

Year 4

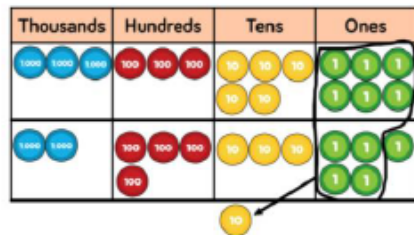
Addition

Working towards adding numbers with up to 4 digits.

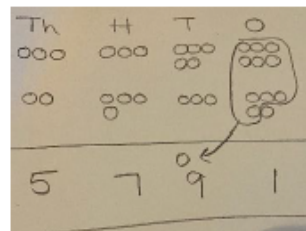
Column method

Children start by recapping their understanding using the place value counters.

They add u each column, starting with the ones. If any column totals 10 or more, they exchange it for 1 counter for the next place value and place below that column.



Children may start to draw pictorial representations of the calculation



Once knowledge is secure, children move to using a formal written method.

	Th	H	T	O
	3	4	5	6
+	2	7	8	9
	5	1	1	5
				1

Subtraction

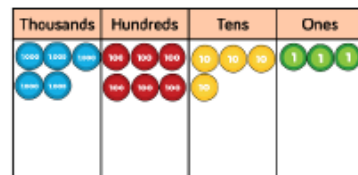
Working towards adding numbers with up to 4 digits.

Column method

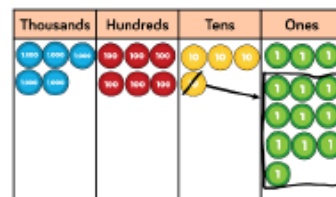
As with addition, children start by recapping their understanding using the place value counters.

$$5643 - 4316 = 1327$$

First they make the largest number. Then, starting with the ones column, they try to take away the smaller number.



In this example, it is difficult to take 6 away from 3, so we need to exchange 1 ten for 10 ones.



It is now easier to take the 6 away.



We repeat for each column giving us the answer of 1327.

Multiplication

Working towards multiplying 3 digit numbers by ones.

Column method.

Children start by revising their learning from year 3, using place value counters to help them to solve the calculation.

$$245 \times 4 = 980$$

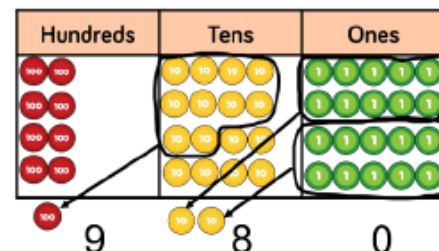


They make the number to be multiplied (245 in this example) with the place value counters.

They then repeat that number according to the multiplier (4 in this question).

Children then multiply each column individually.

If they have an answer of 10 or more in one column, they exchange for a counter from the next place value column.



Division

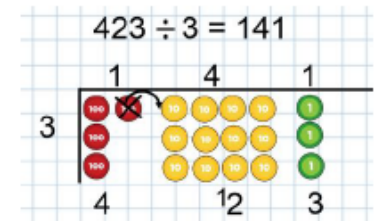
Working towards dividing 3 digit numbers by ones, with remainders.

Short division

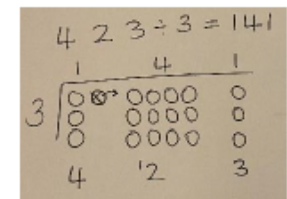
Before moving on to dividing 3 digit numbers, children firstly revise dividing 2 digits by 1 digit.

They then move on to dividing larger numbers, using the same methods as in year 3.

Firstly, using place value counters.



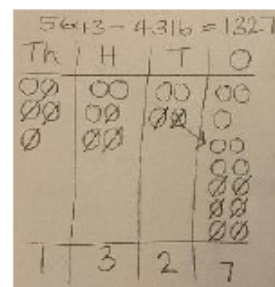
Some children may move on to pictorial representations.



Then on to a formal written method.

	H	T	O
	1	4	1
3	4	2	3

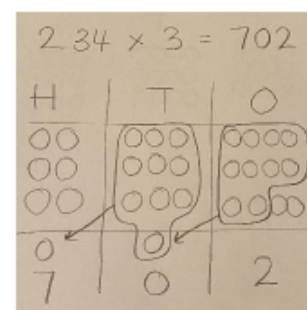
Children may start to draw pictorial representations of the calculation.



Once secure, children move to a formal written method.

	Th	H	T	O
	5	6	3 13	
-	4	3	1	6
	1	3	2	7

Children may begin to use pictorial drawing to represent the counters.



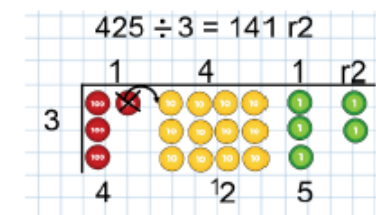
Children begin to record what it is they are doing to show understanding.

This will then lead to a compact written method.

	2	3	4
x			3
	7	0	2
	x	x	

Children will also begin to investigate remainders in year 4.

When dividing the ones column into groups, any counters left over that cannot make a whole group, become a remainder.



	1	1	5	r1
4	4	6	5	