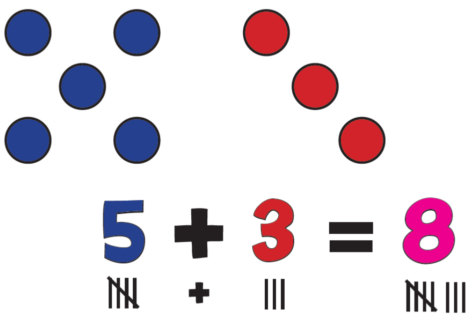
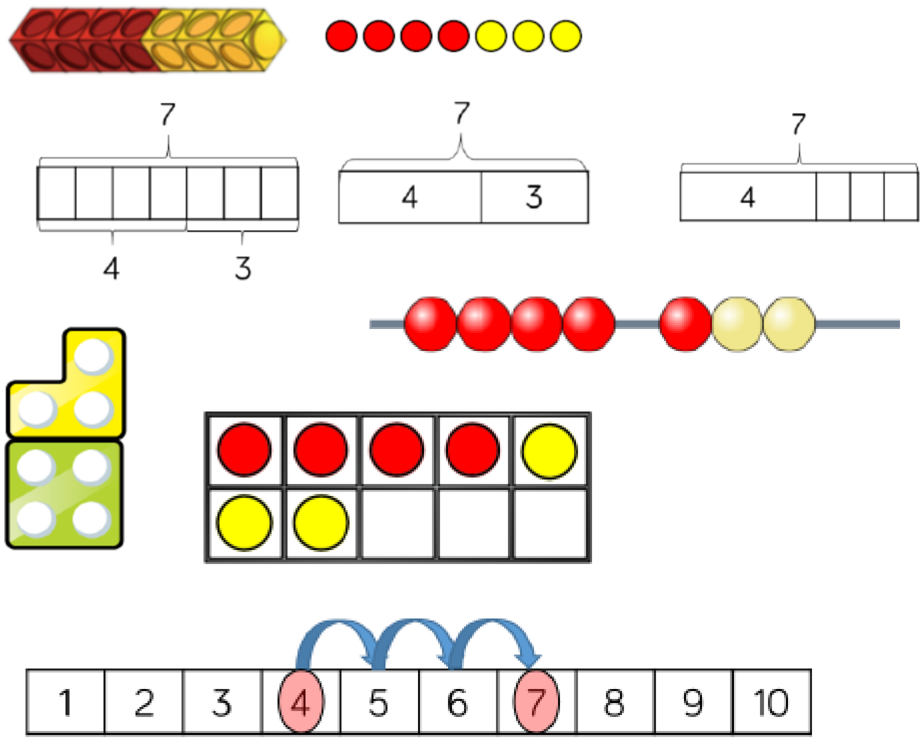
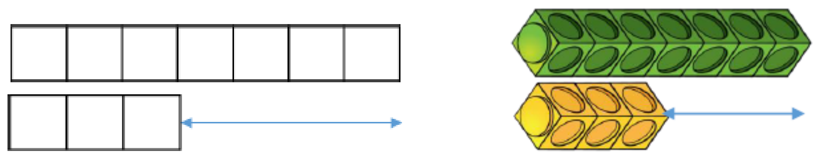
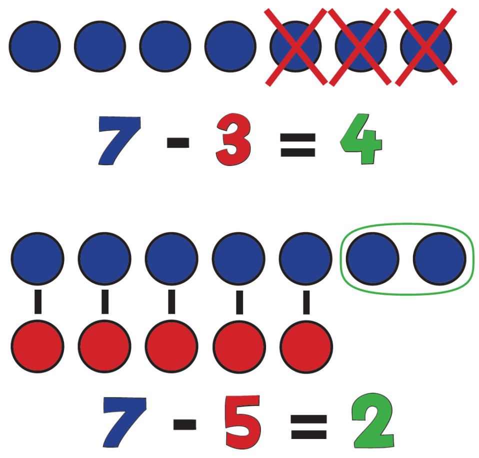
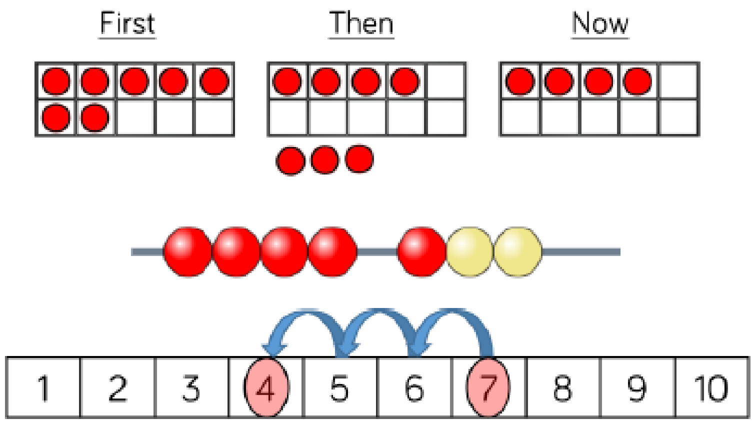
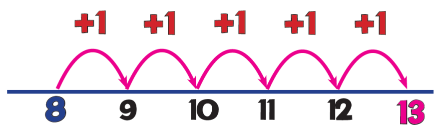
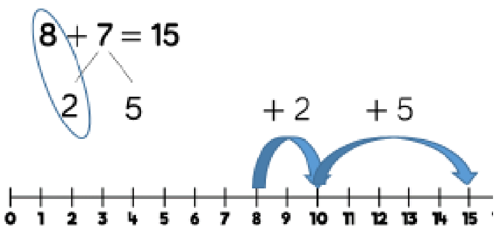
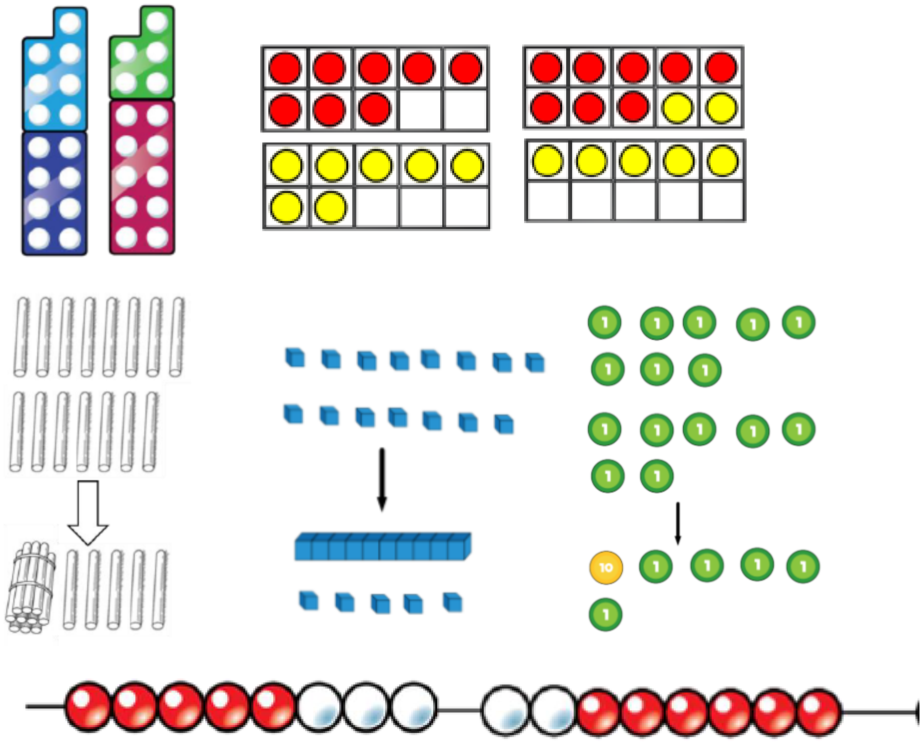
Rosehill Junior School

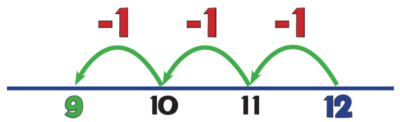
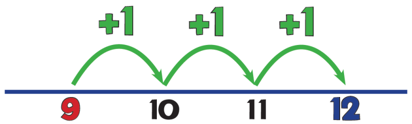
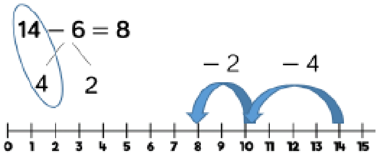
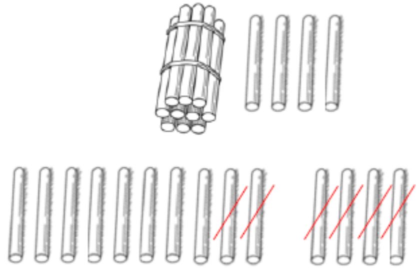
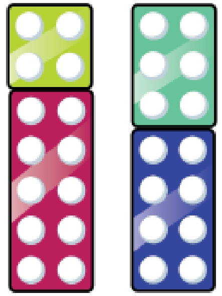
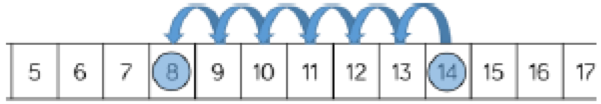
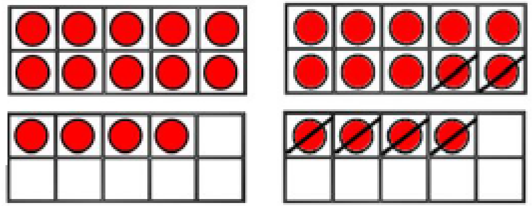
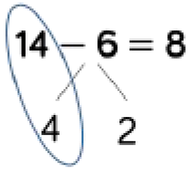
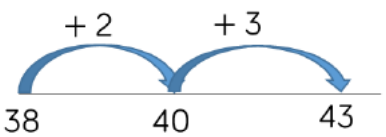
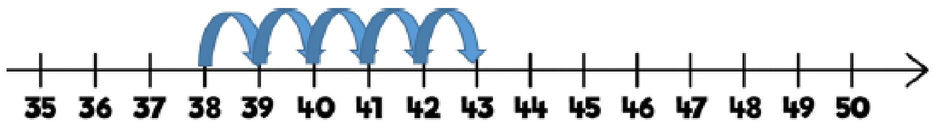
MATHS

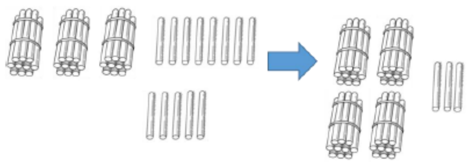
Calculation Policy

Addition & Subtraction

Year 1 Age-Related Expectations		
Objective & Expected Outcome	**Models & Images**	**Notes**
Add 1 digit numbers within 10 Use concrete apparatus leading to a number sentence. 		When exploring number bonds to 10, children must explore the fact families as shown in the bar models. This includes identifying missing numbers e.g. 7 = ? - 9 As well as supporting with addition, Numicon helps children to start to recognise odd and even numbers.
Subtract 1 digit numbers within 10 Use concrete apparatus leading to a number sentence.	$7 - 3 = 4$ 	Ten frames, number tracks and bead strings support the visual act of reducing the number with subtraction. Using single Dienes bricks (the ones) would also be helpful for 'taking away'.

		
Add 1 and 2-digit numbers to 20  8 + 5 = 13 leading to 		As well as supporting children with addition Numicon helps children to start to recognise odd and even numbers. When adding one-digit numbers that cross 10, it is important to highlight the importance of ten ones equalling one ten. Different manipulatives can be used to represent this exchange. Use concrete resources alongside number lines to support children in understanding how to partition their jumps. To strengthen understanding of place value, children would partition the second number when adding mentally, making up the number bond to 10.

Subtract 1 and 2-digit numbers to 20 counting back  **12 - 3 = 9** counting on  **12 - 9 = 3** leading to 	  14 − 6 = 8   	When the children's understanding of place value is insecure, counting on will offer more success than counting backwards. When subtracting one-digit numbers that cross 10, it is important to highlight the importance of ten ones equalling one ten. Children should be encouraged to find the number bond to 10 when partitioning the subtracted number. Ten frames and number lines are particularly useful for this.
Year 2 Age-Related Expectations		
Objective & Expected Outcome	**Models & Images**	**Notes**
Add 1 digit and 2-digit numbers to 100 	 38 + 5 = 43	When adding single digits to a two-digit number, children should be encouraged to count on from the larger number. They should also apply their knowledge of number bonds to add more efficiently e.g. 9 + 5 is the same as 9 + 1 + 4. Children need to begin to



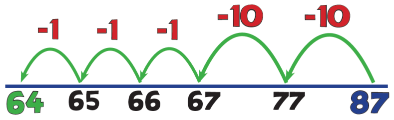
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

explore patterns and recognise that if 3 + 5 is 8 then 30 + 50 will be 80.

Hundred squares, Numicon, ten frames and straws all support children in finding the number bonds.

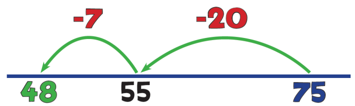
Subtract a 1-digit number from a 2-digit number (up to 100)

counting back



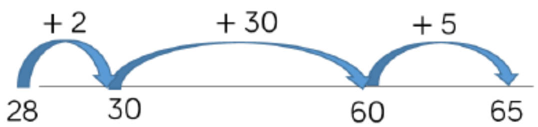
87 - 23 = 64

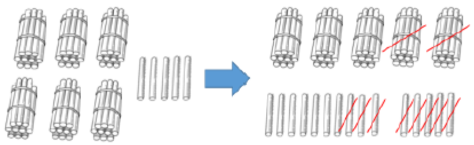
counting on



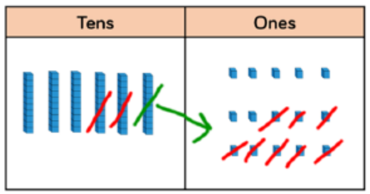
75 - 27 = 48

leading to

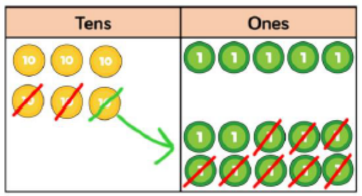




65 – 28 = 37



$$\begin{array}{r} {}^{5}\cancel{6}{}^{1}5 \\ -\ 28 \\ \hline 37 \\ \hline \end{array}$$



At this stage, encourage children to use the formal column method when calculating alongside straws, base 10 (Dienes) or place value counters. As the numbers become larger, the straws become less efficient.

Children can also use a blank number line to count on to find the difference. Encourage them to jump in multiples of 10 to become more efficient.

When children use a number line, if they struggle to add 30 all at once, they need to be taught to chunk it into +10 then +10 then +10 with three separate jumps on the line.

Add two 2-digit numbers to 100 (strategies leading to columnar)

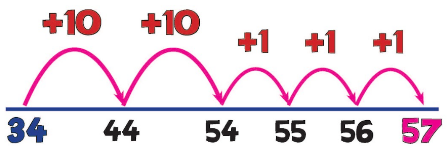
$$\begin{array}{rcc} & 40 & 3 \\ + & 20 & 4 \\ \hline & 60 + & 7 = 67 \\ \hline \end{array}$$

$43 + 24 = 67$

leading to

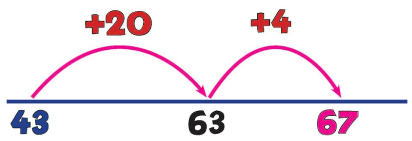
$$\begin{array}{rr} & 78 \\ + & 46 \\ \hline & 124 \\ \hline & {}_{1\ 1} \end{array}$$

$$\begin{array}{rcc} & T & O \\ & 7 & 8 \\ + & 4 & 6 \\ \hline & 12 & 4 \\ \hline & 1 & \end{array}$$



$34 + 23 = 57$

or



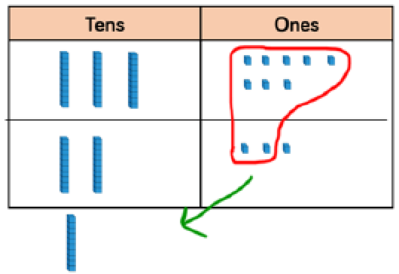
$43 + 24 = 67$

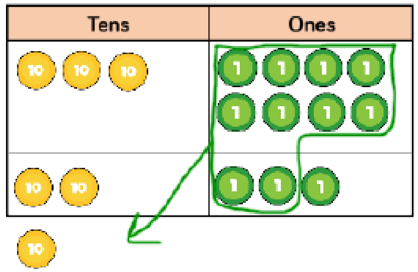
$43 + 24 = 67$

leading to

$43 + 20 = 63$
$63 + 4 = 67$

without the visual



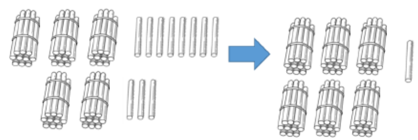


Start by adding multiples of 10.

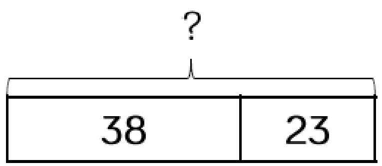
34 + 20 = 54 or 47 + 40 = 87

to allow children to consolidate their understanding of increasing a number by 10.

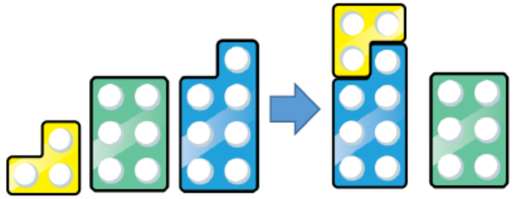
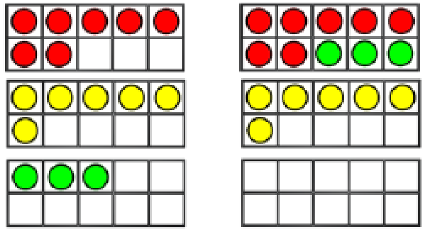
Some children may need to start with add bundles together, e.g.



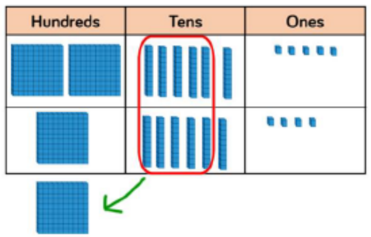
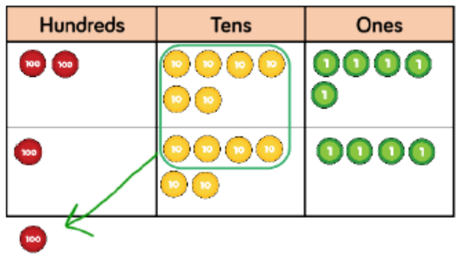
Bar models such as:

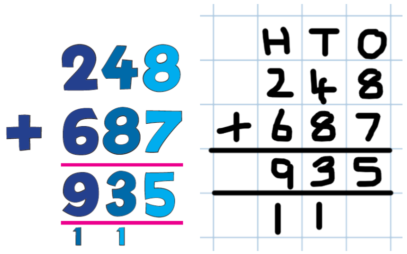


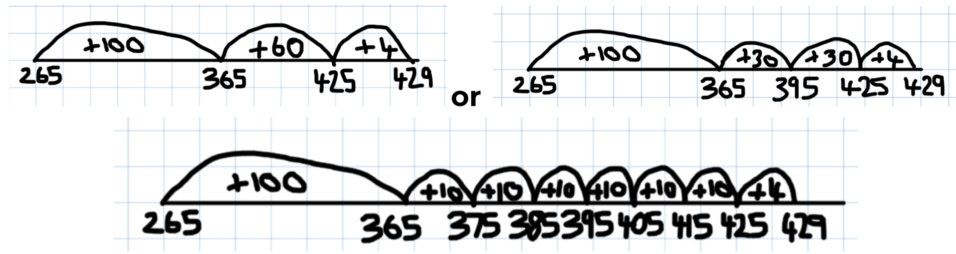
allow children to really see the calculation and understand the parts that make up the whole but they don't help them to actually carry out the calculation at this stage.

Add three 1-digit numbers $7 + 6 + 3 = 16$ 10	  $7 + 6 + 3 = 16$ 10	When adding three 1-digit numbers, children should be encouraged to look for number bonds to 10 or doubles, to help them to add the numbers more efficiently. Not only does this strengthen the children's understanding of number bonds but it supports their understanding of commutativity. Manipulatives that highlight number bonds to 10 are effective when adding three 1-digit numbers.

Year 3 Age-Related Expectations

Objective & Expected Outcome	Models & Images	Notes
Add numbers with up to 3-digits (strategies leading to columnar) 200 40 8 + 600 40 7 800 80 15 248 + 647 = 895 leading to	$265 + 164 = 429$   If children are struggling to see the numbers, revert back to number lines. For example, 265 + 164 will become 265 + 100 + 60 (maybe in blocks of 10 if needed) + 4. See examples below	Make sure that the children are secure with the Year 2 methods **before** moving onto these. Base 10 (Dienes) and Place Value counters are the most effective manipulatives when adding three-digit numbers. They allow children to see the calculation **before** moving onto the column methods. When using place value counters you can either use the place value counters with the numbers written on or put plain counters on a place value grid.

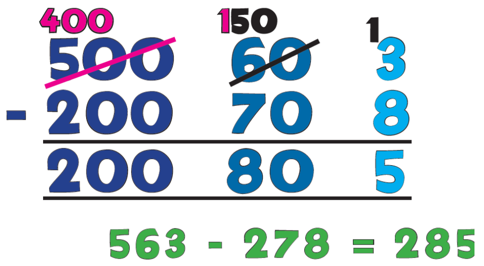




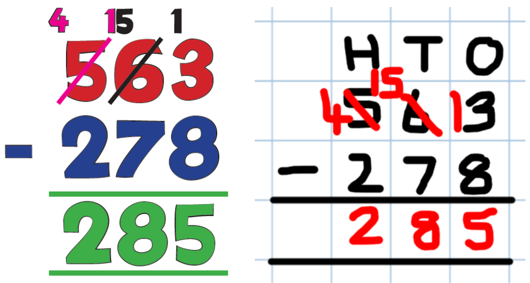
Ensure that the children write out the calculation alongside any concrete resources so that they can see the links to the written method.

The numbers can be written in the jumps or above the jumps.

Subtract numbers with up to 3-digits

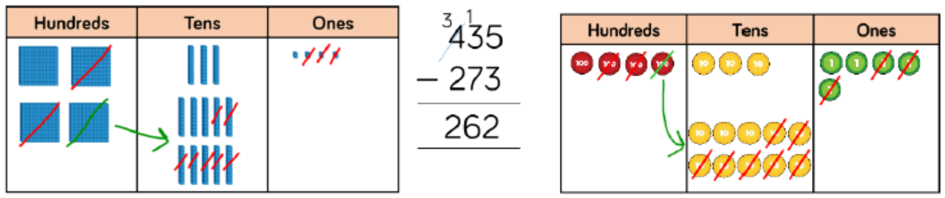


leading to

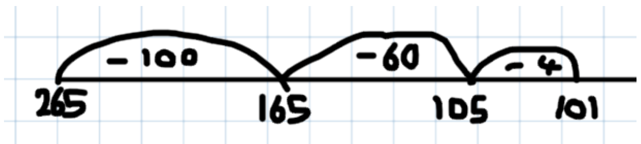


The position of the exchanges doesn't have to be exact (as long as it is in the right column). If you don't have the HTO written above, it gives you a little more space to write them in.

435 - 273 = 162

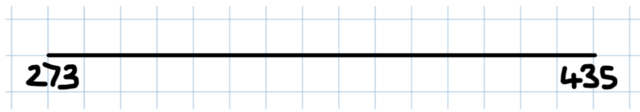


If children are struggling to see the numbers, revert back to number lines. For example, 265 - 164 will become 265 - 100 - 60 (maybe in blocks of 10 if needed) - 4. See example below.



If children struggle to count backwards on a numberline, encourage them to **count on** from the smallest number using their knowledge of number bonds.

Step 1:



Base 10 (Dienes) and place value counters (or plain counters) on a place value grid are the most effective manipulative when subtracting numbers up to 3 digits.

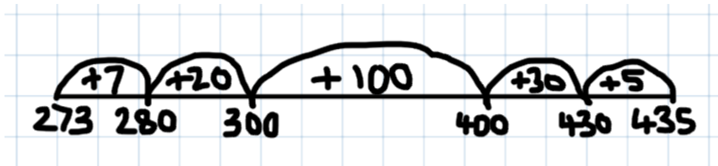
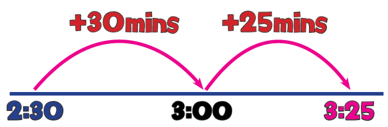
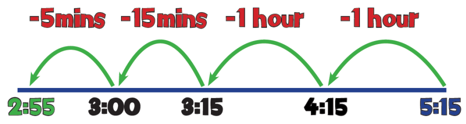
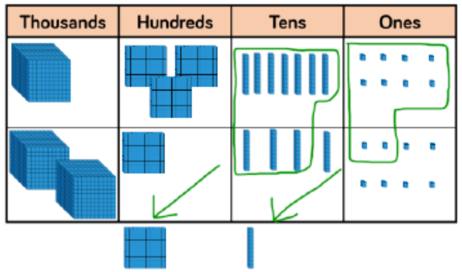
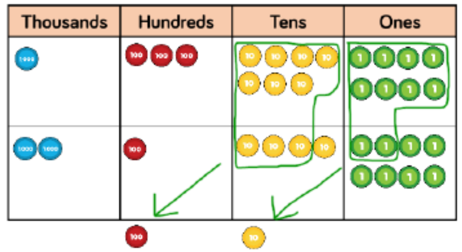
Ensure that children write their calculation out alongside any concrete resources so that they can see the links to the written method.

When using the column method for subtraction, ensure use of the correct vocabulary of exchanging

Using a different colour whilst exchanging also helps the children to see the exchanges clearly.

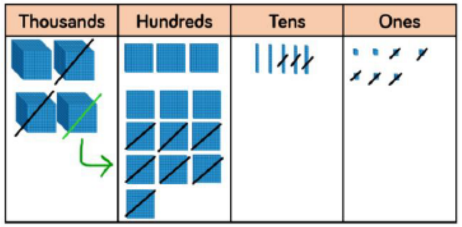
The numbers can be written in the jumps or above the jumps.

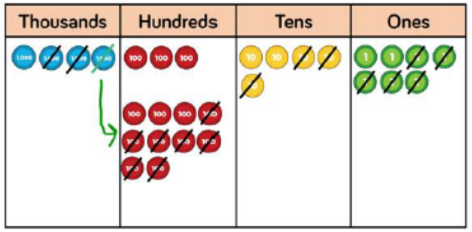
The size of the jumps are not something for the children to worry about when drawing out number lines. It matters not if

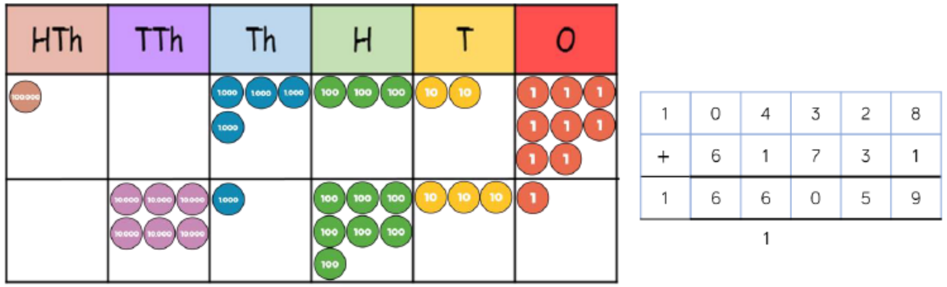
	 **Step 2:** with the answer in or above the jumps	the 60 jump is as big as the 100 jump, as long as the children have room to write their answers.
Calculating duration of time	 2:30pm + 55mins = 3:25pm  5:15pm - 2hr 20mins = 2:55pm	When adding and subtracting time, the easiest method to use is the number line as shown.
Year 4 Age-Related Expectations		
Objective & Expected Outcome	**Models & Images**	**Notes**
Add numbers with up to 4-digits leading to $\begin{array}{r} 1378 \\ +\ 2148 \\ \hline 3526 \\ \hline {}_{1\,1\ } \end{array}$	$1,378 + 2,148 = 3,526$  If children are struggling to see the numbers, revert back to number lines like for previous years.	Children struggling with the column method (particularly carrying over) will need to use Dienes or Place Value counters to see the physical exchange of a ten into 10 ones, etc. When children are using concrete resources, ensure that they write out the calculation so that they can see the links to the written method.
Subtract numbers with up to 4 digits	$4,357 - 2,735 = 1,622$	Base 10 and place value counters (or plain counters on a place value grid) are the most effective manipulatives when subtracting numbers with up to 4 digits.

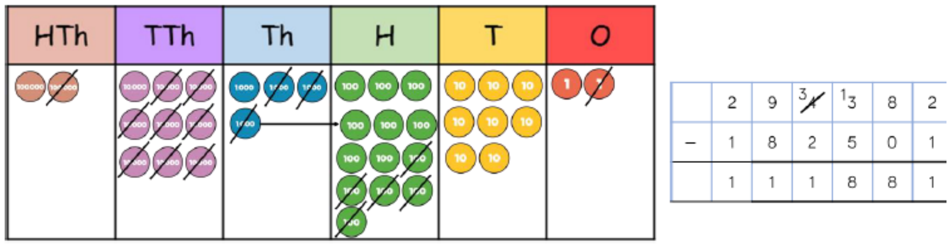
<table>
<tr>
<td>

$$\begin{array}{r} {}^{3}\cancel{4}\,{}^{1}357 \\ -\;2735 \\ \hline 1622 \\ \hline \end{array}$$

leading to</td>
<td>



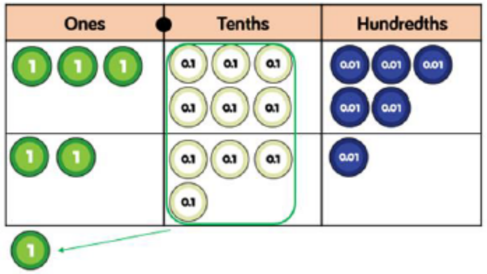
If children are struggling to see the numbers, revert back to number lines like for previous years.</td>
<td>Ensure children write out their calculation alongside any concrete resources so they can see the links.</td>
</tr>
<tr>
<td colspan="3">Year 5 Age-Related Expectations</td>
</tr>
<tr>
<td>Objective & Expected Outcome</td>
<td>Models & Images</td>
<td>Notes</td>
</tr>
<tr>
<td>Add numbers with more than 4 digits</td>
<td>104,328 + 61,731 = 166,059

</td>
<td>Place value counters or plain counters on a place value grid are the most effective concrete resources when adding numbers with more than 4 digits.

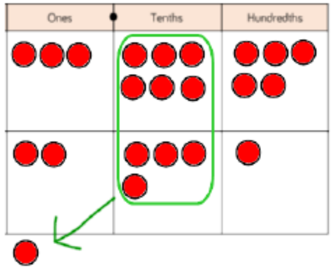
At this stage, the children should be encouraged to work in the abstract, using the column method to add larger numbers efficiently.</td>
</tr>
<tr>
<td>Subtract numbers with more than 4 digits</td>
<td>294,382 – 182,501 = 111,881

</td>
<td>Place value counters or plain counters on a place value grid are the most effective concrete resources when subtracting numbers with more than 4 digits.

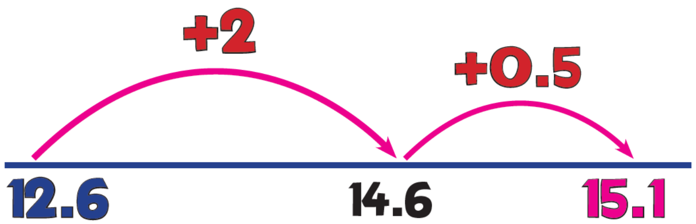
At this stage, the children should be encouraged to work in the abstract, using the column method to subtract larger numbers efficiently.</td>
</tr>
</table>

<table>
<tr>
<td>Add numbers with up to 3 decimal places

$$\begin{array}{r} 3.65 \\ +\ 2.41 \\ \hline 6.06 \\ \hline {}_{1}\ \ \ \ \end{array}$$</td>
<td>$3.65 + 2.41 = 6.06$



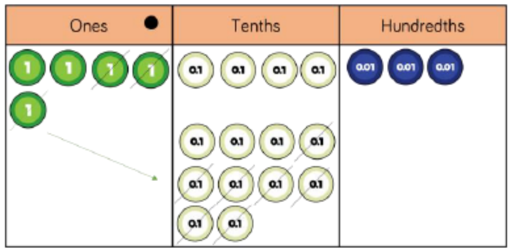


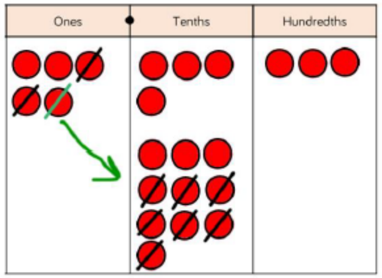


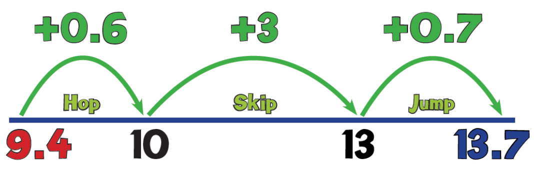
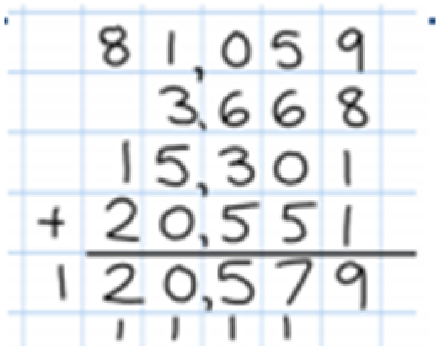
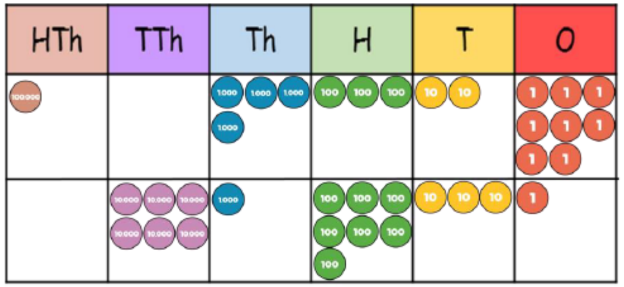
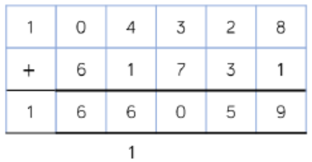
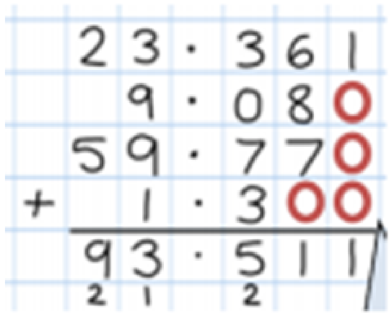
$12.6 + 2.5 = 15.1$</td>
<td>Place value counters and plain counters on a place value grid are the most effective manipulatives when adding decimals with 1,2 and then 3 decimal places.

Ensure children have experience of adding decimals with a variety of decimal places. This includes putting this into context when adding money and other measures</td>
</tr>
<tr>
<td>Subtract numbers with up to 3 decimal places

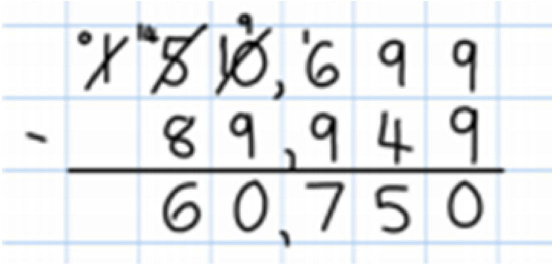
$$\begin{array}{r} {}^{4}\cancel{5}.{}^{1}43 \\ -\ 2.7\ \ \\ \hline 2.73 \\ \hline \end{array}$$</td>
<td>$5.43 - 2.7 = 2.73$

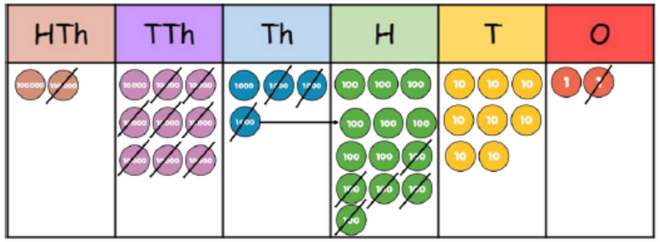



</td>
<td>Place value counters and plain counters on a place value grid are the most effective manipulative when subtracting decimals with 1, 2 and 3 decimal places</td>
</tr>
</table>

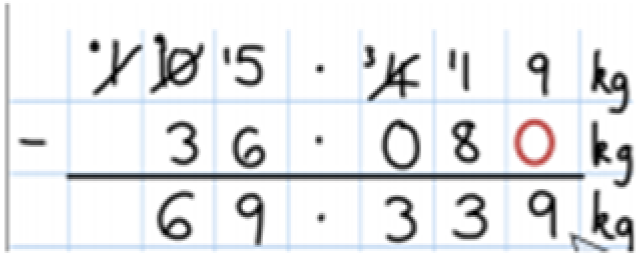
<table>
<tr><td></td><td>
13.7 - 9.4 = 4.3</td><td></td></tr>
<tr><td colspan="3">Year 6 Age-Related Expectations</td></tr>
<tr><td>Objective & Expected Outcome</td><td>Models & Images</td><td>Notes</td></tr>
<tr><td>Add several numbers with more than 4 digits
</td><td>104,328 + 61,731 = 166,059
</td><td>If children are not at this level, look back to the Year 5 Age-Related Expectations for models and images.

When adding decimals, ensure that zeros are used as place holders</td></tr>
<tr><td>Subtract several numbers with more than 4 digits.</td><td>294,382 – 182,501 = 111,881</td><td>If children are not at this level, look back to the Year 5</td></tr>
</table>





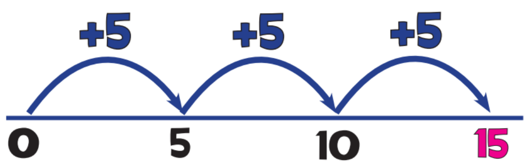
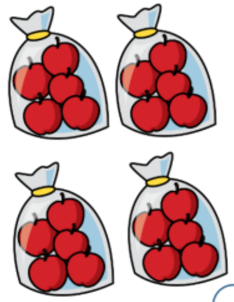
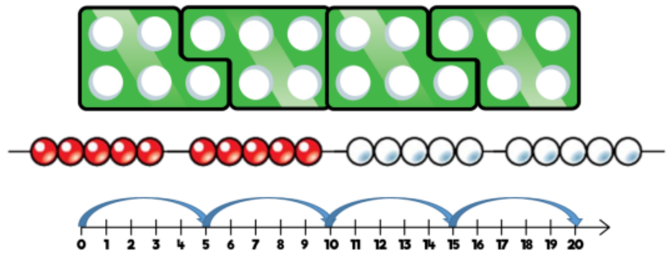
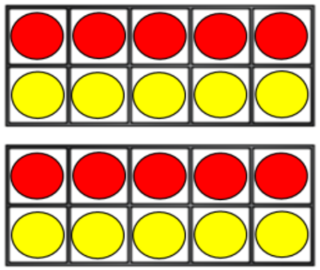
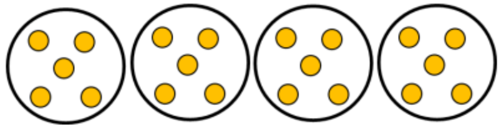
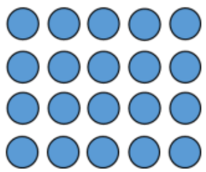
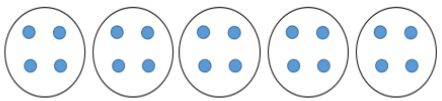
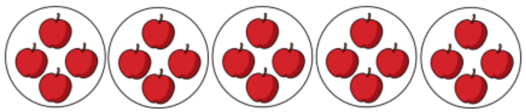
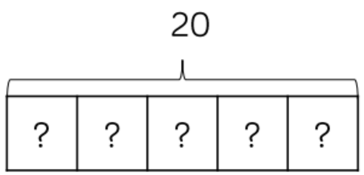
	2	9	$^{3}\cancel{4}$	$^{1}3$	8	2
−	1	8	2	5	0	1
	1	1	1	8	8	1

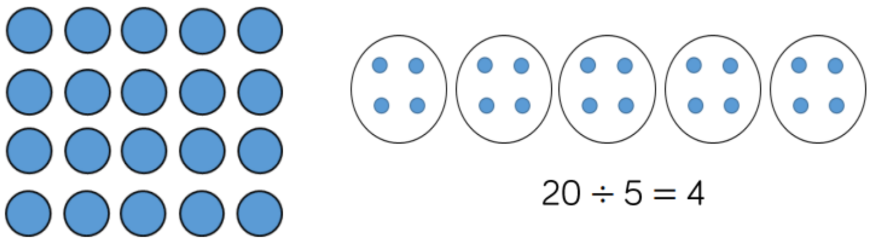
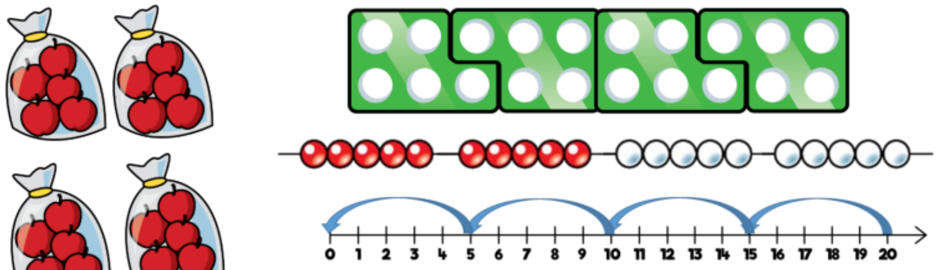
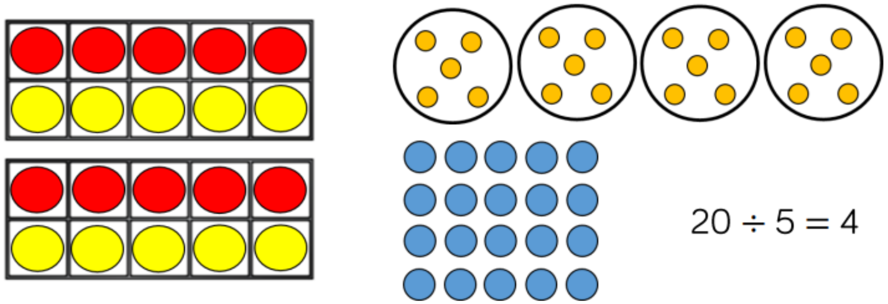


Age-Related Expectations for models and images.

When adding decimals, ensure that zeros are used as place holders

Multiplication & Division

Year 2 Age-Related Expectations		
Objective & Expected Outcome	**Models & Images**	**Notes**
Solve one-step problems with multiplication  $3 \times 5 = 5 + 5 + 5 = 15$ **leading to**  $3 \times 5 = 5 + 5 + 5 = 15$	  One bag holds 5 apples. How many apples do 4 bags hold?    $5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$	Children represent multiplication as repeated addition in many different ways In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record multiplication formally. In Year 2, children are introduced to the multiplication symbol. Children can use counters to explore arrays.
Solve one-step problems using division (sharing)  $20 \div 5 = 4$	 	Children solve problems by sharing amounts into equal groups. In year 1, children use concrete and pictorial representations to solve problems. They are not expected to record divisions formally.

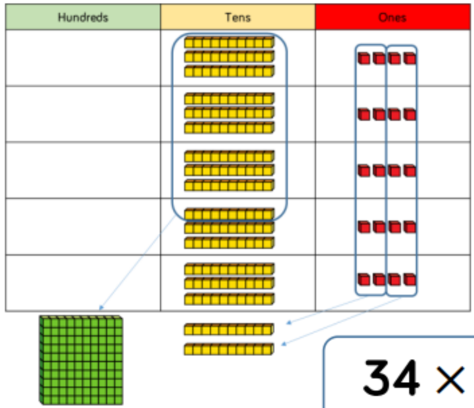
	There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag?  	In year 2, children are introduced to the division symbol. The sharing method reinforces the 'one for you, one for you, one for you' concept.
Solve one-step problems using division (grouping)	 There are 20 apples altogether. They are put in bags of 5. How many bags are there?  	Children solve problems by grouping and counting the number of groups. Grouping encourages children to count in multiples and links to repeated subtraction on a number line. They can use concrete representations in fixed groups such as number shapes which helps to show the link between multiplication and division. The grouping method encourages counting in multiples. '5 for you, 5 for you' until they have all gone.

Year 3 Age-Related Expectations

Objective & Expected Outcome	Models & Images	Notes

Multiply a 2-digit number by a 1-digit number

	H	T	O	
		3	4	
×			5	
	1	7	0	
	1	2		



$34 \times 5 = 170$

	H	T	O		
		3	4		
×			5		
		2	0	(5 × 4)	
+	1	5	0	(5 × 30)	
	1	7	0		

$$15 \times 5 = 75$$
$$10 \times 5 = 50$$
$$5 \times 5 = 25$$
$$50 + 25 = 75$$

$$\begin{array}{rl} 65 & \\ \times \quad 7 & \\ \hline 35 & 5 \times 7 \\ 420 & 60 \times 7 \\ \hline 455 & \end{array}$$

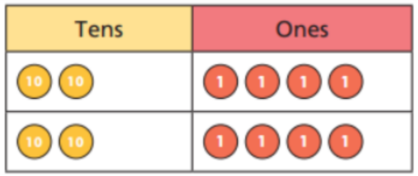
Teachers may decide to first look at the expanded column method before moving on to the short multiplication method.

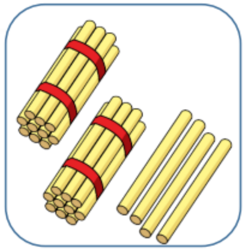
The place value counters should be used to support the understanding of the method rather than supporting the multiplication, as children should use known times tables (x2, x5, x10 at Y2 and x3, x4, x8 at Y3)

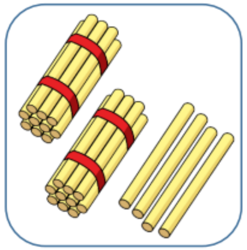
Children can also use their knowledge of partitioning to multiply a 2-digit number by a 1-digit number.

When children use the expanded version, they must write their multiplication at the side of their columns as shown in the examples.

Divide a 2-digit by a 1-digit (no exchanging)



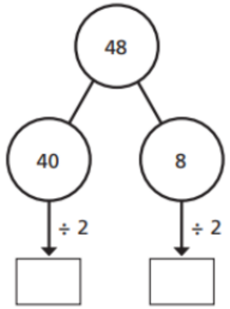
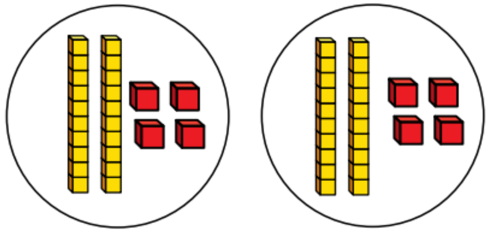
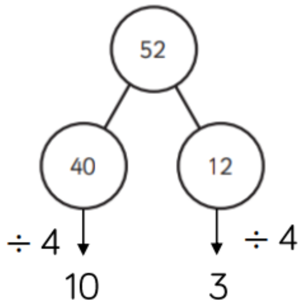
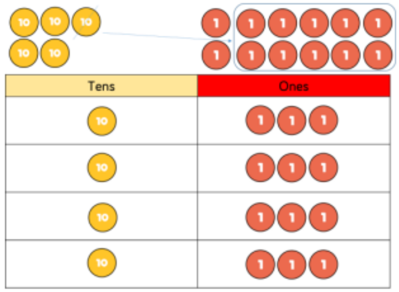




When dividing larger numbers, children can use manipulatives that allow them to partition into tens and ones.

Straws, Base 10, linking cubes and place value counters can all be used to share numbers into equal groups.

Part-whole models can provide children with a clear written method that matches the concrete representation.

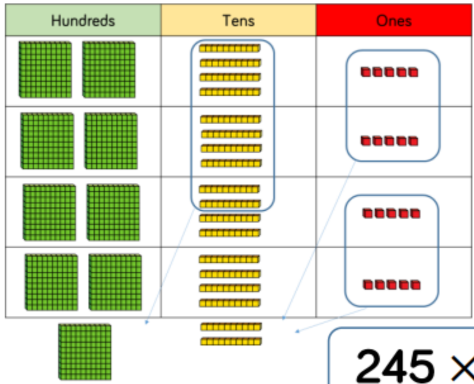
	 $48 \div 2 = 24$ 	
Divide a 2-digit by a 1-digit (with exchanges but no remainders)	 $52 \div 4 = 13$  $10 + 3 = 13$  	When dividing numbers involving an exchange, children can use Base 10 and place value counters to exchange one ten for ten ones. Children should start with the equipment outside the place value grid before sharing the tens and ones equally between the rows.

<table>
<tr><th colspan="3">Year 4 Age-Related Expectations</th></tr>
<tr><th>Objective & Expected Outcome</th><th>Models & Images</th><th>Notes</th></tr>
<tr>
<td>

Multiply a 3-digit number by a 1-digit number

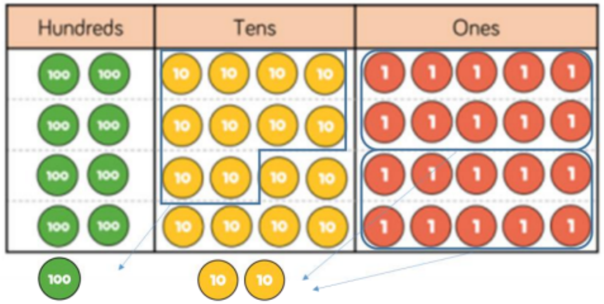
<table>
<tr><td></td><td>H</td><td>T</td><td>O</td></tr>
<tr><td></td><td>2</td><td>4</td><td>5</td></tr>
<tr><td>×</td><td></td><td></td><td>4</td></tr>
<tr><td></td><td>9</td><td>8</td><td>0</td></tr>
<tr><td></td><td>1</td><td>2</td><td></td></tr>
</table>

</td>
<td>



<table>
<tr><td></td><td>H</td><td>T</td><td>O</td></tr>
<tr><td></td><td>2</td><td>4</td><td>5</td></tr>
<tr><td>×</td><td></td><td></td><td>4</td></tr>
<tr><td></td><td>9</td><td>8</td><td>0</td></tr>
<tr><td></td><td>1</td><td>2</td><td></td></tr>
</table>

$245 \times 4 = 980$



</td>
<td>

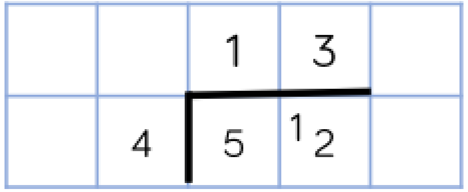
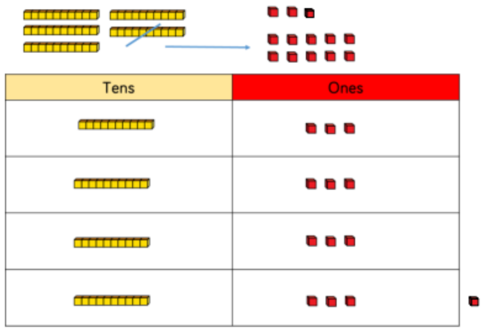
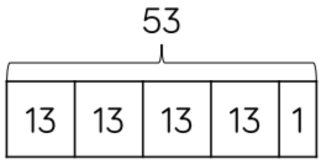
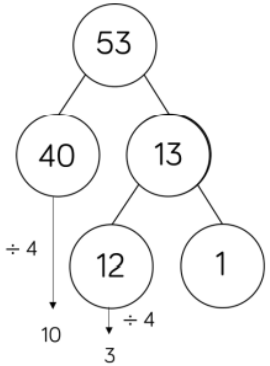
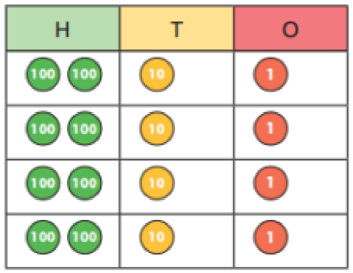
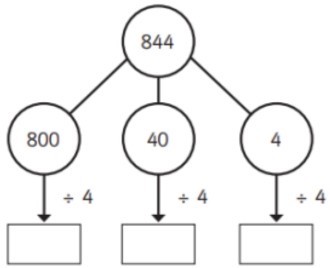
When moving on to 3-digit by 1-digit multiplication, encourage children to move towards the short, formal written method.

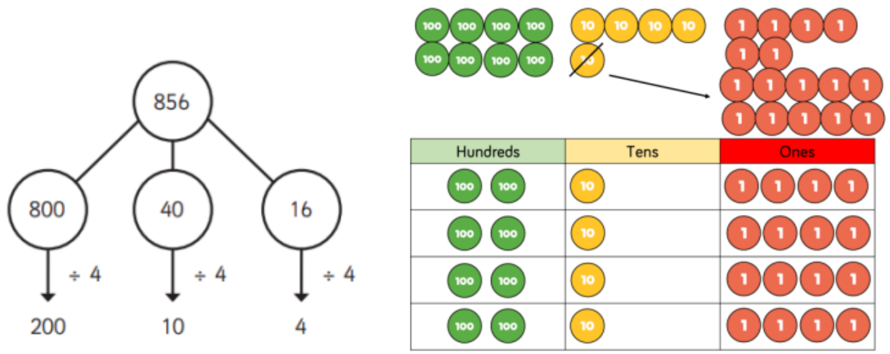
Base 10 and place value counters continue to support the understanding of the written method, as children should use known times tables (x2, x5, x10 at Y2 and x3, x4, x8 at Y3)

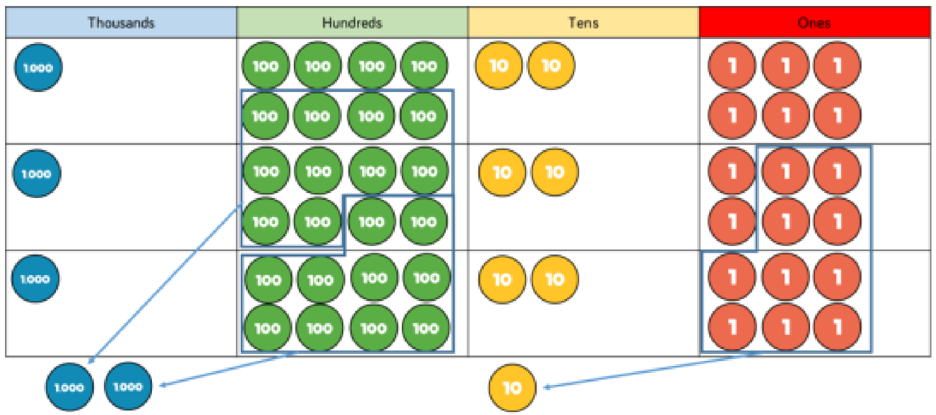
Limit the number of exchanges needed in the questions and move children away from resources when multiplying larger numbers.

If children are multiplying larger numbers and struggling with their times tables, encourage the use of multiplication grids so that children can focus on the use of the written method.

</td>
</tr>
</table>

Divide a 2-digit by a 1-digit with remainders 	$53 \div 4 = 13\ r1$	When dividing numbers with remainders, children can use Base 10 and place value counters to exchange one ten for ten ones. Starting with equipment outside the place value grid will highlight remainders, as they will be left outside the grid once the equal groups have been made. Flexible partitioning in a part-whole model supports this method. When using the short division method (commonly known as the bus-stop method), children use grouping. Starting with the largest place value, they group by the divisor.
Divide a 3-digit by a 1-digit with remainders 	Modelling without exchanges **844 divided by 4 = 211**  Modelling with exchanges: **856 divided by 4 = 214**	Children can continue to use place value counters to share 3-digit numbers into equal groups. Children should start with the equipment outside of the place value grid before sharing the hundreds, tens and ones equally between the rows. This method can also help to highlight remainders.

<table>
<tr><td></td><td>
</td><td></td></tr>
<tr><th colspan="3">Year 5 Age-Related Expectations</th></tr>
<tr><th>Objective & Expected Outcome</th><th>Models & Images</th><th>Notes</th></tr>
<tr><td>Multiply a 4-digit number by a 1-digit number

leading to
<table>
<tr><td></td><td>Th</td><td>H</td><td>T</td><td>O</td></tr>
<tr><td></td><td>1</td><td>8</td><td>2</td><td>6</td></tr>
<tr><td>×</td><td></td><td></td><td></td><td>3</td></tr>
<tr><td></td><td>5</td><td>4</td><td>7</td><td>8</td></tr>
<tr><td></td><td>2</td><td></td><td>1</td><td></td></tr>
</table></td><td>$1,826 \times 3 = 5,478$

</td><td>When multiplying 4-digit numbers, place value counters are the best manipulative to use to support children in their understanding of the formal written method.

If children are multiplying larger numbers and struggling with their times tables, encourage the use of multiplication grids so that children can focus on the use of the written method.</td></tr>
<tr><td>Multiply a 4-digit number by a 2-digit number

leading to</td><td>$2,739 \times 28 = 76,692$</td><td>When multiplying 4-digits by 2-digits, children should be confident in the written method.</td></tr>
</table>

TTh	Th	H	T	O
	2	7	3	9
×			2	8
$_{2}2$	$_{5}1$	$_{3}9$	$_{7}1$	2
$_{1}5$	4	$_{1}7$	8	0
7	6	6	9	2
		1		

TTh	Th	H	T	O
	2	7	3	9
×			2	8
$_{2}2$	$_{5}1$	$_{3}9$	$_{7}1$	2
$_{1}5$	4	$_{1}7$	8	0
7	6	6	9	2
		1		

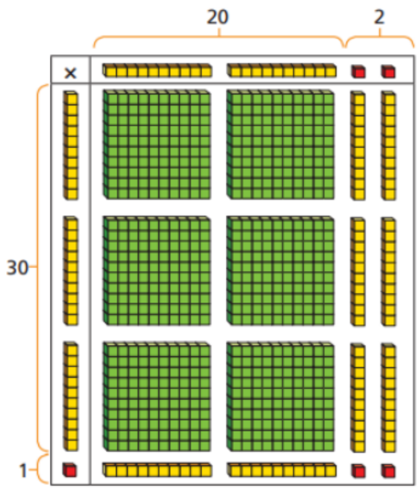
If they are still struggling with times tables, provide multiplication grids to support while they are focusing on learning the method.

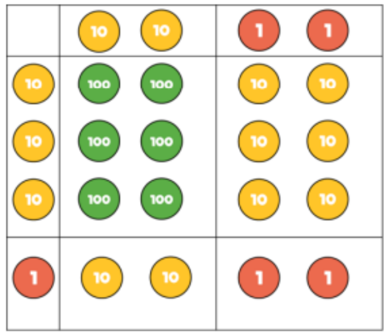
Consider where exchanged digits are placed and make sure this is consistent

Multiply a 2-digit number by a 2-digit number

leading to

	H	T	O
		2	2
×		3	1
		2	2
	6	6	0
	6	8	2





x	40	3
60	2400	180
5	200	15

2400
180
200
\+ 15
2795

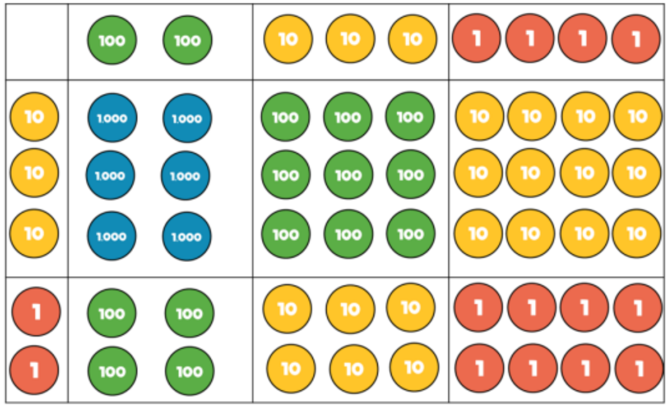
When multiplying a multi-digit number by 2-digits, use the area model to help children understand the size of the numbers they are using. This links to finding the area of a rectangle by finding the space covered by the Base 10.

The grid method matches the area model as an initial written method before moving on to the formal written method for multiplication.

Multiply a 2-digit number by a 3-digit number

leading to

Th	H	T	O
	2	3	4
×		3	2
	4	6	8
$_{1}7$	$_{1}0$	2	0
7	4	8	8



Th	H	T	O
	2	3	4
×		3	2
	4	6	8
$_{1}7$	$_{1}0$	2	0
7	4	8	8

×	200	30	4
30	6,000	900	120
2	400	60	8

$234 \times 32 = 7{,}488$

Children can continue to use the area model when multiplying 3-digits by 2-digits.

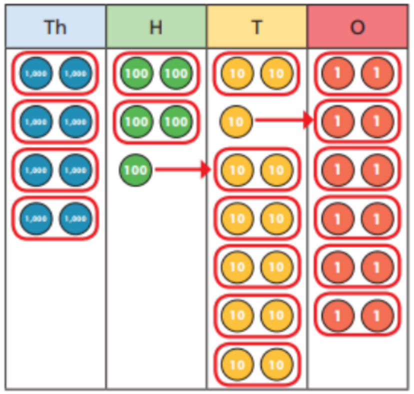
Place value counters become more efficient to us but Base 10 can still be used to highlight the size of the numbers.

Encourage children to move towards the formal written method, seeing the links with the grid method.

Divide a 4-digit by a 1-digit with remainders

leading to

	4	2	6	6
2	8	5	$^{1}3$	$^{1}2$



	4	2	6	6
2	8	5	$^{1}3$	$^{1}2$

$8{,}532 \div 2 = 4{,}266$

Place value counters or plain counters can be used on a place value grid to support children to divide 4-digits by a 1-digit number. Children can also draw their own counters and group them through a more pictorial method.

Children should be encouraged to move away from the concrete and pictorial when dividing numbers with multiple exchanges. As you can see in the image, it complicates things.

Year 6 Age-Related Expectations

Objective & Expected Outcome

Divide any number by 2 digits.

		0	3	6
	12	4	$^{4}3$	$^{7}2$

Models & Images

$$7{,}335 \div 15 = 489$$

	0	4	8	9
15	7	$^{7}3$	$^{13}3$	$^{13}5$

15	30	45	60	75	90	105	120	135	150

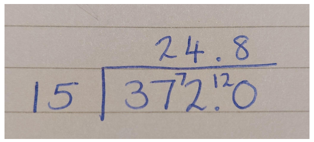
		0	3	6	
1	2	4	3	2	
	–	3	6	0	(×30)
			7	2	
	–		7	2	(×6)
				0	

$12 \times 1 = 12$
$12 \times 2 = 24$
$12 \times 3 = 36$
$12 \times 4 = 48$
$12 \times 5 = 60$
$12 \times 6 = 72$
$12 \times 7 = 84$
$12 \times 8 = 96$
$12 \times 7 = 108$
$12 \times 10 = 120$

$$432 \div 12 = 36$$

			2	4	$\frac{4}{5}$
1	5	3	7	2	
	–	3	0	0	
			7	2	
	–		6	0	
			1	2	

$$372 \div 15 = 24\frac{4}{5}$$



$1 \times 15 = 15$
$2 \times 15 = 30$
$3 \times 15 = 45$
$4 \times 15 = 60$
$5 \times 15 = 75$
$10 \times 15 = 150$

Notes

When children begin to divide larger numbers, written methods become the most accurate as concrete and pictorial representations over-complicate things and become less effective.

As well as the short written method (commonly known as the bus-stop method), children can also divide by 2-digit numbers using long division.

Children can write out multiples to support their calculations with larger remainders.

Children will also solve problems with remainders where the quotient can be rounded as appropriate.

When a remainder is left at the end of a calculation, children can either leave it as a remainder or convert it to a fraction or a decimal. This will depend on the context of the question.

Children can also answer questions where the quotient needs to be rounded according to the context.