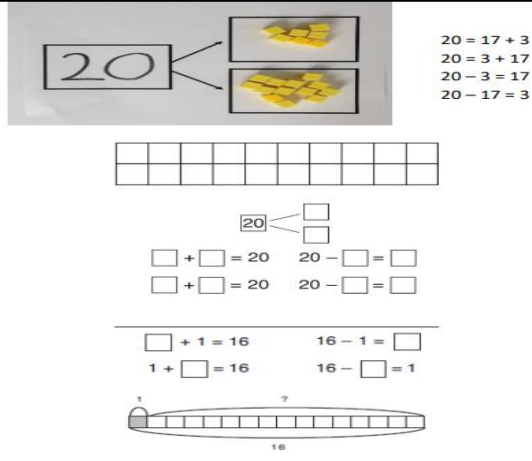
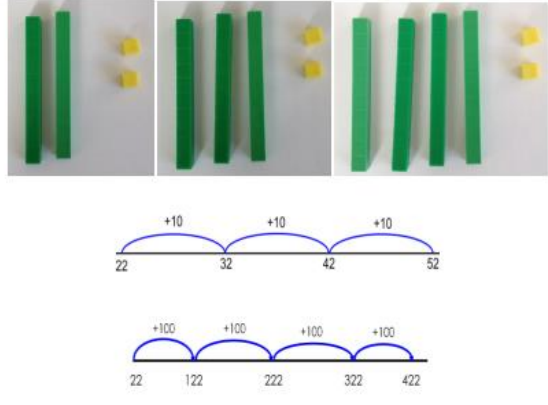
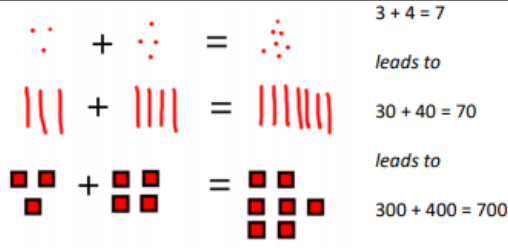
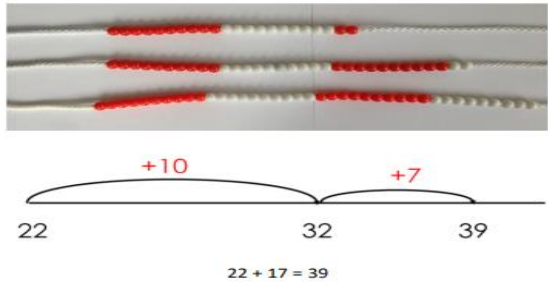


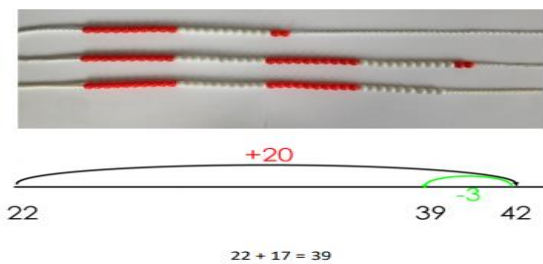
Year 2 Addition

<u>Strategy and guidance</u>	CPA
<p><u>Part-part-whole</u></p> <p>Pupils explore the different ways of making 20. They can do this with all numbers using the same representations. This model develops knowledge of the inverse relationship between addition and subtraction and is used to find the answer to missing number problems.</p>	
<p><u>Counting on in tens and hundreds</u></p>	
<p><u>Using known facts to create derived facts</u></p> <p>Dienes blocks should be used alongside pictorial and abstract representations when introducing this strategy.</p>	
<p><u>Partitioning one number, then adding tens and ones</u></p> <p>Pupils can choose themselves which of the numbers they wish to partition. Pupils will begin to see when this method is more efficient than adding tens and taking away the extra ones, as shown.</p>	

Year 2 Addition

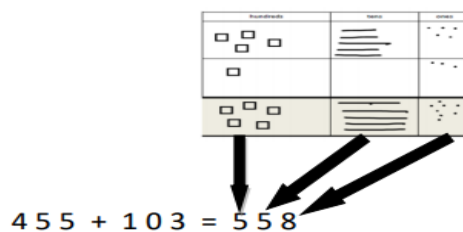
Round and adjust (sometimes known as a compensating strategy)

Pupils will develop a sense of efficiency with this method, beginning to see when rounding and adjusting is more efficient than adding tens and then ones.



Partitioning to add without regrouping

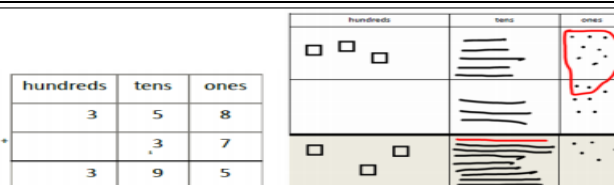
As in Year 1, this is a mental strategy rather than a formal written method. Pupils use the Dienes blocks (and later, images) to represent 3-digit numbers but do not record a formal written method if there is no regrouping.



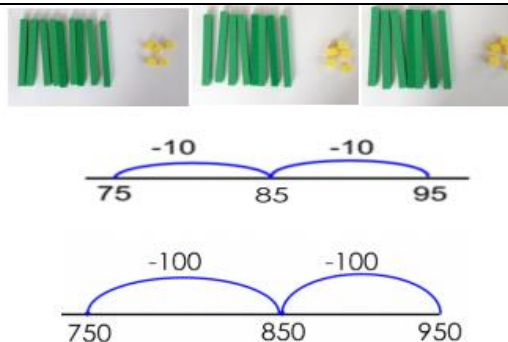
Column method with regrouping

Dienes blocks should be used alongside the pictorial representations; they can be placed on the place value grid before pupils make pictorial representations.

As in Year 1, the focus for the column method is to develop a strong understanding of place value.



Counting back in multiples of ten and one hundred



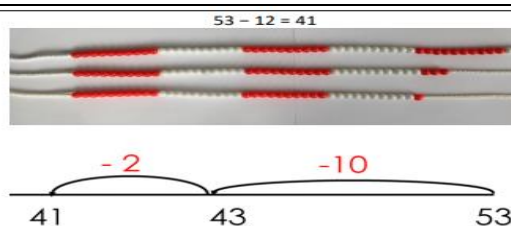
Using known number facts to create derived facts

Dienes blocks should be used alongside pictorial and abstract representations when introducing this strategy, encouraging pupils to apply their knowledge of number bonds to add multiples of ten and 100.



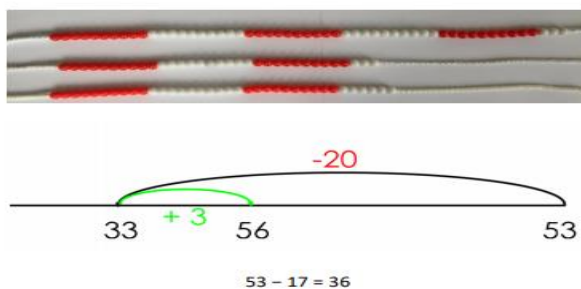
Subtracting tens and ones

Pupils must be taught to partition the second number for this strategy as partitioning both numbers can lead to errors if regrouping is required.



Round and adjust (sometimes known as a compensating strategy)

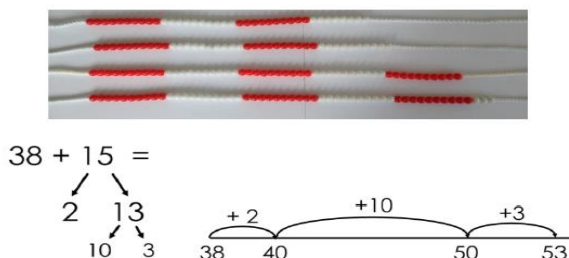
Pupils must be taught to round the number that is being subtracted. Pupils will develop a sense of efficiency with this method, beginning to identify when this method is more efficient than subtracting tens and then ones.



Make ten strategy

How pupils choose to apply this strategy is up to them; however, the focus should always be on efficiency.

It relies on an understanding that numbers can be partitioned in different ways in order to easily make a multiple of ten.



Column method with regrouping

The focus for the column method is to develop a strong understanding of place value and concrete manipulatives should be used alongside.

Pupils are introduced to calculations that require two instances of regrouping (initially from tens to one and then from hundreds to tens). E.g. 232 - 157 and are given plenty of practice using concrete manipulatives and images alongside their formal written methods, ensuring that important steps are not missed in the recording.

Caution should be exercised when introducing calculations requiring 'regrouping to regroup' (e.g. 204 - 137) ensuring ample teacher modelling using concrete manipulatives and images.

