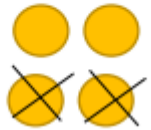
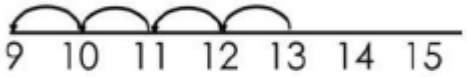
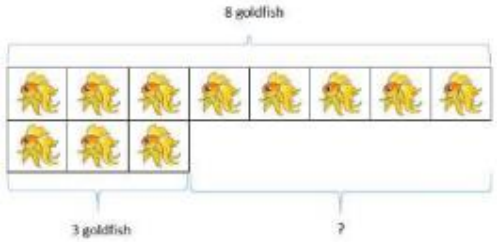
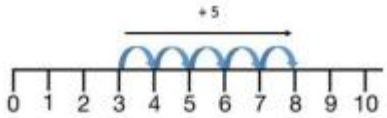
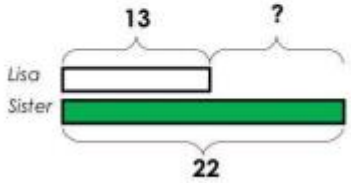
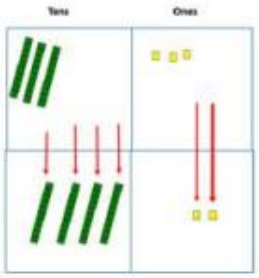
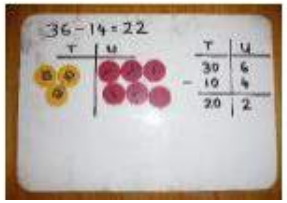
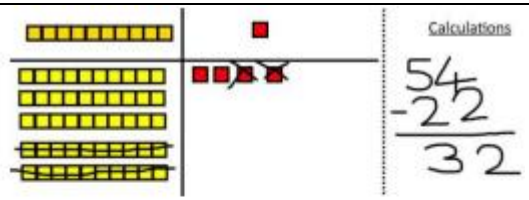
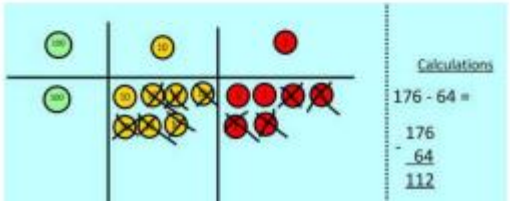
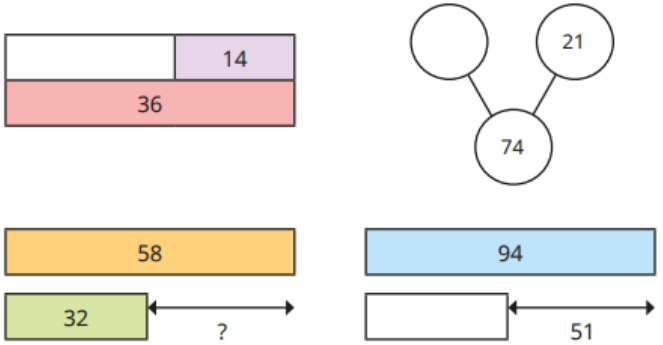
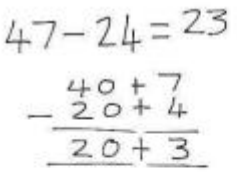
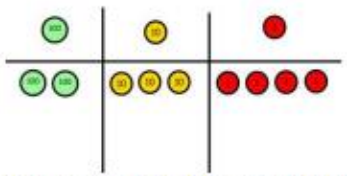
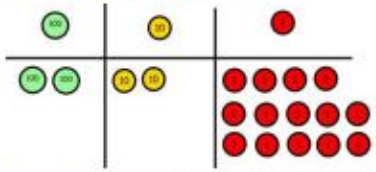
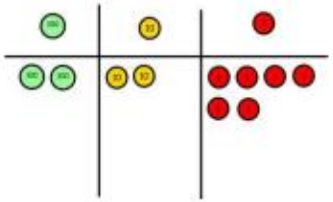
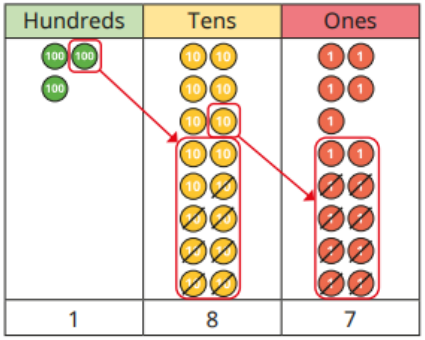
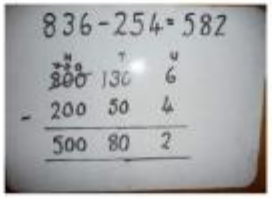
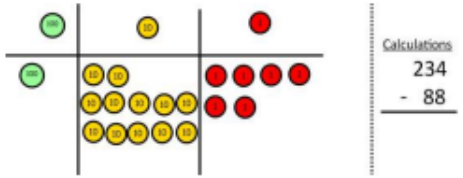
Subtraction

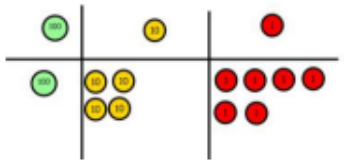
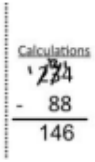
Year	Objective	Concrete	Pictorial	Abstract
1	Taking away ones	Use physical objects, counters, cubes etc. to show how objects can be taken away. 4 – 2 = 2 	Cross out drawn objects to show what has been taken away. 4 – 2 = 2 	4 – 2 = 2
1	Counting back	Make the larger number in your subtraction. Move the beads along your bead string as you count backwards in ones. 13 – 4 = 9	Count back on a number line or number track  Start at the bigger number and count back the smaller number, showing the jumps on the number line.	Put 13 in your head, count back 4. What number are you at? Use your fingers to help.
1	Find the difference	Compare amounts and objects to find the difference.  Use cubes to build towers or make bars to find the difference. Use basic bar models with items to find the difference.	 Count on to find the difference. *Lisa is 13 years old. Her sister is 22 years old. Find the difference in age between them.*  Draw bars to find the difference between 2 numbers.	Hannah has 8 goldfish. Helen has 3 goldfish. Find the difference between the number of goldfish the girls have.

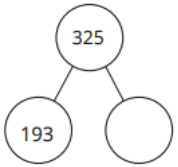
2	Column method without regrouping	Base 10 will support conceptual understanding of number initially before progressing to place value counters. 75 – 42 = 33  Use Base 10 to make the bigger number then take the smaller number away. Show how you partition numbers to subtract. Again make the larger number first. 	 Draw the Base 10 or place value counters alongside the written calculation to help to show working.  Part-whole and bar models will provide a good visual as children progress from pictorial representations to abstract. 	 This will lead to a clear written column subtraction.

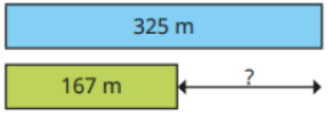
3+	Column method with regrouping	Use Base 10 to start with before moving on to place value counters. Start with one exchange before moving onto subtractions with 2 exchanges. Make the larger number with the place value counters  Calculations 234 - 88 Start with the ones, can I take away 8 from 4 easily? I need to exchange 1 of my tens for 10 ones.  Calculations 234 - 88 Now I can subtract my ones.  Calculations 234 - 88	 Draw the counters onto a place value grid and show what you have taken away by crossing the counters out as well as clearly showing the exchanges you make. When confident, children can find their own way to record the exchange/regrouping. Just writing the numbers as shown here shows that the child understands the method and knows when to exchange/regroup. 	 Children can start their formal written method by partitioning the number into clear place value columns. Moving forward the children use a more compact method. This will lead to an understanding of subtracting any number including decimals. 5 12 1 2 6 3 . 0 - 2 6 . 5 2 3 6 . 5

<table>
<tr>
<td></td>
<td></td>
<td>Now look at the tens, can I take away 8 tens easily? I need to exchange 1 hundred for 10 tens.
 

Calculations
234
- 88

Now I can take away 8 tens and complete my subtraction.
 
 
Calculations
~~2~~1~~3~~4
- 88
146

Show children how the concrete method links to the written method alongside your working. Cross out the numbers when exchanging and show where we write our new amount.</td>
<td>Part-whole and bar models will provide a good visual as children progress from pictorial representations to abstract.
 

 
</td>
<td></td>
</tr>
<tr>
<td>4, 5 and 6</td>
<td colspan="4">Consolidate understanding using numbers with more than 3 digits and extend by subtracting numbers up to 3 decimal places.

Be mindful that concrete and pictorial representation will continue to support conceptual understanding for new learning and are good for retrieval.
Some learners in higher year groups will still need to use concrete resources and pictorial representations in lessons so adaptive practice will be needed to ensure all children can access the learning.</td>
</tr>
</table>