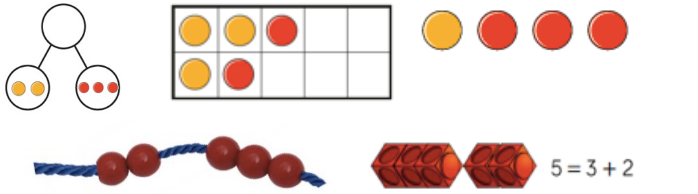
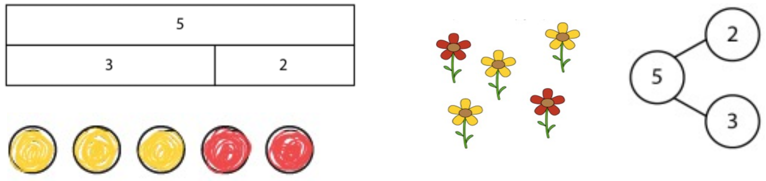
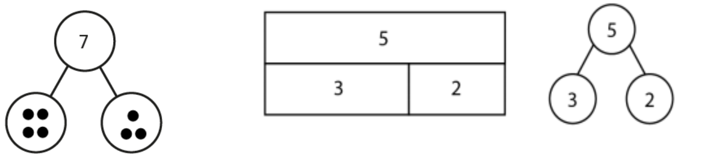
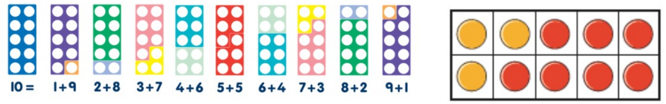
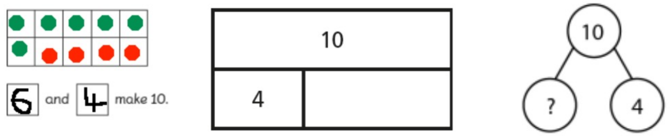
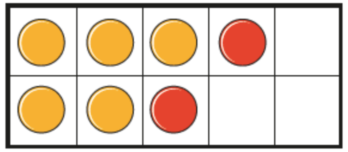
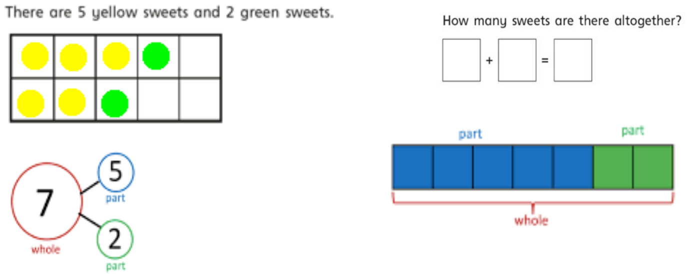
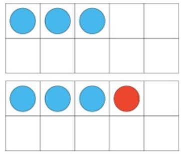
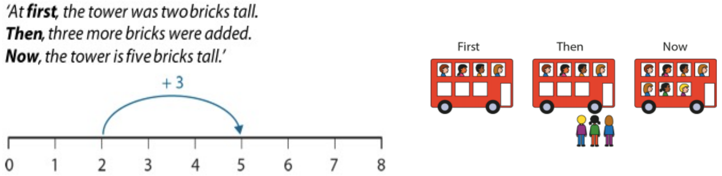
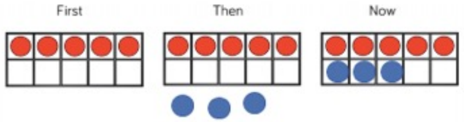
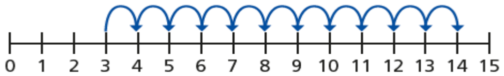
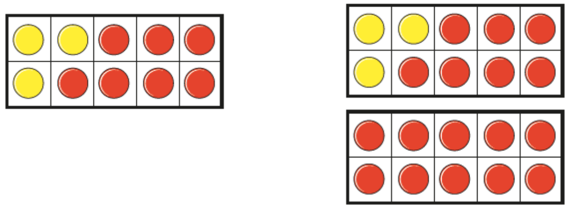
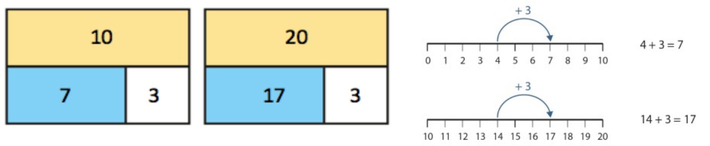
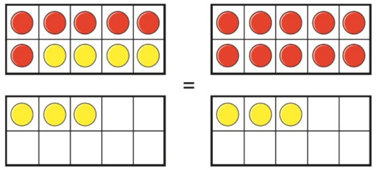
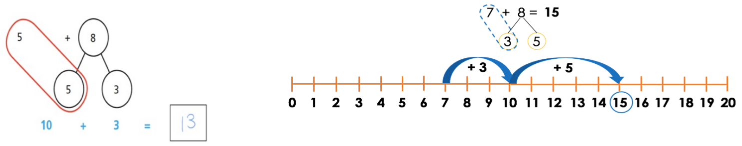
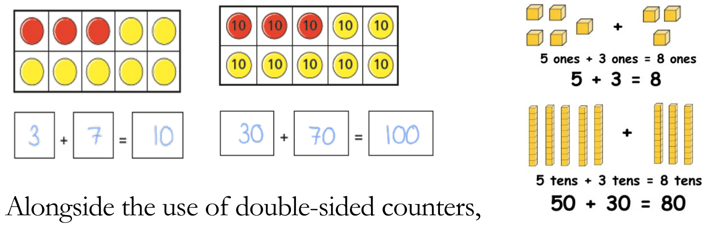
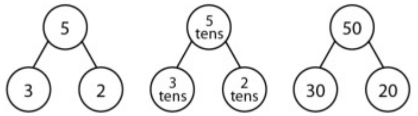
Key Vocabulary: whole, part, addend, sum, equals, number bond, partition, add, addition, plus, total, altogether

	Concrete	Pictorial	Abstract
Year 1 Addition using the part part whole model	 Children can use counters or multilink to add two parts together using a part part whole model. Children understand that part (addend) + part (addend) = whole (sum).	 Children can use a part part whole model to represent addition. For example, 2 red flowers (part) add 3 yellow flowers (part) equals 5 flowers altogether (whole). This can also be presented as a bar model, exposing children to further pictorial representations.	7 + 2 = ☐ Children can begin to add two numbers together (the addends) to find the sum and represent this using a number sentence. Children make clear links between the abstract equation and the concrete and pictorial representations by using the part part whole model.
Year 1 Number bonds within 10	 Children can use multilink or double-sided counters to represent the whole amount, before partitioning it into two groups to represent each part. Children can then be encouraged to make the whole again, before finding another way to partition the number.	 Children can use drawings and pictorial representations to help them partition a whole into 2 parts, such as the part, part whole. Children should begin to familiarize themselves with the bar model, understanding that partitioning can be represented using the bar model.	Find three different ways to make 6 ☐ + ☐ = 6 ☐ + ☐ = 6 ☐ + ☐ = 6 Starting with the whole, children can explore how many ways a number can be partitioned.
Year 1 Numbers bonds to 10	 Children can use Numicon to find and explore number bonds to 10. If done as above, it links nicely to the systematic number bonds work from last lesson. Children can also use double sided place value counters and tens frames to represent 10, partitioning it into two groups (red counters and yellow counters) to represent each part, or bead strings.	 Children can use drawings to represent number bonds to 10, understanding they are partitioning the whole into two parts. They can also use the bar model, understanding each part is reflective of its size, which differs from the use of a part, part whole model.	3 + 7 = 10 6 + 4 = 10 10 children can sit at this table.  How many more children can sit down? ☐ more children can sit down. Starting with the whole, children can explore how many ways 10 can be partitioned and recall some of these bonds fluently. Children can apply this knowledge to begin solving some simple worded problems in context.

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

	Concrete	Pictorial	Abstract
Year 1 Adding on	 Children can use double-sided place value counters and tens frames add two numbers together to find the total amount. Still refer to each number as a 'part' and the total amount being the 'whole', reinforcing that part + part = whole.	 Children can use drawings to represent numbers, particularly those presented in a word problem context. Children will also benefit from seeing this in a part/part whole model and bar model representation.	Ron has 2 dogs and 3 cats. How many pets does he have altogether? ☐ + ☐ = ☐ Children can add two numbers together, using the + and = symbols when writing number sentences to represent the calculations. They can apply their knowledge of addition in the context of a word problem, understanding that they should add the two numbers and they will find the whole.
Year 1 Using the First, Then, Now structure to count on.	 *'**First**, James wrote three sentences. **Then**, he wrote one more sentence. **Now**, he has four sentences written down.'* Children will move from counting all, like in previous lessons, to counting on. It's important that this is modelled that children understand how to count on. They can represent problems using counters/multilink by identifying the 'first' aspect of the problem, counting on the 'then' to find the 'now' – which is the answer.	 Children can refer to a number line to help them with counting on, understanding that for 2+3, they need to start at 2 and count on 3. Children may also benefit from seeing pictorial representations such as the above, understanding the additive structure of first, then, now.	Mo has this money.  Jack gives Mo 5 more pennies. How many pennies does Mo have now? ☐ + ☐ = ☐ Children can add two numbers together by counting on. They can do this is worded problem context, understanding the structure of first… then… now…
Year 1 Add by Counting on	 Children can use tens frames to represent addition calculations, following the first, then, now structure which they should have used previously. Remind children that by counting on, we are adding to what we already have (as opposed to adding two groups together).	 Children can use a number line to count on. By modelling examples such as the above, children can further develop their understanding of commutativity and begin to recognise which order of addends is the most efficient. In the above example, children should be able to see that starting at 11 and counting on 3 is far more efficient.	**a)** 2 + 13 = ☐　　**b)** 4 + 9 = ☐ Children can find the sum of two addends by counting on. They understand that regardless of the order of which they add the two numbers, they sum will remain the same. They also recognise that despite this, it is more efficient to start with the largest number when counting on.

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

	Concrete	Pictorial	Abstract
Year 1 Number bonds within and to 20	 Children can use tens frame and double-sided counters to see the links between the number bonds to ten and the number bonds to twenty. They should be able to identify the similarities and differences between the two calculations.	 Children can represent the number bonds to 20 using a bar model. This will help children see the bonds as a part part whole structure. From this, children can generalize that when ten is added to a part, the whole also increased by 10. You could also represent the number bonds on a number line, again drawing attention to the patterns between the calculations.	a) 4 + 6 = ☐ c) 10 = ☐ + 1 4 + 16 = ☐ 20 = ☐ + 1 Children can apply their knowledge of the numbers bonds to 10 to find the number bonds to 20.
Year 1 Add by Making 10	 Children use tens frames to see that we can make ten to help us add. By using double sided counters, children could represent the original calculation (6+7), then flip 4 over to make 10. Children can then see they have 10 and 3 counters, but the total amount of counters had not changed.	 Children can use a part part whole model to help make ten by partitioning. By applying their knowledge of number bonds to ten, children can partition a single digit number so they can make a full ten. Alongside this, children could also use a number line to partition numbers to make 10, then add by counting on.	a) 8 + 3 = 10 + ☐ b) 9 + 7 = 10 + ☐ Children can add numbers within 20 using their knowledge of number bonds to make 10. Understanding of this is crucial as this is a valuable strategy to use when calculating mentally.
Year 2 Related facts and Bonds to and within 100	 Alongside the use of double-sided counters, children can use the base-10 equipment to show the difference between calculations which have similar digits, understanding the difference between adding tens and adding ones.	 Children can use drawings to represent the concrete base-10 materials. Additionally, children can read pictorial representations, making links to the concrete materials by noting the value of each representation. The relationship between these related facts can be made explicit through use of the part part whole model, as shown above.	a) 1 + 2 = 3 b) 7 + 2 = 9 10 + 20 = ☐ 70 + 20 = ☐ Children can show understanding of calculations with similar digits. They should be able to identify what is the same and what is different about each calculation, using language of tens and ones appropriately.

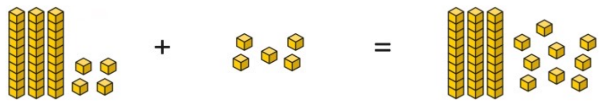
Chichester Free School: Calculation Policy

Addition

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

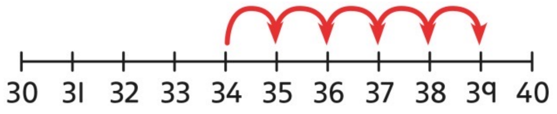
Year 2
Adding 1s

Concrete



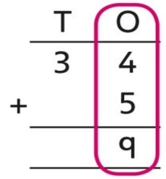
Children can use base-10 equipment to add and subtract ones. Begin by encouraging the children to find one more than a given number, building on their place value work.

Pictorial



Children can use drawings to represent adding by adding more. This could include drawing concrete representations such as the base-10 equipment. Children may also use a number track or number line to support with adding ones.

Abstract



Complete the calculations.

a) 14 + 2 =

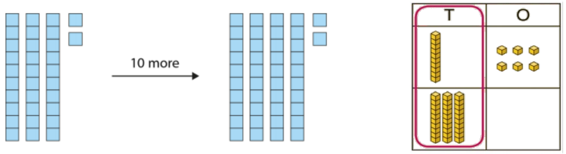
b) 22 + 3 =

Children can add ones to a 2-digit number. They understand that the ones digit will change. Remind children that sometimes, this means the tens will change too, but does not occur this step.

Year 2
Adding 10s

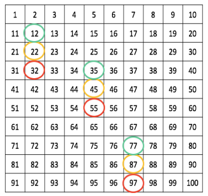
Note: Column method is not shown in the new WRM materials in Y2 – teachers will still need to teach this using their own materials.

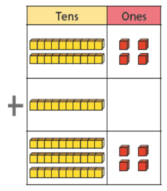
Concrete



Children can use base 10 to represent a number. Then, they can either add or subtract multiples of ten and count the total to find the answer. To help reinforce their understanding, and scaffold towards the column method, use a place value grid alongside the base 10 equipment and encourage children to work vertically.

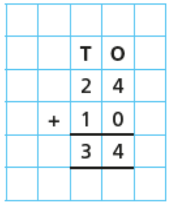
Pictorial

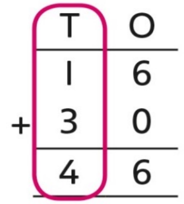




Children can use a number square to find multiples of 10 more than a given number. By either showing pictorial representations of base 10 (see above), or drawing base 10 in a place value chart, children can add or subtract tens. This representation allows children to see the links between the concrete equipment and the abstract column method.

Abstract





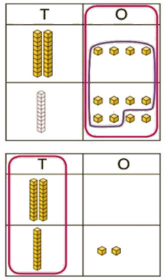
Children can begin to use the column method to add or subtract 10s. By using this alongside the pictorial representation of the column method, children can really understand the method and how it helps us calculate the answer.

Year 2
Adding 1-digit number to a 2-digit number, crossing 10.

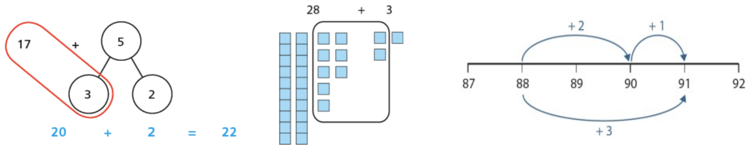
Note: Column method is not shown in the new WRM materials in Y2 – teachers will still need to teach this using their own materials.

Concrete

Children can use base ten equipment to add a 1-digit number to a 2-digit number. Remind children that 10 ones = 1 ten and represent this with the equipment. Explain that when we have more than 10 ones, we can regroup ten ones and exchange it for a ten. By exploring this using a place value grid, as per the example, children can begin to make links with the column method algorithm when it is introduced alongside.

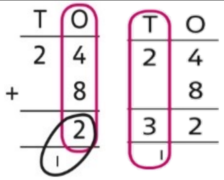


Pictorial



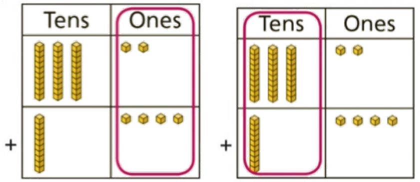
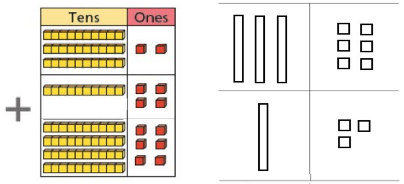
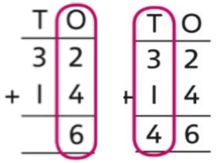
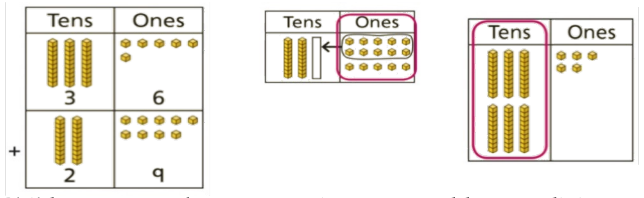
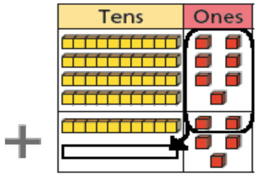
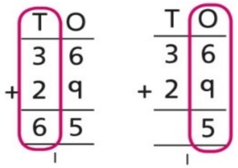
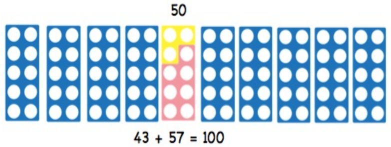
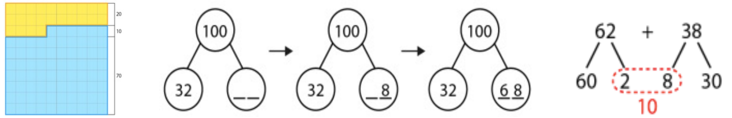
Children can use methods from the previous learning, such as partitioning using a part part whole model and using a number line, to add a one-digit number to a 2-digit number. Children can use drawings of base-10 equipment to represent the calculation. They can then circle ten ones and regroup this into a ten.

Abstract



By modelling the column method for addition alongside the corresponding concrete and pictorial representations, children can begin to understand the process behind the algorithm. Children should know to line the digits up correctly and begin adding from the right.

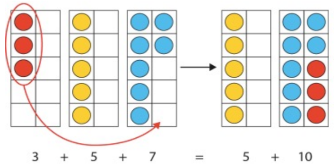
Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

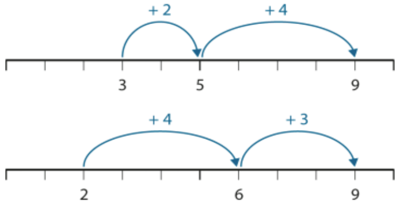
	Concrete	Pictorial	Abstract
Year 2 Adding tens and ones, without regrouping. Note: Column method is not shown in the new WRM materials in Y2 – teachers will still need to teach this using their own materials.	 Children can use base 10 to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, first adding the ones, then the tens. By using a place value grid and encouraging children to work vertically, this will help scaffold towards the abstract column addition method.	 By either showing pictorial representations of base 10 (see above), or drawing base 10 in a place value chart, children can add 2-digit numbers. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method.	By modelling the column method for addition alongside the corresponding concrete and pictorial representations, children can begin to understand the process behind the algorithm.  Children should know to line the digits up correctly and begin adding vertically from the right. They demonstrate understanding of the value of each digit. For example, 3 represents 3 tens and 1 represents one ten. 3 tens + 1 ten = 4 tens, which we can represent with a 4 digit in the tens column.
Year 2 Adding two 2-digit numbers, with regrouping. Note: Column method is not shown in the new WRM materials in Y2 – teachers will still need to teach this using their own materials.	 Children can use base ten equipment to add any 2-digit numbers together. Remind children that 10 ones = 1 ten and represent this with the equipment. Remind children that when we have more than 10 ones, we can regroup ten ones and exchange it for a ten.	 Children can use drawings of base-10 equipment to represent the calculation, working vertically to maintain links with the abstract column method. When the ones column sums more than 10, children can then circle ten ones and regroup this into a ten, which is then placed in the tens column.	By modelling the column method for addition alongside the corresponding representations, children can begin to understand the process behind the algorithm.  Children should know to line the digits up correctly and begin adding from the right. They can identify what each digit represents and explain that when the ones column sums to 10 or greater, we regroup as ten ones is equal to 1 ten. This is represented by a ten placed in the tens column, and it is included when adding our tens.
Year 2 Bonds to 100	 Children can use Numicon to identify number bonds to 100. By examining the ones of the number, children can use their number bonds to identify how many more ones we need to make a ten. When this is known, we then can work out how many tens are needed to make 100.	 Children can use 100 squares to partition 100. Instead of counting each individual square, encourage the children to count in tens and ones . By applying their knowledge of number bonds to make 10 first, children can then identify that they need to make nine more tens, as opposed to ten - a common misconception. Children can also use this strategy to check if their calculations are correct. If their tens total 110, they know they must adjust their answer by 10.	a) 40 + 60 = 100 b) 30 + 70 = 100 Children can apply their knowledge of number bonds to 10 to calculate number bonds to 100. Children can check their calculations are correct using addition and, if they are incorrect, adjust their answers accordingly.

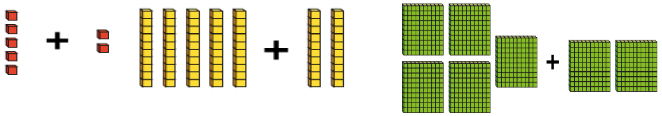
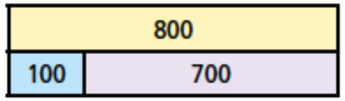
Chichester Free School: Calculation Policy

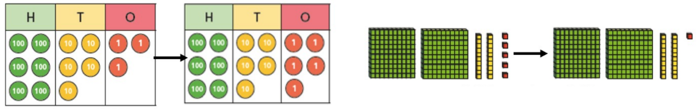
Addition

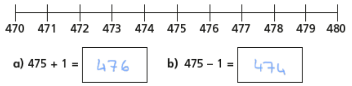
Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

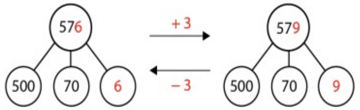
<table>
<tr><th></th><th>Concrete</th><th>Pictorial</th><th>Abstract</th></tr>
<tr>
<td>Year 2
Add 3
1-digit
numbers</td>
<td>

Children can use tens frames and three different coloured counters to add 3 single digit numbers. Encourage children to look for a pair of addends which sum to ten. This will encourage children to be efficient with their calculations.</td>
<td>

Children can use a number line to add three single digit numbers. This is a visual way to show the children that no matter which order the addends are added, it does not change the sum (commutative law). Discuss which way the children think is the most efficient and why.</td>
<td>a) 9 + 4 + 1 = ☐ c) 8 + 3 + 1 = ☐
Children can add three single digit numbers, applying their knowledge of commutativity and numbers bonds to 10 to help them do this efficiently.</td>
</tr>
<tr>
<td>Year 3
Add multiples
of 100.</td>
<td>
5 + 2 = 7 50 + 20 = 70 500 + 200 = 700
Children can use base-10 equipment to see the links between adding ones, tens and hundreds. When they are secure with this, children can then use the hundreds to represent adding multiples of 100.</td>
<td>

100 + 700 = 800
700 + 100 = 800
Children can represent addition using a part part whole model. They should understand that part + part = whole. Similarly, they can use a bar model to represent their calculations. From the bar model, children should be able to identify two related addition statements, demonstrating understanding of</td>
<td>a) 3 + 1 = 4 b) 400 + 200 = 600
30 + 10 = 40 400 + 300 = 700
300 + 100 = 400 400 + 400 = 800
Children should apply their understanding of simple addition to add multiples of 100.</td>
</tr>
<tr>
<td>Year 3
Adding ones
to a 3-digit
number.</td>
<td>

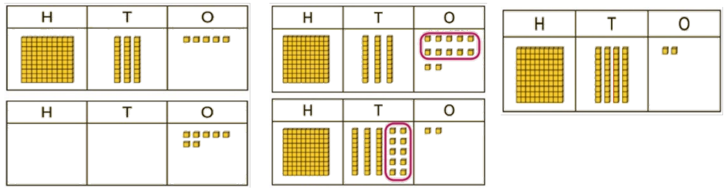
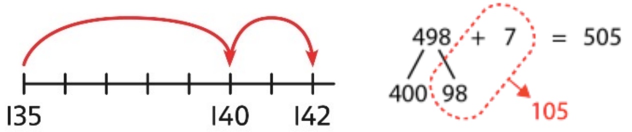
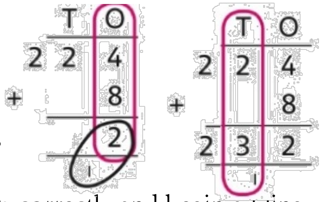
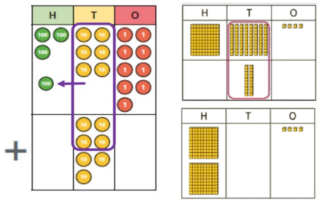
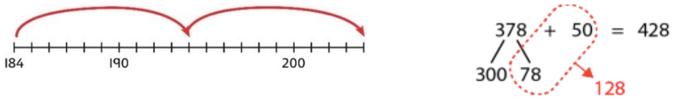
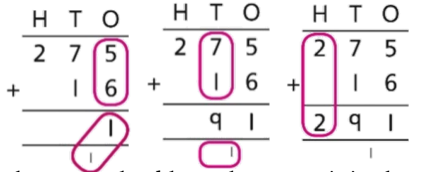
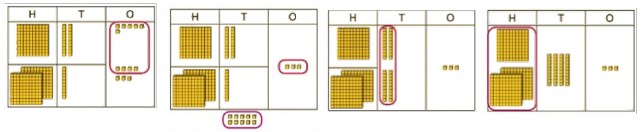
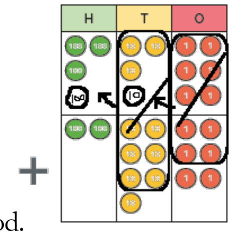
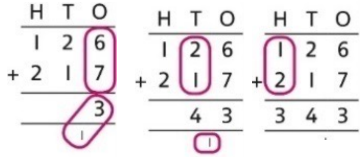
Children can use place value counters and base-10 to add and subtract ones. They will see that when representing these calculations, only the ones column is being affected, while the tens and hundreds are remaining the same – this is because we are not regrouping.</td>
<td>



Children can use a number line to count forwards or backwards in ones. Representing this as a part part part whole model will allow children to see which digits of the number are being changed by the calculation.</td>
<td>a) 276 + 3 = 279
Nijah collects stamps.
She has 526 stamps.
She collects 3 more.
How many stamps does she have now?

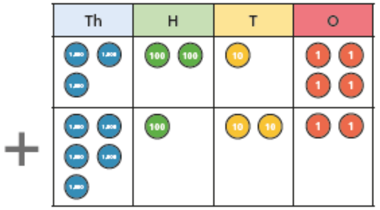
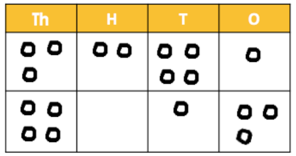
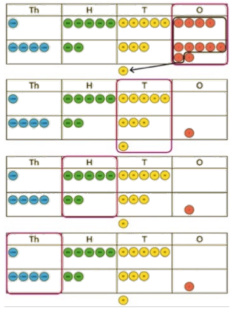
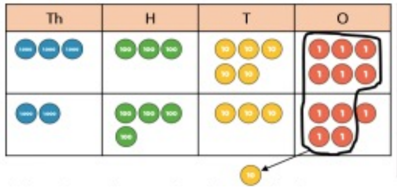
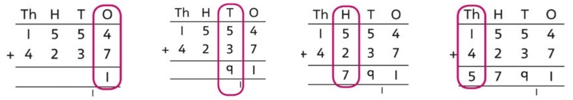
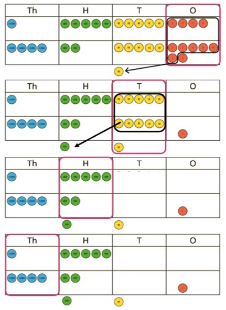
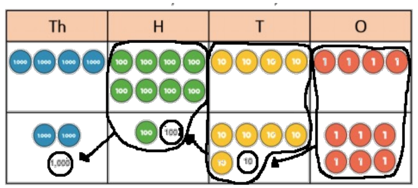
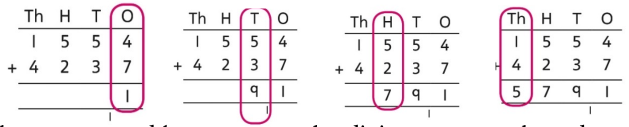
529
Children can add and subtract ones from 3-digit numbers, applying their knowledge of basic addition and subtraction within 10.</td>
</tr>
</table>

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

	Concrete	Pictorial	Abstract
Year 3 Adding 1-digits to a 3-digit number, with regrouping.	 Children can use base 10 or place value counters and a place value chart to build a 3-digit number. Then, they add the ones. Remind children that 10 ones = 1 ten and represent this with the equipment. Explain that when we have more than 10 ones, we can regroup ten ones and exchange it for a ten, as they have done previously.	 Children can use methods from previously learning such as partitioning using a part part whole model and using a number line, to add a 1-digit number to a 3-digit Number.	 By modelling the column method for addition alongside the corresponding concrete representations, children can begin to understand the process behind the algorithm. Children should know to line the digits up correctly and begin adding from the right. They can identify what each digit represents and explain that when the ones column sums to 10 or greater, we exchange as ten ones is equal to 1 ten. This is represented by a ten placed in the tens column. We can then continue to add the tens and hundreds. They will also recognise that when adding ones, not only will the ones change, sometimes the tens will too.
Year 3 Adding 3-digit numbers and 2-digit numbers, with regrouping.	 Children can use base 10 or place value counters and a place value chart to build a 3-digit number. Then, they add tens. Remind children that 10 tens = 1 hundred and represent this with the equipment. Explain that when we have more than 10 tens, we can regroup ten tens and exchange it for a hundred.	 Children can use drawings to represent them calculation, showing an understanding of d exchange by crossing out ten tens and exchanging this for a hundred. They could also draw upon method from previous steps, such as partitioning and using a number line to support them when counting on in tens.	 Children recognise that when adding tens, the tens and hundreds column can change. You should introduce the column method here, however it is also important for children to develop their mental strategy of counting on in tens. Discussion around efficient methods would be beneficial to the children.
Year 3 Adding 3-digit numbers, with regrouping.	 Children can use base 10/place value counters to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, first adding the ones, then the tens, then the hundreds. Reinforce that if any column sums to 10 or greater, we must regroup. Model the column method algorithm alongside so children can make links.	By either drawing on pictorial representations of base 10/place value counters or drawing base 10/place value counters in a place value chart themselves, children can add 3-digit numbers, regrouping where necessary. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method. 	 Children should know to line the digits up correctly and begin adding vertically from the right. They demonstrate understanding of the value of each digit. When a column sums to ten or more, they know they need to regroup, and represent this by either placing another ten in the tens column or another hundred in the hundreds column.

Addition

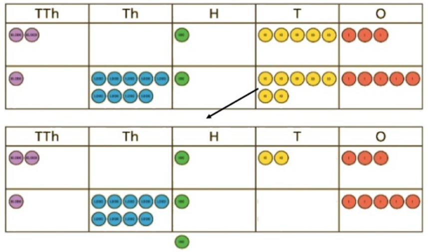
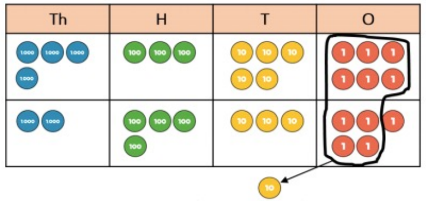
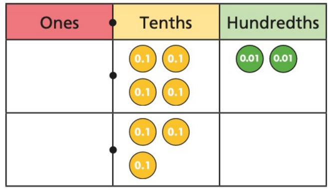
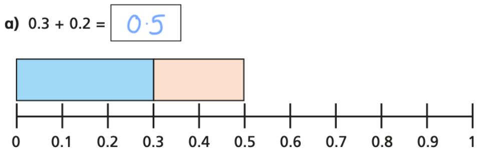
Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

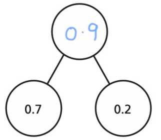
	Concrete	Pictorial	Abstract
Year 4	Children can use base place value counters to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, first adding the ones, then the tens, then the hundreds. Reinforce that we only need to regroup when a column sums to ten or more. 	By drawing place value counters in a place value chart to represent a calculation, children can add two 4-digit numbers. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method. 3,241 + 4,013 = 7,254 	By modelling the column method corresponding concrete and pictorial representations, children the process behind the algorithm. Children should know to line the digits up correctly and begin adding vertically from the right. They demonstrate understanding of the value of what each number represents. For example, 4 represents 4,000 and 3 represents 3,000. We can represent 7,000 by placing a 7 in the thousands column. 4 2 7 5 + 3 2 0 2 7 4 7 7
Year 4	Children can use place value counters to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, first adding the ones, then the tens, then the hundreds, then the thousands. 	By either drawing on pictorial representations of place value counters or drawing place value counters in a place value chart themselves, children can add 4-digit numbers, regrouping where necessary. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method. 	 Children should know to line the digits up correctly and begin adding vertically from the right. They demonstrate understanding of the value of each digit. When a column sums to ten or more, they know they need to regroup, and represent this by either placing another ten in the tens column, another hundred in the hundreds column or another thousand in the thousands column
Year 4	Children can use place value counters to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, first adding the ones, then the tens, then the hundreds, then the thousands. Reinforce that if any column sums to 10 or greater, we must regroup and make an exchange. Model the column method algorithm alongside so children can make links between the representations. 	By either drawing on pictorial representations of place value counters or drawing place value counters in a place value chart themselves, children can add 4-digit numbers, regrouping where necessary. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method. 	 Children should know to line the digits up correctly and begin adding vertically from the right. They demonstrate understanding of the value of each digit. When a column sums to ten or more, they know they need to regroup, and represent this by either placing another ten in the tens column, another hundred in the hundreds column or another thousand in the thousands column.

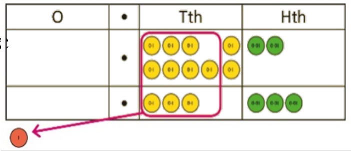
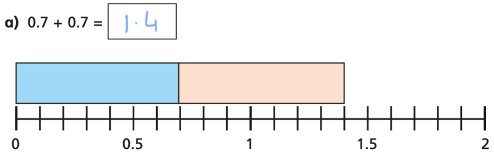
Chichester Free School: Calculation Policy

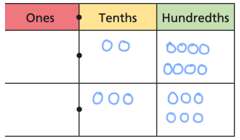
Addition

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

<table>
<tr><th></th><th>Concrete</th><th>Pictorial</th><th>Abstract</th></tr>
<tr>
<td>Year 5
Adding whole numbers with more than 4-digits.</td>
<td>Children can use place value counters to represent a number on a place value chart. Then, they can represent the number they are adding and add this to chart, calculating the total sum of each column from the right hand side. Reinforce that if any column sums to 10 or greater, we must make an exchange. Model the column method algorithm alongside so children can make links between the representations.

</td>
<td>By either drawing on pictorial representations of place value counters or drawing place value counters in a place value chart themselves, children can add whole numbers of 4 or more digits, regrouping where necessary. This representation allows children to see the links between the concrete and pictorial representations and the abstract column method.

</td>
<td>Children should know to line the digits up correctly and begin adding vertically from the right. This is especially important when two addends do not have the same number of digits. When a column sums to ten or more, they know they need to make and exchange, and represent this by either placing another ten in the tens column, another hundred in the hundreds column, another thousand in the thousands column or another ten thousand in the ten thousands column.
TTh Th H T O
1 9 1 7 5
+ 1 8 4 1 7
3 7 5 9 2
1 1</td>
</tr>
<tr>
<td>Year 5
Adding decimals with no regrouping.</td>
<td>Children can use decimal place value counters to represent a decimal number on a place value chart. Then, they can represent the number they are adding and add this to chart, calculating the total sum of each column from the right-hand side. Therefore it is essential to reinforce that we don't always start with the ones, as this is not the case.

</td>
<td>



Children can use number lines to add decimal numbers. They can also represent addition using a part part whole model.</td>
<td>Children know how to line the digits up correctly and begin adding vertically from the right. They know that even if there is a different number of decimal places after the whole number, the decimal point must be aligned so that the decimal numbers can be added correctly.
0 . 0 4
+ 0 . 3 3
0 . 3 7</td>
</tr>
<tr>
<td>Year 5
Adding Decimals using column method</td>
<td>Children can use decimal place value counters to represent a decimal number on a place value chart. Then, they can represent the number they are adding and add this to chart, calculating the total sum of each column from the right-hand side. Reinforce that if any column sums to 10 counters or greater, we must make an exchange.

</td>
<td>



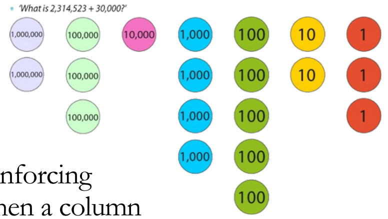
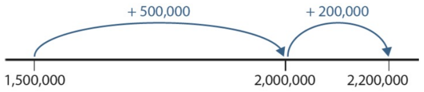
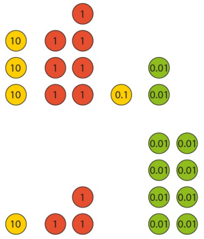
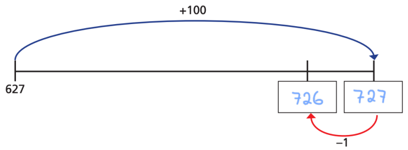
Children can use a number line to add decimals when crossing the whole number. They can see patterns between whole number and decimals numbers. Additionally, they can draw representations of counters and demonstrate the exchange process.</td>
<td>O . Tth Hth
0 . 2 3
+ 0 . 4 5
0 . 6 8

O . Tth Hth
0 . 9 2
+ 0 . 3 3
1 . 2 5
1

O . Tth Hth
3 . 4 0
+ 0 . 6 5
.

Children should know to line the digits up correctly and begin adding vertically from the right. This is especially important when two addends do not have the same number of decimal places. They know that they can use 0 as a place holder to support with accurate addition.</td>
</tr>
</table>

Key Vocabulary: whole, part, ones, ten, tens, number bond, add, addition, plus, total, altogether

	Concrete	Pictorial	Abstract
Year 6 Adding integers, using appropriate methods.	Children can use place value counters to represent numbers to 1,000,000. They can add the integer using place value counters, reinforcing their previous learning that when a column sums to ten or more counters, we need to make an exchange. 	Children begin thinking about which is the most efficient methods to use when adding. Using a number line is a solid method to encourage children to think about the 'steps' they take in their head when solving a calculation mentally, especially when crossing boundaries. 	Children can add any whole number using the formal method of addition. When a column sums to ten or more, they know exchange. Additionally, children consider the most efficient way to add. For example, it is far more efficient to calculate 742 + 999 by adding 1,000 and subtracting 1 than it is writing out the column method. 6 4 3, 8 0 1 + 5 0 5, 3 7 0 1, 1 4 9, 1 7 1 1
Year 7 Addition of integers and decimal numbers using formal and mental methods.	Children use place value counters to support when adding integers and decimals numbers. This is particularly helpful when a number has a different number of digits, or decimal places. Children know that when a column sums to 10 or more counters, they need to make an exchange. 	Children can continue to consider which are the most efficient methods for addition. For example, when adding 99 to a number, it is more efficient to add 100 and adjust the answer by 1. Children can draw a number line to visual this process. 	Children build upon their KS2 experience to continue to add integers using a formal column method. **d)** 23.66 + 51.3