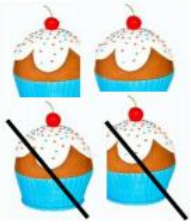
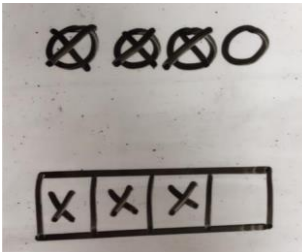


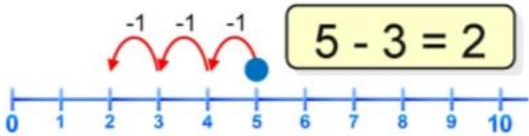
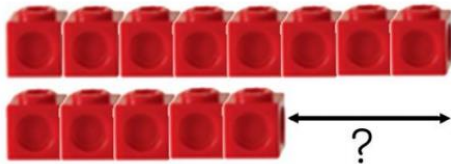
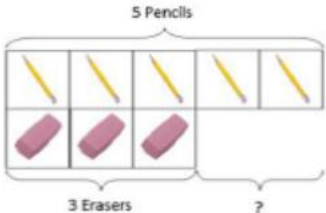
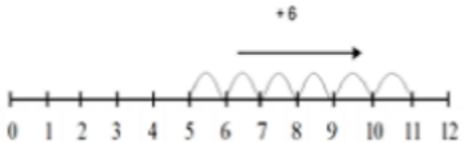


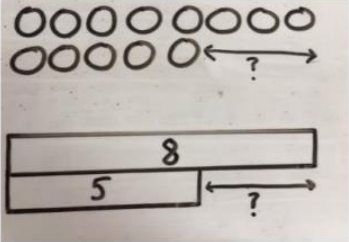
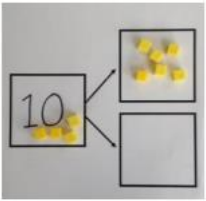
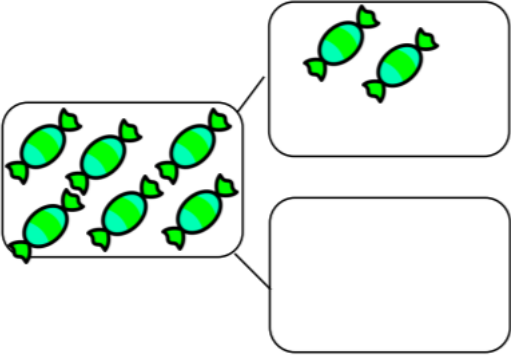
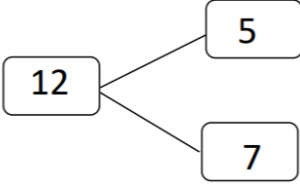
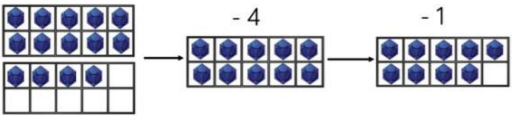
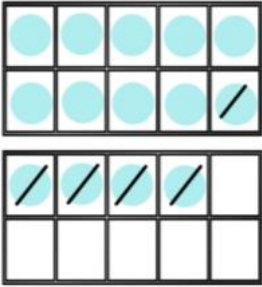
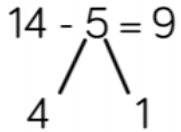
Darley Dene - Subtraction Calculation Policy

Key language: take away, less than, the difference, subtract, minus, fewer, decrease.

Year 1	
Fluency	End of year expectations
Count backwards (including crossing 100) any given number Switch count between ones and tens e.g. 33, 32, 31, 30, 20, 10 Represent and use subtraction facts linked to number bonds up to 20 (establish addition and subtraction as related operations) Find one less than a number Find ten less than a number Count back in multiples of 2s, 5s and 10s starting on multiples to highlight pattern	O - O TO - O numbers up to 20 (including subtracting zero) Understand subtraction as taking away What is ... less than ...? Compare quantities to say how many less and/or how many more

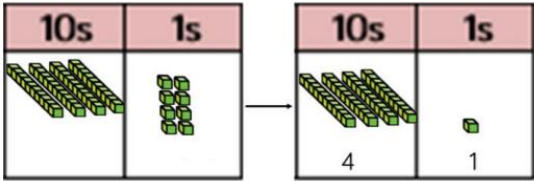
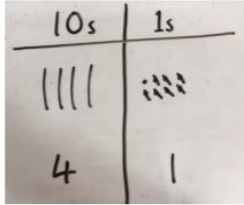
Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)
Taking away ones	Use physical objects, counters, cubes etc to show how objects can be taken away. 	Cross out drawn objects to show what has been taken away. 	$7 - 4 = 3$ $16 - 9 = 7$

Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)
<p>Counting back</p>	<p>Move objects away from the group, counting backwards.</p>  <p>Move the beads along the bead string as you count backwards.</p> 	<p>Count back in ones using a number line.</p> 	<p>Put 13 in your head, count back 4. What number are you at?</p>
<p>Find the difference</p>	<p>Compare objects and amounts</p>  <p>Lay objects to represent bar model.</p> 	<p>Count on using a number line to find the difference.</p>  <p>Children to draw the cubes/other concrete objects which they have used or use the bar model to illustrate what they need to calculate.</p>	<p>Hannah has 12 sweets and her sister has 5. How many more does Hannah have than her sister?</p>

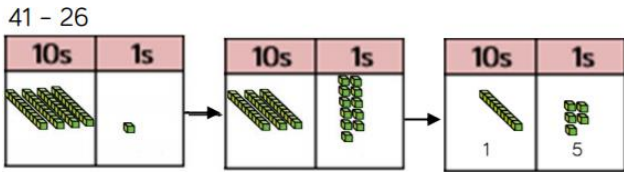
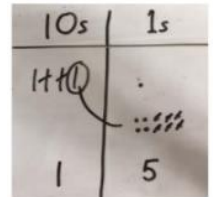
			
<p>Represent and use number bonds and related subtraction facts within 20</p> <p>Part Part Whole model</p>	<p>Link to addition. Use PPW model to model the inverse.</p>  <p>If 10 is the whole and 6 is one of the parts, what is the other part? $10 - 6 = 4$</p>	<p>Use pictorial representations to show the part.</p> 	<p>Move to using numbers within the part whole model.</p> 
<p>Make 10</p>	<p>$14 - 5 = 9$</p> <p>Make 14 on the ten frame. Take 4 away to make ten, then take one more away so that you have taken 5.</p> 	<p>Children to present the ten frame pictorially and discuss what they did to make 10.</p> 	<p>Children to show how they can make 10 by partitioning.</p> $14 - 5 = 9$  $14 - 4 = 10$ $10 - 1 = 9$

Bar model			8	2
			$10 = 8 + 2$ $10 = 2 + 8$ $10 - 2 = 8$ $10 - 8 = 2$	

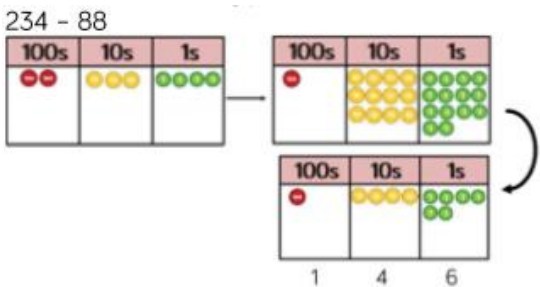
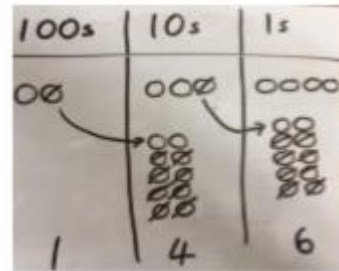
Year 2	
Fluency	End of year expectations
Practise addition and subtraction facts to 20 Show increasing fluency in deriving subtraction facts for numbers up to 10 and then up to 20 Use known facts to 20 to derive new facts e.g. $7 - 3$, $70 - 30$ Use knowledge to derive and use subtraction number facts up to 100	TO - O TO - tens TO - TO Understand subtraction as taking away and finding the difference Ensure children understand that subtraction is not commutative (cannot be done in any order) Children should be able to partition numbers in different ways

Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)
Subtract without exchanging	Use base 10. $48 - 7$ 	Children to represent the base 10 pictorially. 	$48 - 7 =$ $56 - 24 =$

Year 3

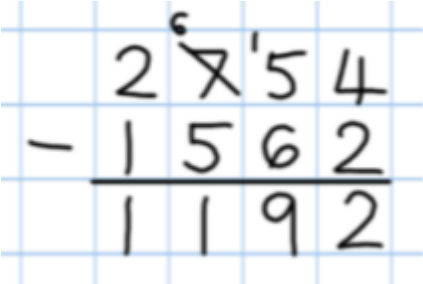
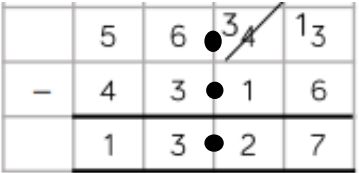
Fluency	End of year expectations
<p>Count back in ones, tens and hundreds maintaining fluency through varied and frequent practice</p> <p>Perform mental calculations with two-digit numbers, the answer could exceed 100</p> <p>Find ten and a hundred less than a number with up to three-digits</p> <p>Switch count between hundreds, tens and ones e.g 500, 400, 300, 290, 280, 270, 269, 268, 267</p> <p>Mentally subtract HTU - ones, HTU - tens, HTU - hundreds</p>	<p>Subtract numbers with up to three-digits (formal written column method)</p>
<p>Subtraction with exchanging</p>	<p>Represent the base 10 pictorially, remembering to show the exchange.</p>
<p>41 - 26</p> 	
<p>41 - 26 = 15</p>	

Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)

<p>Column method using place value counters</p>	<p>Begin with base 10. Move to place value counters, modelling the exchange of a ten into ten ones.</p> 	<p>Represent the place value counters pictorially; remembering to show what has been exchanged.</p> 	<p>Formal column method. Children must understand what has happened when they have crossed out digits.</p> $ \begin{array}{r} \overset{2}{2}\overset{1}{3}4 \\ - 88 \\ \hline 6 \end{array} $
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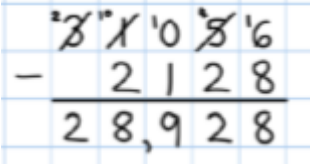
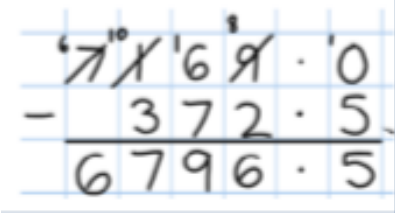
Year 4	
Fluency	End of year expectations
<p>Count back in 6, 7, 9, 25 and 1000</p> <p>Count back through zero to include negative numbers</p> <p>Find 1000 less than a number</p> <p>Continue to practise mental calculations with increasingly large numbers to aid fluency</p>	<p>Subtract numbers with up to four-digits (formal written column method)</p> <p>Understand subtraction as the inverse of addition</p> <p>Solve two-step problems deciding upon the appropriate operations and methods and justifying choices made</p>

Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)
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<p>Column method of subtraction with up to 4 digits</p>	<p>As Year 3, using place value counters</p>	<p>As Year 3, using place value counters</p>	
<p>Introduce decimal subtraction through context of money</p>	<p>Use decimal place value counters</p>	<p>Use decimal place value counters</p>	

<p>Year 5</p>	
<p>Fluency</p>	<p>End of year expectations</p>
<p>Count backwards in powers of ten up to one million</p> <p>Count backwards in positive and negative whole numbers through zero</p> <p>Practise mental calculations with increasingly large numbers</p>	<p>Subtract larger numbers (formal written column method)</p>

<p>Objective and strategy</p>	<p>Concrete (build it)</p>	<p>Pictorial (draw it)</p>	<p>Abstract (write it)</p>
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<p>Subtract with at least 4 digits, including money and measures.</p> <p>Subtract with decimal values, including mixtures of integers and decimals and aligning the decimal</p>	As Year 3/4	As Year 3/4	 <p>Use zeros for placeholders.</p> 
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Year 6	
Fluency	End of year expectations
Undertake mental calculations with increasingly large numbers and more complex calculations	Subtract larger numbers (formal written column method)

Objective and strategy	Concrete (build it)	Pictorial (draw it)	Abstract (write it)
<p style="text-align: center;">Subtract with increasingly large and more complex numbers and decimal values</p>	<p>As Year 3/4/5</p>	<p>As Year 3/4/5</p>	 <p>Handwritten subtraction problems on grid paper:</p> $\begin{array}{r} \cancel{8} \cancel{1} \cancel{0}, \cancel{6} \cancel{9} \cancel{9} \\ - \quad 89,949 \\ \hline 60,750 \end{array}$ $\begin{array}{r} \cancel{1} \cancel{0} \cancel{5} \text{ kg} \\ - \quad 36 \cdot 08 \text{ kg} \\ \hline 69 \cdot 339 \text{ kg} \end{array}$