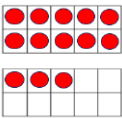
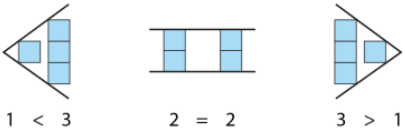
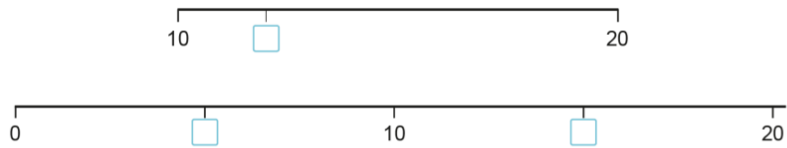
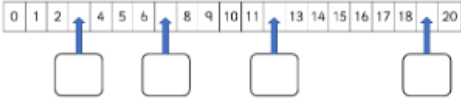
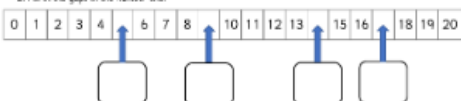
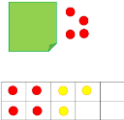
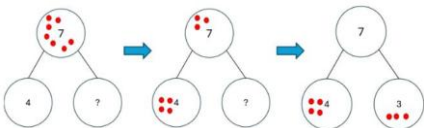
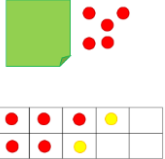


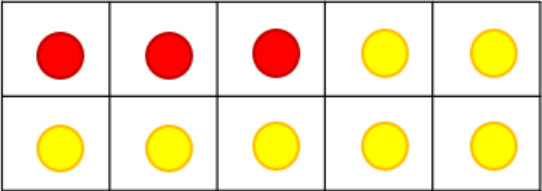
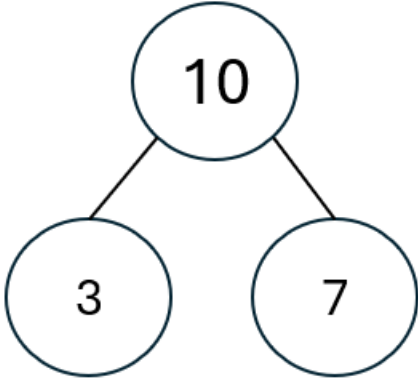
Maths Medium Term Planning – Year 2 – Autumn 1 – updated 2026

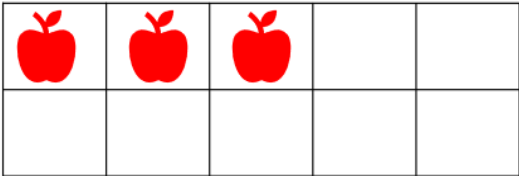
Mental Maths		
Learning Intention	Implementation	Impact
To count forwards and backwards in ones to 100, starting at any given number. To be able to count in steps of 2 from 0, forward or backward. To count in tens from any number, forward or backward. I can recognise the place value of each digit in a two digit number.	The children will start at different numbers and count in 1s forwards and backwards within 100. On a 100 square the children will count in 2s and colour in the numbers for even numbers, they will carry on the pattern beyond 100. They will then colour the odd numbers. The children will be able to add 10 and count in tens from any number from 0 to 100. E.g. 6, 16, 26. The children will write 0 to 100 counting in 10s. Reason about counting sequences e.g. if I count back in tens from 89, will I say the number 59? 99? 37? Counting Orchestra – assign groups to count forwards or backwards in 10's, 5's or ones. As the conductor points to a group, they pick up the count. Write up the number 37. How many 10s are in it? How many ones? Repeat with different numbers.	All children will be able to count forwards and backwards in ones. Children can recognise the pattern for counting in 2s and understand what odd and even numbers are. They will know how to write a 3 digit number. The children will understand that every time you add a ten to a number, the tens column changes but the ones column remains the same. The children will recognise the pattern e.g. tens column increasing by 1 ten each time and the ones column remaining at 0. The children will be able to say how many tens and ones are in two digit numbers up to 99.

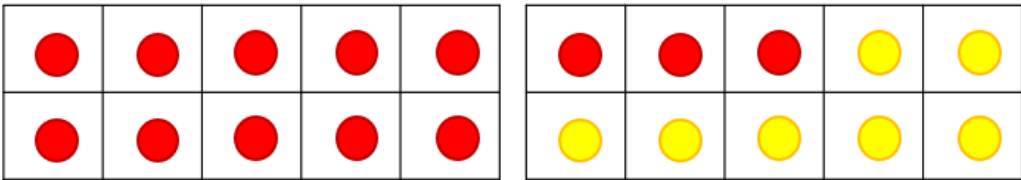
Week 2 – Number and Place Value		
Learning Intention	Implementation	Impact
I can recognise the place value of each digit in a two-digit number. I can represent numbers using different representations. Key vocabulary: Partitioning Splitting Tens Ones	(Unitizing – learning to see a group of single items as one whole unit e.g., instead of seeing 10 individual cubes, help pupils see them as 1 group of ten). GD & EX – introduce pupils to diennes equipment. (in Year 1 we used counters and tens frames – show them how to move from this to use diennes – What’s the same? What’s different?). Use ‘I do’ approach – show them using diennes equipment how to make 13. Use arrow cards to support. ‘We do’ – now try making 14 using diennes. Can they record on a whiteboard – how many tens, how many ones? ‘You do’ – in books 15 = ____ tens ____ ones. WT – To start by partitioning numbers using counters and a tens frame (encourage them not to count the counters on the tens frame but know that there are ten there).  Give them different _____ ten numbers to work out practically. Take a picture for their book. PKS - Focus on numbers to 20. Adults to assess which numbers they recognise to 20. Children to order consecutive number cards and practice writing numbers. Mastery of number – week 0 – session 4 – practise subitising and then making 5.	Children can understand what digit represents the tens and what digit represents the ones and where numbers are in relation to other numbers within 100.
I can use ‘less than’, ‘greater than’ and ‘equal to’ when comparing numbers up to 20. Key vocabulary: Less than Greater than Equal to, compare	GD & EX - Before introducing the symbols <, >, and =, ensure pupils are confident with comparative language from Year 1 (less than, more than and equal to. Explicitly teach that ‘greater than’ means the same as ‘more than’).  Again use ‘I do’, ‘We do’, ‘You do’ approach. Have some number sentences for them on the board to correctly fill in the missing symbol. GD extension – can they make up their own number sentences using the symbols <, > and =? WT – Can practice writing a number greater than say 13, writing a number less than 13 etc. PKS - Focus on numbers to 20. Adults to assess which numbers they recognise to 20. Children to order 3 number cards from smallest to largest e.g., 10, 13, 3 and practice writing numbers.	The children will confidently use the language of less than, more than and equal to and will understand the symbols <, >, and =.
I can find one more than a number. Key vocabulary:	Pupils can use number lines and hundred squares (they will need this explained as didn’t use in Year 1, Use - https://www.topmarks.co.uk/learning-to-count/paint-the-squares to demo) to help them see the order of numbers and understand that one more is moving one step forward. (It is also important that pupils develop finding one more without counting).	The children will understand what one more than a number is and most

One more One step forward Next plus	GD – to work within 50, EX – to work within 30. WT – to work within 20 (using a number line) PKS - Focus on numbers to 20. Use a number track and a teddy bear. Start Teddy on number 5. Can they find one more by moving him one space forward on the number track? Mastering number week 1, session 1 (finding the 5 in me).	will be able to do this within 30.
I can find one less than a number. Key vocabulary: One less One step back Previous Take away, minus	Pupils can use number lines and hundred squares to help them see the order of numbers and understand that one less is moving one step backwards. (Also important that pupils develop finding one less without counting). GD – to work within 50, EX – to work within 30. WT – to work within 20 (using a number line) PKS - Focus on numbers to 20. Use a number track and a teddy bear. Start Teddy on number 5. Can they find one less by moving him one space back on the number track? Mastering number week 1, session 2.	
Week 3 -Number and Place Value		
Learning Intention	Implementation	Impact
I can order numbers on a number line (up to 20). Key vocabulary: One more One less Next to In between Mid-point After before	GD - Pupils will identify/place numbers up to 20 on marked and unmarked number lines.  Figure 1: Identifying 5, 12 and 19 on a marked 0 to 20 number line Language focus "a is 5 because it is halfway between 0 and 10." "b is 12 because it is 2 more than 10." "c is 19 because it is one less than 20." EX – Pupils will identify/place numbers up to 20 on marked number lines. WT/PKS – Pupils will identify/place numbers up to 20 on marked number lines.	The children will be able to reason where numbers up to 20 go on a number line using mid points, knowledge of one more and one less.

	1. Fill in the gaps in the number line.  2. Fill in the gaps in the number line.  Pupils should use efficient strategies and appropriate reasoning, including working backwards from a multiple of 10, to identify or place numbers on marked number lines. Make links to prior learning, including the use of language of comparison and one more, one less.	
Week 4 – Addition and Subtraction		
Learning Intention	Implementation	Impact
I can represent and use number bonds within 10. Key vocabulary: part whole add addition more plus	This step builds on from the Year 1 knowledge of recognising parts within wholes. When exploring number bonds up to 9, encourage pupils to use their subitising skills rather than counting in ones. This will help pupils see number relationships quickly and builds a stronger understanding of how numbers are made up. - I have 7 counters in total. How many are hidden under the card?   7 is the whole, 4 is a part, ____ is a part. <i>I know 4 and 3 make 7. 7 is the whole, 4 is a part, 3 is a part.</i> - What happens if I move one of my counters out from under the card. - What has changed? What has stayed the same?  7 is the whole, 5 is a part, ____ is a part. WT/PKS – work practically securing number bonds to 5. Have two circles and they can use 5 counters to find different ways to make 5.	The children will be able to recall number bonds up to 10 fluently utilising their subitising skills.

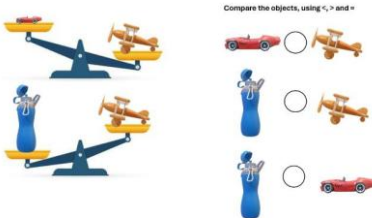
I can represent and use number bonds to 10.	GD – Ten frame flash – flash a partially filled in tens frame. Pupils to show using fingers/record on whiteboard how many more to make 10. Fill a tens frame with red counters. Can you find a way of splitting 10 into two parts? EX - How has your partner split 10? Can you find another way of splitting 10 into two parts? This is an opportunity to support pupils with working systematically to find all the number bonds to 10. Continue to develop fluency: Number bond snap, matching pairs game. WT – secure number bonds to 5. Application/Problem solving: Use real life scenarios or games to support deep understanding and flexible use of number bonds to 10.	The children will be able to fluently recall number bonds up to 10.
I can represent and use number bonds and related subtraction facts within 10. Key vocabulary: part whole add addition more plus subtract subtraction take away minus less left/left over difference	This step focuses on helping pupils understand and use the relationship between addition and subtraction through number bonds within and to 10. Pupils should be able to represent each number bond in four related facts. For example: • $6 + 4 = 10$ • $4 + 6 = 10$ • $10 - 6 = 4$ • $10 - 4 = 6$ If I know $3 + 7 = 10$   I know $7 + 3 = 10$ I know $10 - 3 = 7$ I know $10 - 7 = 3$	

	To support this, pupils need a secure understanding of part-whole relationships and should be encouraged to use real-world objects (e.g. 3 apples and 7 oranges), maths concrete resources, visual representations (like ten frames or bar models), and oral rehearsal. Emphasise the connection between the operations, not just memorisation. This builds fluency and prepares them for more complex number work. Watch out for pupils who have misconceptions around commutativity. Clarify the concept that addition is commutative, (for example, $3 + 7 = 7 + 3$) but subtraction is not (for example, $10 - 3 \neq 3 - 10$). Use real-life objects or concrete manipulatives to support understanding. E.g. “If you have 10 apples and give away 3, is that the same as having 3 and giving away 10?” 	
I can represent and use number bonds and related subtraction facts within 10. Key vocabulary: part whole add addition more plus subtract subtraction take away minus less left/left over difference	GD & EX - This step builds on pupils’ understanding of number bonds to 10 and introduces them to number bonds to 20, along with their related subtraction facts. Pupils should be able to represent each bond with four related facts, for example: • $13 + 7 = 20$ • $7 + 13 = 20$ • $20 - 13 = 7$ • $20 - 7 = 13$ To support this, encourage pupils to spot patterns between number bonds to 10 and number bonds to 20. For example, if they know $3 + 7 = 10$, they can use that to understand $13 + 7 = 20$. This helps them see how number facts build on each other and strengthens their mental maths strategies. Use visual representations like tens frames, Rekenreks and Diennes to show how the numbers relate. Reinforce the idea that addition and subtraction are connected and encourage pupils to explain their thinking using part-whole language. WT – secure number bonds to 6.	The children will be able to use their knowledge of number bonds to 10 to work out number bonds to 20.

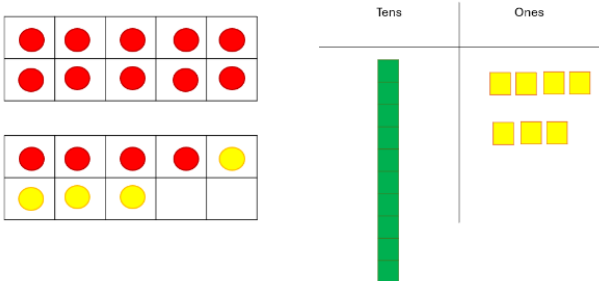
	If I know $3 + 7 = 10$, then I know that $13 + 7 = 20$ 	
Week 5 – Measurement – length/height		
Learning Intention	Implementation	Impact
I can measure lengths/heights in cm and m. Key vocabulary: Measure Size Compare Length Long Short Longer Shorter Metre (m) Centimetre (cm) Ruler Metre stick	For this step, begin by asking if pupils can talk about their experience of measuring (In year 1 they made direct comparisons, used long/short, they measured heights using non-standard measurements, such as cubes and began measuring in cms). Introduce the vocabulary: • Centimetres: small units used to measure short lengths. Show a ruler under a visualiser and count up using the centimetre marks together. • Metres: a metre is a longer unit – pupils need to know that there are 100 centimetres in 1 metre. Compare a metre stick to a ruler. This learning can be connected to their knowledge of number lines and counting in 10s. •  Model how to start measuring from 0 on the ruler or metre stick. Suggested tasks: Centimetre Hunt • Hide cards around the room with objects and their lengths in cm. • Pupils find the object and check if the measurement is accurate using a ruler.	The children will be confident measuring in cms and metres.
I can measure lengths/heights in cm and m. Key vocabulary: Measure, Size, Compare Length, Long, Short, Longer, Shorter, height, tall, taller, shortest, longest,	Outdoor: Give pupils rulers ask them to measure: • The length of a bench (in m) • The height of a fence (in m or cm) • The distance between two trees (in m) Encourage discussion and reasoning: “Why did you choose centimetres instead of metres?”	The children will be able to use a ruler to measure in cms and ms and understand when we might use metres or centimetres.

Metre (m), Centimetre (cm) Ruler, Metre stick		
I can measure and estimate length/height in cm and m. Key vocabulary: Measure, compare, guess, estimate, nearly, roughly.	Once pupils are confident using centimetres and metres to measure and have developed a sense of reference for common lengths, they are ready to begin estimating lengths. Estimation helps pupils internalise the size of standard units and apply their understanding in real-world contexts. Encourage pupils to estimate the length of an object before measuring it, then compare their estimate with the actual measurement. This supports their ability to judge length and reinforces the concept of measurement as a way to describe and compare objects. As they work, prompt them to use comparative language such as 'longer than, shorter than, about the same as'.	The children will be able to estimate (make a sensible guess) lengths/heights.
I can use the symbols <, > and = when comparing lengths. Key vocabulary: Measure, compare, longer/taller than, shorter than, equal to, greater than, less than.	Pupils can begin to compare lengths using the mathematical symbols for less than, greater than and equal to. This concept builds on their understanding of measuring length in centimetres and metres and reinforces the symbolic representation of comparisons. Suggested task: Pupils collect classroom or natural objects, measure and compare them using rulers or metre sticks and record comparisons using symbols. Ensure that pupils can use sentence stems alongside the symbolic representation: ____ is longer/taller than ____ ____ > ____ ____ is shorter than ____ ____ < ____ ____ is equal to ____ ____ = ____	The children will be able to use >, < and = to compare lengths.
Week 6 – Mass (g, kg)		
Learning Intention	Implementation	Impact
I can measure and estimate mass in g and kg. Key vocabulary: - Weigh, weighs, balances, heavy, light, heavier, lighter, heaviest, lightest, kilogram (g), gram (g), scales, weight,	For this step, begin by asking pupils to talk about their prior experiences of comparing weight (In year 1 learning was practical with opportunities for pupils to handle objects, make direct comparisons and describe mass using vocabulary such as heavy/light and heavier/lighter. Pupils used balance scales to compare objects and measured mass using non-standard units, such as cubes). What does "heavier" mean? How did they use scales? Introduce the new vocabulary: Grams (g): a small unit used to measure lighter objects (e.g. a pencil or an apple). Show small classroom objects and discuss their mass in grams. Kilograms (kg): a larger unit used to measure heavier objects (e.g. a bag of flour). Explain that 1 kilogram = 1000 grams. Compare a 1kg weight to gram weights where possible.	The children will understand that (g) is used for measuring smaller weights and (kg) is used for measuring heavier weights.

	• Demonstrate how to place an object on a scale and read the measurement carefully. Show both digital and analogue scales (if available), emphasising how to read units correctly. Reinforce the importance of starting from zero and using the correct unit (g or kg). Weigh and Record Pupils use scales to weigh classroom objects and record their mass into those best measured in grams or kilograms. • Mass Sorting Activity • Provide a range of objects and ask pupils to sort them into those best measured in grams or kilograms. •	
I can measure and estimate mass in g and kg. Key vocabulary: - Weigh, weighs, balances, heavy, light, heavier, lighter, heaviest, lightest, kilogram (g), gram (g), scales, weight, close to.	• Practical investigation (e.g. "Which is heavier?") • Pupils compare two objects, estimate which is heavier, then test using scales. • Encourage discussion and reasoning: "Why did you choose grams instead of kilograms?", "How do you know this is heavier?", "Is your estimate close? Why or why not?" Once pupils are confident using grams and kilograms and have a sense of reference for common masses, they are ready to develop their estimation skills further. Estimation supports pupils in understanding the relative size of units and applying this knowledge in real-life contexts. Encourage pupils to estimate before measuring and to refine their ideas through experience. Prompt them to use comparative language such as 'heavier than, lighter than, about the same as, close to'.	The children will be able to estimate, compare and measure the mass of different objects.
I can use the symbols <, > and = when comparing mass. Key vocabulary: - Weigh, weighs, balances, heavy, light, heavier, lighter, heaviest, lightest, kilogram (g), gram (g), scales, weight, heavier than, lighter than, equal to, greater than, less than.	Pupils can begin to compare mass using the mathematical symbols for less than (<), greater than (>) and equal to (=). This builds on their understanding of measuring mass using both non-standard units (e.g. cubes) and standard units (grams and kilograms) and reinforces the symbolic representation of comparisons. It is important to emphasise that the symbols represent the relationship between the masses, not the size or appearance of the objects or the units used. Suggested task: Pupils collect classroom or natural objects, weigh them using balance scales or digital/analogue scales, and record comparisons using symbols. Ensure that pupils can use sentence stems alongside the symbolic representation: ___ is heavier than ___ > ___ ___ is lighter than ___ < ___ ___ is equal to ___ = ___ Watch out for:	The children will be able to compare mass using the symbols less than < and greater than >.

	• Pupils who confuse grams and kilograms, assuming that 3g and 3kg are similar because the number is the same, rather than understanding that kilograms are a much larger unit. 	
Week 7 – Measurement: Capacity		
Learning Intention	Implementation	Impact
I can measure and estimate capacity in ml and l. Key vocabulary: Capacity, full, half full, empty, holds, contains, litre (l), half-litre, millilitre (ml), container,	In Year 1, learning was highly practical and exploratory, with regular opportunities for pupils to handle containers, fill and empty them, and describe what they observed using vocabulary such as full/empty, more than, less than, and half full. Pupils compared capacity by pouring between containers and began measuring using non-standard units, such as counting how many cups were needed to fill a container, focusing on consistency and accurate comparison. Begin by asking pupils to talk about their prior experiences of comparing capacity. What does “full” or “empty” mean? How did they know one container held more than another? Introduce the new vocabulary: • Millilitres (ml): a small unit used to measure smaller amounts of liquid (e.g. a cup of water or juice). Show a labelled measuring container and explore markings in ml. • Litres (l): a larger unit used to measure greater volumes (e.g. a bottle of water). Explain that 1 litre = 1000 millilitres, linking to pupils’ knowledge of number and place value. Compare a 1 litre container to smaller measures. Demonstrate how to read a scale on a measuring jug, focusing on the markings and units. • Have some measuring jugs with each one full of different amounts of liquids. Can the pupils accurately read the scales.	The children will be able to understand and read the scales on a measuring jug.
I can measure and estimate capacity in ml and l.	Show how to pour carefully, placing the jug on a flat surface and reading at eye level for accuracy. Reinforce the importance of using the correct unit (ml or l) and reading the scale correctly. Provide a range of containers and ask pupils to decide whether their capacity would be best measured in ml	The children will be able to understand and read the scales on a measuring jug.

Key vocabulary: Capacity, full, half full, empty, holds, contains, litre (l), half-litre, millilitre (ml), container,	Pupils will then fill the containers with water and measure the capacity using a measuring jug, recording results in ml or l. • Talk about which measurement they used (ml or l). Did they initially sort them correctly? Why?/Why not?	
I can measure and estimate capacity in ml and l. Key vocabulary: Capacity, full, half full, empty, holds, contains, litre (l), half-litre, millilitre (ml), container, more than, less than, about the same as, close to, nearly full.	• Practical investigation (e.g. “Which holds more?”) • Pupils compare two containers by estimating and then checking by measuring or pouring. Encourage discussion and reasoning: “Why did you choose millilitres instead of litres?”, “How do you know this holds more?”, “Is your estimate close? Why or why not?”. Once pupils are confident using millilitres and litres and have a sense of reference for common capacities, they are ready to develop their estimation skills further. Estimation supports pupils in understanding the relative size of units and applying this knowledge in real-life contexts. Encourage pupils to estimate before measuring and refine their understanding through experience. Prompt them to use comparative language such as more than, less than, about the same as, close to, nearly full, half full.	The children will be able to estimate, measure and compare the capacity of two containers.
I can use the symbols >, < and = when comparing capacity. Key vocabulary: Capacity, full, half full, empty, holds, contains, litre (l), half-litre, millilitre (ml), container, more than, less than, about the same as, close to, nearly full.	Pupils can begin to compare capacity using the mathematical symbols for less than (<), greater than (>) and equal to (=). This builds on their understanding of measuring capacity using both non-standard units (e.g. cups) and standard units (millilitres and litres) and reinforces the symbolic representation of comparisons. Watch out for: • Pupils who assume a taller or larger-looking container holds more, rather than checking by measuring. • Pupils who confuse millilitres and litres, assuming 500ml is greater than 1l because 500 is a larger number, rather than understanding that 1 litre = 1000ml. • Pupils who reverse symbols when recording comparisons.	The children will be able to compare capacity using the mathematical symbols >, < and =.
Week 8 - Addition		
Learning Intention	Implementation	Impact
I can add a two-digit number and ones using concrete objects (without bridging) Key vocabulary:	This step supports pupils in developing a secure understanding of place value and addition by using concrete resources. The focus is on non-bridging scenarios, where the ones being added do not cause the total to cross into the next ten (e.g., $14 + 3 = 17$). Now, they apply understanding to addition, using their knowledge of number bonds within 10 to support efficient calculation. Pupils should be encouraged to use known number facts (e.g., $4 + 3$) rather than counting on in ones from the two-digit number.	The children will be able to add a one-digit number to a two-digit number.

Add, addition, more, plus, make, sum, total, altogether, number bonds, part, whole.	When modelling, emphasise efficient strategies that draw on place value understanding and number bonds, rather than starting at 14 and counting each number individually. Use concrete resources to model the structure of the numbers and the addition process: e.g. $14 + 3 = ?$ • Represent 14 as 1 ten and 4 ones using counters or Diennes. • Add 3 more ones. “What do you see?”, “How do you see it?” • Ask: “<i>What is $4 + 3$?</i>” (Use number bonds to 10). • Combine: 1 ten and 7 ones = 17. $14 + 3 = 17$ Encourage pupils to explain their thinking using place value language: “I know 14 is 1 ten and 4 ones. I’m adding 3 more ones. $4 + 3$ is 7, so I still have 1 ten and now 7 ones. That makes 17.” 	
I can subtract a two-digit and ones using concrete objects (without bridging) Key vocabulary: Subtract, subtraction, take away, minus, leave, how many are left over?	This step supports pupils in developing a secure understanding of place value and subtraction through the use of concrete resources. The focus is on non-bridging scenarios, where the number of ones being subtracted does not require crossing into the previous ten (e.g., $18 - 6 = 12$). This builds directly on learning where pupils developed fluency with the four related facts for addition and subtraction (e.g., $6 + 2 = 8$, $2 + 6 = 8$, $8 - 6 = 2$, $8 - 2 = 6$). Pupils are expected to use their knowledge of number bonds within 10 and related facts to support efficient calculation and reasoning. e.g: $18 - 6 = ?$ • Represent 18 as 1 ten and 8 ones using counters or Dienes. • Remove 6 ones. • Ask: “What is $8 - 6$?” (Use number bonds to 10). • Combine: 1 ten and 2 ones = 12.	The children will be able to subtract a one-digit number from a two-digit number using their knowledge of number bonds to 10.

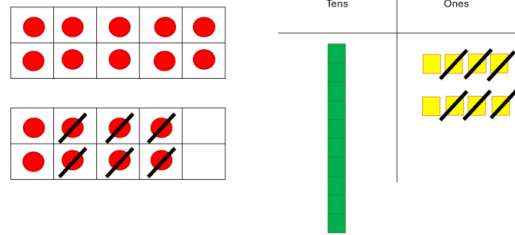
$$18 - 6 = 12$$

Encourage pupils to explain their thinking using place value language:

"I know 18 is 1 ten and 8 ones. I'm taking away 6 ones. $8 - 6$ is 2, so I still have 1 ten and now 2 ones.

That makes 12."

In the image, the counters and diennes have been placed in a 2s pattern as this makes it easier to remove a group of 6 without needing to count in 1s. The counters and diennes have been crossed out to demonstrate the counters or diennes would have been removed in a practical context.



Mastering number	Subitising	Cardinality, ordinality and counting	Composition	Comparison	Addition and subtraction/ Number facts
	- develop conceptual subitising skills as they become more familiar with patterns made by numbers within 10 and understand their composition - use perceptual and conceptual subitising when using a rekenrek.	- explore the linear number system within 10, looking at a range of representations - compare number tracks and number lines and explore the use of 'midpoints' to enable them to identify the location of other numbers.	- focus on the composition of numbers within 10, with a particular emphasis on the composition of numbers 6, 7, 8 and 9 as '5 and a bit', as well as exploring the composition of numbers 5 and 6 in-depth - explore the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have 'an extra 1' – they will link this to the 'shape' of these numbers.		- link their growing understanding of the composition of numbers within 10 to the related additive facts, including adding 2 to an odd or even number - practise recalling facts in a variety of ways, including through solving simple picture problems and completing equations with a missing sum or addend,
	Independence Resilience Respect Team-work Creativity Aspirational.				