)	Spring unit 5.7 (1 week)	Summer unit 5.18 (3 weeks)
<p>I can use inverse operations to check answers to a calculation.</p> <p>I can add mentally using partitioning.</p> <p>I can subtract mentally using partitioning.</p> <p>I can add mentally using number bonds.</p> <p>I can subtract mentally using number bonds.</p> <p>I can solve problems using number facts (complements to 1000).</p> <p>I can add up to 4 digits using formal written methods.</p> <p>I can subtract with up to 4 digits using formal written methods.</p> <p>I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>I can add numbers mentally with increasingly large numbers.</p> <p>I can subtract numbers mentally with increasingly large numbers.</p> <p>I can add whole numbers with more than 4 digits, including using formal written methods.</p> <p>I can subtract whole numbers with more than 4 digits, including using formal written methods.</p> <p>I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>I can round to check answers and determine levels of accuracy.</p> <p>I can add mentally using rounding and adjusting.</p> <p>I can subtract mentally using rounding and adjusting.</p>	<p>I can add and subtract numbers mentally with increasingly large numbers.</p> <p>I can add and subtract whole numbers with more than 4 digits, including using formal written methods.</p> <p>I can use rounding to check answers to calculations and determine levels of accuracy.</p> <p>I can solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.</p> <p>I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</p>
		<p>Summer unit 5.14 (2 weeks)</p> <p><i>Repeats in measurement learning journey</i></p> <p>I can use all four operations to solve problems involving length, using decimal notation, including scaling.</p> <p>I can use all four operations to solve problems involving mass, using decimal notation, including scaling.</p> <p>I can use all four operations to solve problems involving volume, using decimal notation, including scaling.</p> <p>I can use all four operations to solve problems involving money, using decimal notation, including scaling.</p>	

Proposed lesson sequence to support development of mathematical concepts

Developing fluency and automaticity – ongoing daily practice

Mastering Key Facts in Key Stage 2

Autumn Ongoing Mental Fluency Practice

- Number bonds and related number bonds to 1,000,000
- Addition by partitioning up to 4-digit numbers (e.g. 2235 + 1054)
- Subtraction by partitioning up to 4-digit numbers (e.g. 9627 – 4015)
- Recall multiplication and division facts for multiplication tables up to 12 × 12
- I can read roman numerals to 1000.
- I can recognise years written in Roman numerals

I can...

Mathematical Concepts, Key Skills and Suggested Tasks

10 Sessions – Number and Place Value

I can recognise the place value of each digit in a four-digit number.

Use assessment of pupils' understanding and confidence in Unit 5.1 to determine whether this step should be taught as a stand-alone lesson. It is essential that pupils have a secure grasp of this knowledge before progressing to positioning numbers on a number line and rounding.

4NPV–2 Example assessment questions

1. Complete the calculations.

$90 + 7 + 6,000 + 400 = \square$

$4,382 - 300 = \square$

$900 + 70 + 600 + 4 = \square$

$4,382 - 80 = \square$

$9 + 7,000 + 60 + 400 = \square$

$4,382 - 2 = \square$

Here is a number.

9,641

Tick all the statements that are **true**.

The digit 6 represents 600

The value of the digit 9 is ninety thousand

The value of the digit 4 is four tens

The digit 1 represents 1000

[Mathematics guidance: key stages 1 and 2 \(covers years 1 to 6\) – 4NPV-2](#)

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I can reason about the location of a four-digit number on a number line.

Pupils need to identify and place four-digit numbers accurately on marked number lines with a range of scales. They should also be able to estimate the value or position of a four-digit number on an unmarked number line, using appropriate proportional reasoning.

In addition, pupils should identify the multiples of 1,000 and 100 that a given four-digit number lies between. For example, for the number 8,681, pupils should recognise the previous and next multiples of both 1,000 and 100

Sentence stems:

The previous multiple of 1000 is _____.

The next multiple of 1000 is _____.

Continue to practise counting forwards and backwards in steps of 10, 100 and 1,000 from any given number, up to 10 000. This will support pupils' understanding, particularly when bridging across place-value boundaries, for example:

- 3800, 3900, 4000, 4100...
- 6580, 6590, 6600, 6610, 6620...

[Mathematics guidance: key stages 1 and 2 \(covers years 1 to 6\) – 4NPV-3](#)

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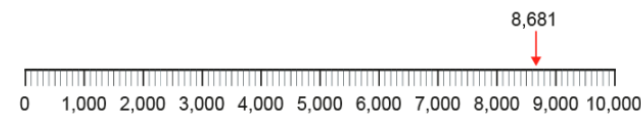


Figure 109: using a number line to identify the previous and next multiple of 1,000

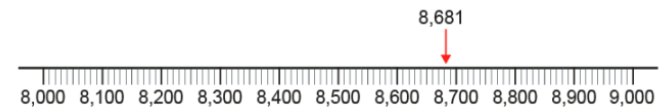


Figure 110: using a number line to identify the previous and next multiple of 100

I can recognise the place value of each digit in a five-digit number.

As working with numbers up to five digits is new learning in Year 5, consider spending additional time securing pupils' place-value understanding before moving on. Use assessment of pupils' understanding and confidence in Unit 5.1 to determine whether this is appropriate.

Pupils need to understand not only the order of the digits, but also the value each digit represents within the whole number. Use concrete and pictorial representations, such as counters, base-10 equipment, and place-value grids, to make the structure of five-digit numbers explicit.

Regular opportunities to represent, partition, and discuss numbers in multiple ways will help pupils develop a secure conceptual understanding, which is essential for later learning such as number lines, rounding, and efficient calculation strategies.

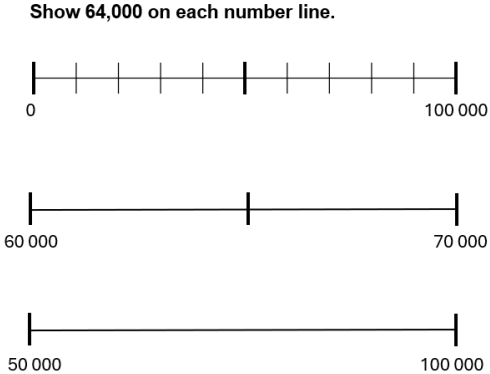
Pupils should also be encouraged to talk confidently and precisely about place value, for example by:

- Explaining the value of a digit based on its position (e.g. 86 712: the 8 represents eighty thousand, not eight);
- Making comparisons between numbers using place-value language (e.g. greater than, less than, nearest ten-thousand).

How many different ways can you write 43,270?

Pupils should suggest answers such as:

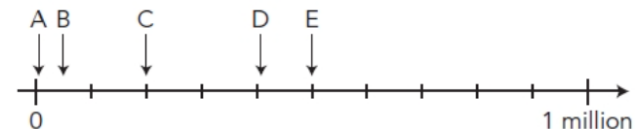
- 4,327 tens
- 432 hundreds and 7 tens
- 43 thousands and 270 ones
- 4 ten thousands, 3 thousands, 2 hundreds and 7 tens
- 42 thousands and 1270 ones
- 3 ten thousands and 13 thousands and 270 ones

<p>I can reason about the location of a five-digit number on a number line.</p>	<p>Pupils should identify and place numbers up to 100,000 accurately on marked number lines with a range of scales. They should also begin to estimate the value or position of a number on an unmarked number line, using proportional reasoning to support increasingly accurate judgements.</p> <p>Pupils should be introduced to identifying the multiples of 10,000, 1,000 and 100 that a given number lies between. For example, for the number 68,410, pupils should recognise the previous and next multiples of 10,000, 1,000 and 100.</p> <p>Sentence stems:</p> <ul style="list-style-type: none"> • The previous multiple of 10,000 is _____. • The next multiple of 10,000 is _____. <p>Continue to practise counting forwards and backwards in steps of 100, 1,000 and 10,000 from any given number, up to 100 000. This will support pupils' understanding, particularly when bridging across place-value boundaries, for example:</p> <ul style="list-style-type: none"> • 59 000, 60 000, 61 000, 62 000 • 18 000, 19 000, 20 000, 21 000... <div style="text-align: right;"> <p>Show 64,000 on each number line.</p>  </div>
<p>I can recognise the place value of each digit in a six-digit number.</p>	<p>As this step is also new learning in Year 5, consider spending additional time securing pupils' place-value understanding before moving on. Continue to use concrete and pictorial representations, such as counters, base-10 equipment, and place-value grids, to make the structure of six-digit numbers explicit.</p> <p>Pupils should also be encouraged to talk confidently and precisely about place value, for example by:</p> <ul style="list-style-type: none"> • Explaining the value of a digit based on its position (e.g. 103 672: the 6 represents six hundred, not six); • Making comparisons between numbers using place-value language (e.g. greater than, less than, nearest hundred-thousand). <p style="text-align: right;">Circle the numbers that have 8 in the thousands place.</p> <div style="text-align: right;"> <p>84,623 28,436 683,052</p> <p>8,325 608,231</p> </div> <p>Regular opportunities to represent, partition, and discuss numbers in multiple ways will help pupils develop a secure conceptual understanding, which is essential for later learning such as number lines, rounding, and efficient calculation strategies.</p> <p>Contains material developed by the Standards and Testing Agency for national curriculum assessments and licensed under Open Government Licence v3.0' http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/</p>

I can reason about the location of a six-digit number on a number line.

When working with number lines, pupils should first revisit counting forwards and backwards in 100 000s up to 1,000,000. Pupils should identify and place numbers accurately on marked number lines where intervals may increase in steps of 10,000 or 100,000. They should also estimate the position of six-digit numbers on unmarked number lines, using proportional reasoning to judge relative position and size.

As part of this progression, pupils should be introduced to identifying the multiples of 100,000, 10,000, 1,000 and 100 that a number lies between. For example, for the number 684,120, pupils should recognise the previous and next multiples of 100,000 and 10,000, before refining their thinking to identify the relevant multiples of 1,000 and 100.



Write the letter of the arrow that points to the number 50 000

Sentence stems (to support new learning):

- The previous multiple of 100,000 is _____.
- The next multiple of 100,000 is _____.

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I can round any number up to 1 000 000 to the nearest 10.

Pupils were first introduced to rounding in Year 4. Use assessment from this unit to determine the size and range of numbers pupils will be rounding and ensure that this aligns with their security in place-value understanding. It is essential that pupils are confident with the place-value structure of the numbers involved.

Begin by ensuring pupils can identify the previous and next multiple of 10 for a given number. Represent this visually by drawing a number line and clearly labelling these endpoints. Pupils should then identify and mark the midpoint between the two multiples.

From here, they can reason about the position of the number being rounded and decide which multiple it is closer to.

Where needed, revisit rounding using two-, three- and four-digit numbers before progressing to larger numbers. Worked examples of rounding to the nearest 10 can be found in Unit 4.7 and may be used to reinforce the structure of the strategy and highlight key similarities, helping pupils recognise that the procedure remains consistent as numbers increase in size.

See next page for further detail:

Sentence stems:

The previous multiple of 10 is ____.
 The next multiple of 10 is ____.
 The midpoint is ____.
 ____ is closer to ____ than ____.
 ____ rounded to the nearest 10 is ____.

Round 167, 437 to the nearest 10.

**Watch out for:**

Pupils who think that 37 rounds down to 30 because “3 is smaller than 7”.

To prevent this, use clear visual models such as number lines and emphasize the language of ‘nearest 10’ rather than ‘round up’ or ‘round down’, which can cause confusion. Avoid using mnemonics such as “1, 2, 3, 4 to the floor”, as these do not promote conceptual understanding and can lead to shallow learning.

I can round any number up to 1 000 000 to the nearest 100.

Pupils will now apply the same knowledge and skills to round numbers to the nearest 100. Emphasise that the process remains consistent. Pupils continue to use their understanding of place value, multiples, and midpoints, but now within a different unit size.

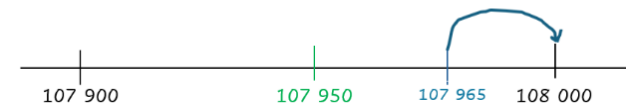
Support pupils to identify the previous and next multiple of 100 and reason about where the given number lies in relation to these. Encourage pupils to draw and annotate number lines where needed, particularly when bridging across hundreds (for example, when numbers are close to the next thousand).



Continue to prioritise mathematical reasoning and precise language, ensuring pupils can explain their decisions by referring explicitly to the hundreds, tens, and ones digits. This will help secure understanding as pupils move towards rounding larger numbers and different place values.

Sentence stems:

The previous multiple of 100 is ____.
 The next multiple of 100 is ____.
 The midpoint is ____.
 ____ is closer to ____ than ____.
 ____ rounded to the nearest 100 is ____.

Round 107 965 to the nearest 100.



<p>I can round any number up to 1 000 000 to the nearest 1 000.</p>	<p>Pupils extend their rounding skills to rounding numbers to the nearest 1,000, continuing to apply the same understanding of place value, multiples, and midpoints developed in previous steps.</p> <p>Support pupils to identify the previous and next multiple of 1,000 and reason about where the number lies between them. Where appropriate, encourage the continued use of number lines to visualise the position of the number, particularly when bridging across thousands or when rounding five- and six-digit numbers.</p> <p>Pupils should be able to justify their decisions by referring to the value of the hundreds and tens digits and explain how these indicate whether the number is closer to the lower or higher multiple of 1,000. Secure understanding at this stage will support later work on estimating, comparing large numbers, and rounding to increasingly larger place values.</p> <p>Sentence stems: The previous multiple of 1 000 is ____. The next multiple of 1 000 is ____. The midpoint is ____. ____ is closer to ____ than ____. ____ rounded to the nearest 1 000 is ____.</p> <p style="text-align: right;">Round 107 965 to the nearest 1000.</p> 
<p>I can round any number up to 1 000 000 to the nearest 10 000.</p>	<p>Pupils apply their rounding skills to rounding numbers to the nearest 10,000, continuing to draw on their secure understanding of place value, multiples, and midpoints.</p> <p>Support pupils to identify the previous and next multiple of 10,000 and to reason about where the given number lies between these two points.</p> <p>Encourage pupils to justify their decisions by referring explicitly to the thousands and hundreds digits, explaining how these determine whether the number is closer to the lower or higher multiple of 10,000. Accurate use of place-value language and clear reasoning at this stage is key to developing confidence with estimation, comparison, and rounding to even larger place values.</p> <p>Sentence stems: The previous multiple of 10 000 is ____. The next multiple of 10 000 is ____. The midpoint is ____. ____ is closer to ____ than ____. ____ rounded to the nearest 10 000 is ____.</p> <p style="text-align: right;">Round 104 965 to the nearest 10 000.</p> 

I can round any number up to 1 000 000 to the nearest 100 000.

Pupils now extend their rounding skills to rounding numbers to the nearest 100,000, continuing to apply the same knowledge and strategies they have already used for smaller place values. Emphasise that while the numbers are larger, the structure of the method remains unchanged.

Ensure pupils are confident identifying the previous and next multiple of 100,000 for a given number. Teachers should model this explicitly, particularly where numbers are close to a midpoint or require bridging across hundred-thousands (for example, moving from 499,000 to 500,000).

Pupils should justify their rounding by referring to the ten-thousands digit, explaining how its value indicates whether the number is closer to the lower or higher multiple of 100,000.

Round 499 545 to the nearest 100 000.

Sentence stems:

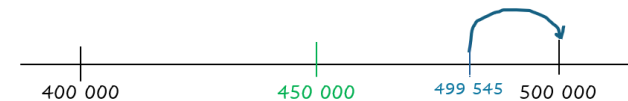
The previous multiple of 100 000 is ____.

The next multiple of 100 000 is ____.

The midpoint is ____.

____ is closer to ____ than ____.

____ rounded to the nearest 100 000 is ____.



5 sessions – Addition and Subtraction

I can add numbers mentally with increasingly large numbers.

Pupils have been introduced to a range of mental calculation strategies in Unit 5.1 and should continue to consolidate and apply these approaches with increasing fluency. These include:

- Adding using partitioning.
- Adding using number bonds.
- Solving problems using known number facts, including complements to 1,000.

Pupils should be encouraged to use estimation to judge the reasonableness of their answers and to apply inverse operations as a strategy for checking calculations. Teachers should model these behaviours explicitly and prompt pupils to explain why an answer makes sense.

Use assessment outcomes to shape the lesson sequence, ensuring pupils have regular opportunities to practise and strengthen the mental strategies they are least secure in. Targeted rehearsal of these strategies will support flexibility, accuracy, and confidence in mental calculation.

<p>I can subtract numbers mentally with increasingly large numbers.</p>	<p>Pupils have been introduced to a range of mental calculation strategies in Unit 5.1 and should continue to consolidate and apply these approaches with increasing fluency. These include:</p> <ul style="list-style-type: none"> • Subtracting using partitioning. • Subtracting using number bonds. • Solving problems using known number facts, including complements to 1,000. <p>Pupils should be encouraged to use estimation to judge the reasonableness of their answers and to apply inverse operations as a strategy for checking calculations. Teachers should model these behaviours explicitly and prompt pupils to explain why an answer makes sense.</p> <p>Use assessment outcomes to shape the lesson sequence, ensuring pupils have regular opportunities to practise and strengthen the mental strategies they are least secure in. Targeted rehearsal of these strategies will support flexibility, accuracy, and confidence in mental calculation.</p>
<p>I can add whole numbers with more than 4 digits, including using formal written methods.</p>	<p>As pupils now extend their formal written addition to numbers with more than four digits, this step may need to be broken down further depending on the starting points of the cohort. Use assessment to gauge pupils' confidence with:</p> <ul style="list-style-type: none"> • Adding where no regrouping is required • Adding with one regroup • Adding with two or more regroups <p>When working with larger numbers, continue to provide opportunities for pupils to reason about the structure of the calculation. Ask pupils to explain why regrouping is necessary, which place value is affected, and how the regrouping changes the value of the number. This supports deeper place-value understanding rather than reliance on a procedural method.</p> <p>It is important that pupils learn to recognise when a calculation can be solved more efficiently using a mental strategy, such as partitioning, particularly when no regrouping is required. Encourage pupils to explain their choice of method and justify why it is efficient, supporting the development of flexible and strategic thinking as numbers increase in size.</p> <p>Throughout this step, reinforce the relationship between addition and subtraction, and encourage pupils to check the accuracy of their calculations using the inverse operation, especially when working with larger, more complex numbers.</p>

I can subtract whole numbers with more than 4 digits, including using formal written methods.

As pupils extend their formal written subtraction to numbers with more than four digits, this step may need to be broken down into smaller, manageable stages depending on the starting points of the cohort. Use assessment to gauge pupils' confidence with:

- Subtracting where no exchange is required
- Subtracting with one exchange
- Subtracting with two or more exchanges

Alongside procedural accuracy, support pupils to identify the whole and the parts within a subtraction calculation. Pupils should be able to articulate which number represents the whole and how the subtracted amount represents a part of that whole. This understanding supports both written and mental strategies and helps pupils reason about the size of the answer before calculating.

Reinforce the relationship between addition and subtraction throughout and encourage pupils to check the accuracy of their answers using the inverse operation. This reinforces understanding of the whole–part relationship and supports error detection, particularly when working with larger numbers.

It is important that pupils learn to recognise when a calculation can be solved more efficiently using a mental strategy, such as finding the difference using complements to 10, 100, or 1,000, or through partitioning, particularly where no exchanging is required. Encourage pupils to explain their choice of method and justify why it is efficient, supporting the development of flexible, strategic, and reflective mathematical thinking.

I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

This step is designed to build on pupils' existing calculation strategies, using a range of questions and contexts to further develop problem-solving skills. The focus is not on increasing the number of problems pupils complete, but on improving the depth of their thinking, reasoning, and decision-making, particularly when approaching unfamiliar or more complex tasks.

In Unit 5.1, pupils engaged with a range of routine and non-routine problems. Similar question types can be revisited in this step to reinforce and extend these problem-solving approaches, allowing pupils to apply known strategies with increasing independence, flexibility, and confidence.

<p>Starting Skills</p> <p>Choose the most efficient methods to solve the calculation below.</p> <ol style="list-style-type: none"> 1. $2500 + 7500 =$ 2. $3748 - 2738 =$ 3. $4843 + 3999 =$ 4. $3050 - 2250 =$ 5. $3284 - 2900 =$ 6. $3928 + 8924 =$ 7. $3700 - 2300 =$ 8. $1728 + 6111 =$ 	<p>5.7 - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>2023 Key Stage 2: Paper 3 Reasoning, Question 11</p> <p>At the start of April, a shop had 15,000 games.</p> <p>The shop sold:</p> <ul style="list-style-type: none"> • 7,918 games in April • 4,624 games in May. <p>How many games did the shop have left at the end of May?</p>	<p>Intelligent Practice</p> <ol style="list-style-type: none"> 1. What if 7000 games were sold in April? 2. What if 7998 games were sold in April? 3. What if 8136 games were sold in April? 4. What if 4050 games were sold in May? 5. What if 3999 games were sold in May? 6. What if 3882 games were sold in May? 7. What if at the start of April, the shop had 14,500 games? 8. What if at the start of April, the shop had 20,000 games? 	
<p>Deepen</p> <p>In addition to the sales, the shop received a delivery of 2,000 new games halfway through May.</p> <p>How many games were in the shop at the end of May?</p>	<p>What do you know?</p>	<p>What do we need to know?</p>	<p>What strategy can you use to help you?</p>

Year 5, Reasoning and Intelligent Practice Tasks

HIAS Resources to support:

- Reasoning and Intelligent Practice Tasks: [Reasoning and Intelligent Practice Tasks](#)
- Faded Scaffolds and Intelligent Practice: [Faded Scaffolds and Intelligent Practice](#)
- Paired Examples: [Paired Examples](#)
- Entry and Exit tickets: [Entry and Exit Tickets](#)
- Interleaving, Recall and Retrieval: [Interleaving, Recall and Retrieval \(hants.gov.uk\)](#)
- Connect4Maths: [Connect4Maths - Primary](#)
- Moderation Documents: [Moderation Documents](#)
- KS1 Key Facts: [Key Stage 1 Key Facts Document](#)
- Mastering Times Tables: [Mastering Times Tables](#)

NCETM Resources to support:

- Exemplification of ready -to -progress criteria (RTPS): [Exemplification of ready-to-progress criteria | NCETM](#)
- NCETM Professional Development materials spine 1: [Number, Addition and Subtraction | NCETM](#) ;
- The NCETM Mastery Task booklets can be used as a source of tasks to support end of year teacher assessment for both EXS and GDS [Teaching for Mastery Booklets Yr1-6](#)

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