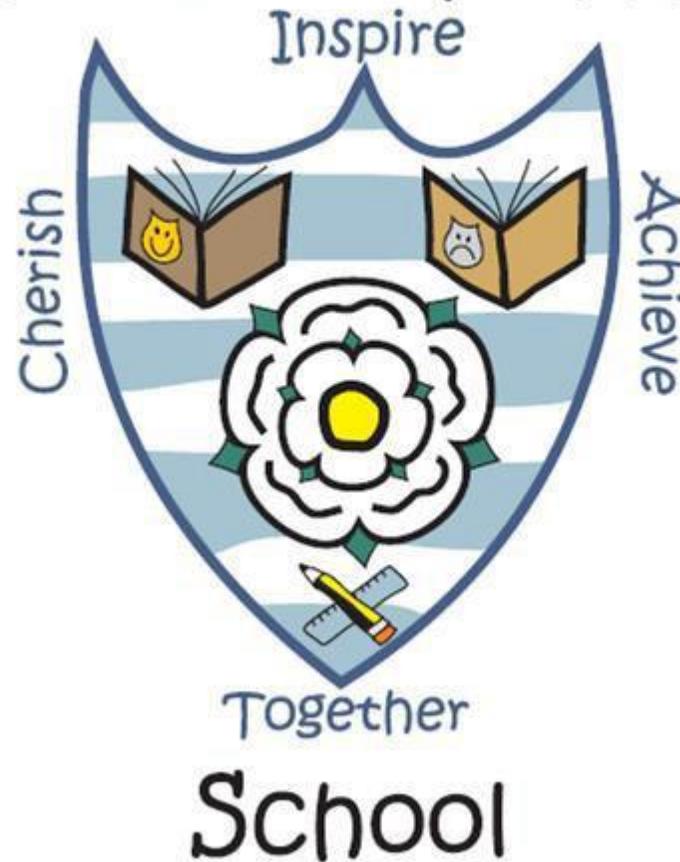
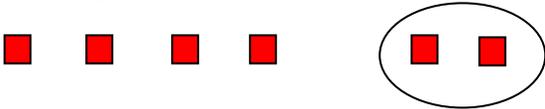
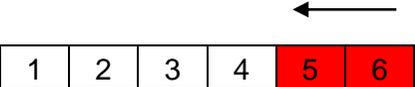
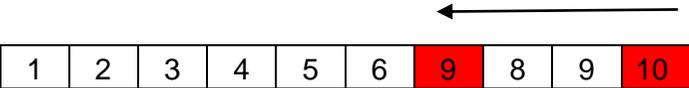
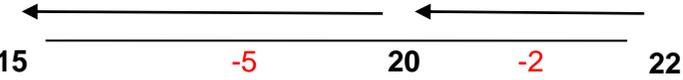


# Birkwood Primary

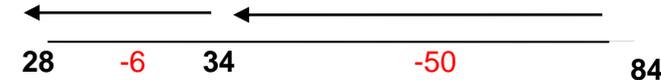
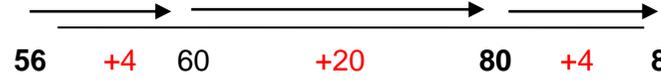


## **Calculation Policy (Subtraction) UPDATED SEPTEMBER 2017**

**Birkwood Primary School**  
**Calculation Policy (Subtraction)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples				
1	<ul style="list-style-type: none"> <li>-Count back (From and to)</li> <li>-Take (Away)</li> <li>-Leave</li> <li>-Left over</li> <li>-One less</li> <li>-Two less</li> <li>-Ten less</li> </ul>	<p><b>Pictorial representations:</b></p>  <p><i>Concrete apparatus models 6 objects. Take 2 objects away.</i></p> <p><b>Simple Number Tracks:</b> 6 take away 7</p> 	Counters, Small toys, Buttons, Cubes, Pegs, counters, Numicon, Fingers, Songs, whiteboards.	$7 - \underline{\quad} = 4$ $\underline{\quad} - 5 = 2$ $10 - \underline{\quad} = 10$ $\underline{\quad} - \underline{\quad} = 5$				
2	<ul style="list-style-type: none"> <li>-Take (Away)</li> <li>-Leave</li> <li>-Left over</li> <li>-One less</li> <li>-Two less</li> <li>-Ten less</li> <li>-Subtract.</li> <li>-Minus</li> </ul>	<p><b>Number tracks to subtract on:</b></p>  <p><i>10 subtract 3.</i></p>	Counters, Small toys, Buttons, Cubes, Pegs, counters, Numicon, Fingers, Number tracks.	<p>I'm thinking of a number. I subtract 7 from that number and I get 3.</p> <p>What number am I?</p>				
3	<ul style="list-style-type: none"> <li>-Take (Away)</li> <li>-Leave</li> <li>-Left over</li> <li>-Two less</li> <li>-Ten less</li> <li>-One hundred less</li> <li>-Subtract.</li> <li>-Minus</li> </ul>	<p><b>Number lines:</b> 22 - 15 (Counting Back)</p>  <p><b>Counting on:</b></p> 	100 grid, Number lines, Number grids, Coins, Whiteboards, Place value cards.	<p>What could the number sentence be?</p> $85 = \square - \square$  <table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">94</td> </tr> <tr> <td>?</td> <td>?</td> </tr> </table>	94		?	?
94								
?	?							

**Birkwood Primary School**  
**Calculation Policy (Subtraction)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples								
4	<ul style="list-style-type: none"> <li>-Take (Away)</li> <li>-Leave</li> <li>-Left over</li> <li>-Two less</li> <li>-Ten less</li> <li>-Subtract.</li> <li>-Minus</li> <li>-Estimate</li> </ul>	<p><b>Number lines (As above)</b> Larger numbers with the potential of using the 100 number grid.</p> <p>84- 56</p>  <p>28    -6    34                    -50                    84</p> <p><b>Counting on:</b></p>  <p>56    +4    60                    +20                    80    +4    84</p>	Number lines, Number grids, Coins, Place value mats, Whiteboards.	<p>How many ways could you devise, using -, to make 84?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">84</td> </tr> <tr> <td style="width: 50px; height: 20px;"></td> <td style="width: 50px; height: 20px;"></td> </tr> <tr> <td style="width: 50px; height: 20px;"></td> <td style="width: 50px; height: 20px;"></td> </tr> <tr> <td style="width: 50px; height: 20px;"></td> <td style="width: 50px; height: 20px;"></td> </tr> </table>	84							
84												
5	<ul style="list-style-type: none"> <li>-Hundreds</li> <li>-Tens</li> <li>-Units</li> <li>-Place value</li> <li>-Partitioning</li> <li>-Subtract.</li> <li>-Minus</li> <li>-Estimate</li> <li>- &lt;</li> <li>-Columns</li> </ul>	<p><b>Partitioning</b>            Use of place value knowledge to put numbers into columns. They begin by counting on and progress to decomposition.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Column- Counting on:</b></p> <math display="block">\begin{array}{r} 754 \\ - 76 \\ \hline 24 \text{ (100)} \\ 600 \text{ (700)} \\ \hline 54 \text{ (754)} \\ \hline 678 \end{array}</math> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Column- Decomposition:</b></p> <math display="block">\begin{array}{r} 754 \\ - 233 \\ \hline 521 \end{array}</math> <p>(The numbers will not carry at this stage)</p> </td> </tr> </table>	<p><b>Column- Counting on:</b></p> $\begin{array}{r} 754 \\ - 76 \\ \hline 24 \text{ (100)} \\ 600 \text{ (700)} \\ \hline 54 \text{ (754)} \\ \hline 678 \end{array}$	<p><b>Column- Decomposition:</b></p> $\begin{array}{r} 754 \\ - 233 \\ \hline 521 \end{array}$ <p>(The numbers will not carry at this stage)</p>	Number lines, Number grids, Coins, Place value mats, Whiteboards, Cm squared maths books.	<p>Laura has 987 stamps. Jenny has 635.</p> <p>Laura says that she has 306 stamps more than Jenny. Is she right?</p> <p>Estimate and check using your preferred method.</p>						
<p><b>Column- Counting on:</b></p> $\begin{array}{r} 754 \\ - 76 \\ \hline 24 \text{ (100)} \\ 600 \text{ (700)} \\ \hline 54 \text{ (754)} \\ \hline 678 \end{array}$	<p><b>Column- Decomposition:</b></p> $\begin{array}{r} 754 \\ - 233 \\ \hline 521 \end{array}$ <p>(The numbers will not carry at this stage)</p>											

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**Calculation Policy (Subtraction)**

Stage	Key Vocabulary	How it looks in practice		Resources	Mastery Examples
6	-Less -Thousands -Hundreds -Tens -Units -Place value -Partitioning -Decrease -Minus -Estimate -Regroup -Columns	<b>Partitioning using column subtraction.</b>		Whiteboards, Place value mats, Cm squared maths books.	Solve these problems using your preferred method.  $2175 = \square - 3881$  $7217 - \square = 2276$  $6802 = \square - 4597$
		<b>Decomposition:</b>  $\begin{array}{r} 6567 \\ -2414 \\ \hline 4153 \end{array}$  (Larger numbers with no regrouping)	<b>Moving to:</b>  $\begin{array}{r} 5 \phantom{0} \\ \cancel{6}367 \\ -2414 \\ \hline 3953 \end{array}$  (Numbers are 'stolen' to make their subtraction possible)  *The same method will be used with larger numbers.		
7	-Less -Thousands -Hundreds -Tens -Units -Place value -Partitioning -Decrease -Minus -Estimate - < -Columns -Decimals	<b>Column subtraction (Decimals and larger numbers)</b>		Whiteboards, Place value mats, Cm squared maths books.	John ran the 200m race with a time of 47.32. Peter completed his race in 34.98.  Who had the quickest time? Can you prove how you know?
		<b>Larger numbers:</b>  $\begin{array}{r} 34297 \\ - 33276 \\ \hline 01021 \end{array}$	<b>Decimals:</b>  $\begin{array}{r} 7.15 \\ -2.03 \\ \hline 5.12 \end{array}$		
Numbers will increase at this point and regrouping will occur through each given value.					

