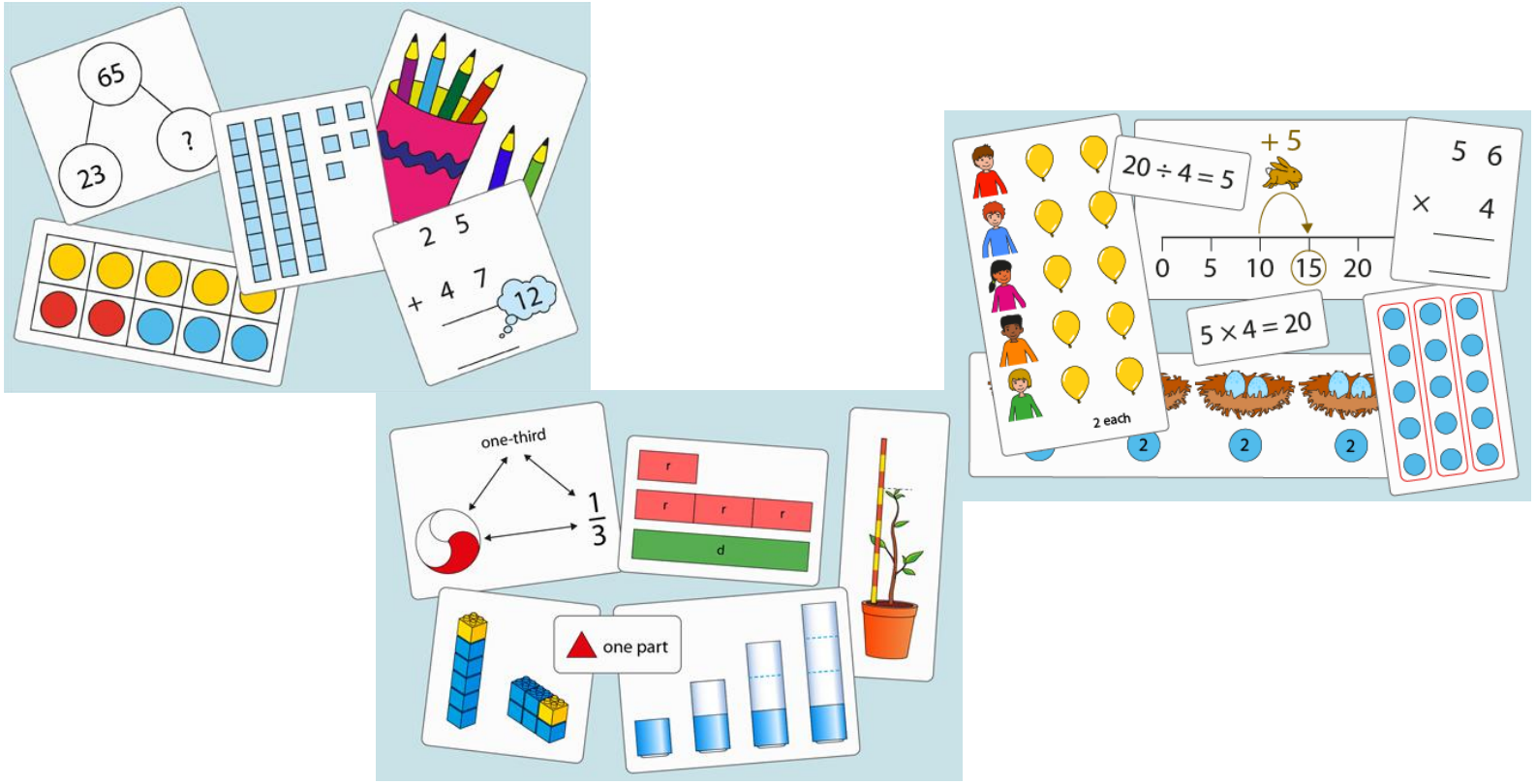
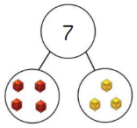
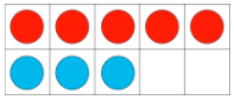
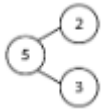
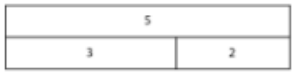
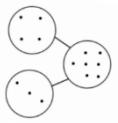
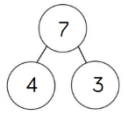
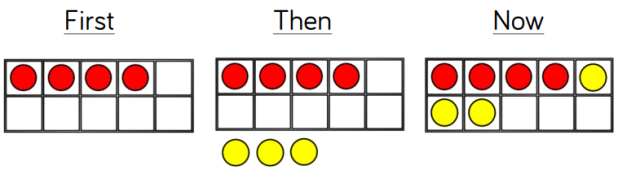
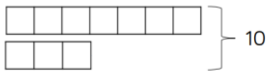
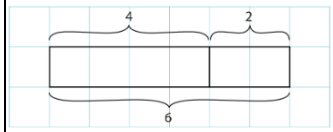
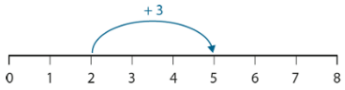
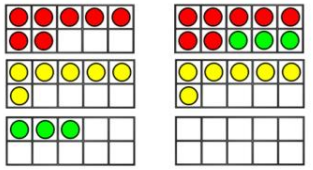
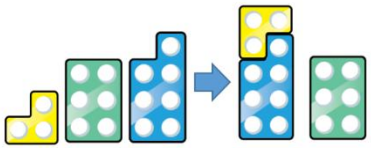
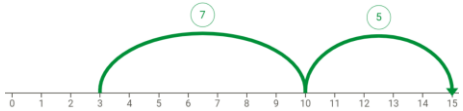
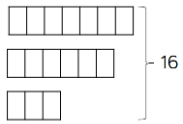
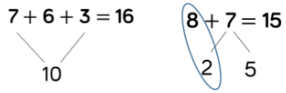
CALCULATION POLICY

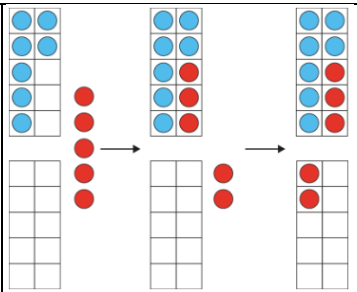
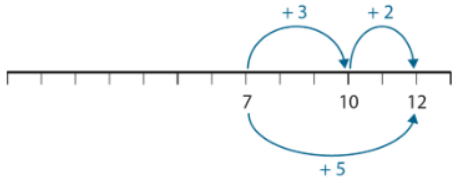
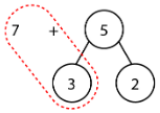
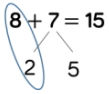
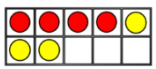
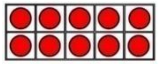
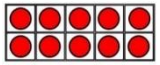
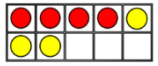
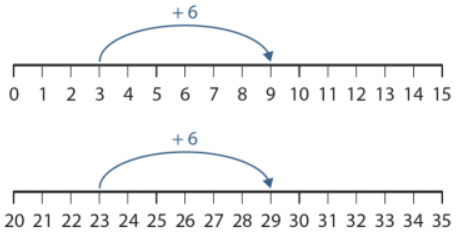
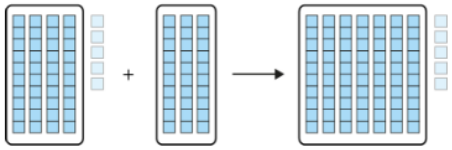
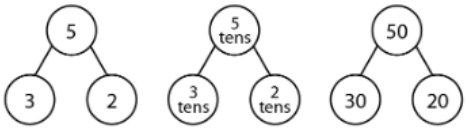


Addition and Subtraction Ready to Progress

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Calculations	add and subtract one-digit and two-digit numbers to 20, including zero	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a) a two-digit number and ones b) a two-digit number and tens c) two two-digit numbers d) adding three one-digit numbers	• add and subtract numbers mentally, including: a) a three-digit number and ones b) a three-digit number and tens c) a three-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	• add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • add and subtract numbers mentally with increasingly large numbers	• perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four operations
Problems	• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = c - 9$	• solve problems with addition and subtraction: a) using concrete objects and pictorial representations, including those involving numbers, quantities and measures b) applying their increasing knowledge of mental and written methods	• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	• solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Addition

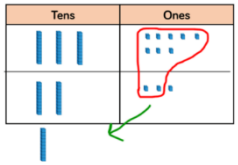
Stem sentences	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
__ is the whole, __ is a part, __ is a part. __ = __ plus __ and __ plus __ = __ There are __ in total. **Year R/1**	 $7 = 4 + 3$ $7 = 3 + 4$  3 + 4 = 7 7 = 3 + 4 4 + 3 = 7 7 = 4 + 3  5 + 3 = 8 8 = 5 + 3 3 + 5 = 8 8 = 3 + 5	 3 + 2 = 5 5 = 3 + 2 2 + 3 = 5 5 = 2 + 3 Bar model    3 + 4 = 7 7 = 3 + 4 4 + 3 = 7 7 = 4 + 3	2 + 3 = 5 5 = 2 + 3 3 + 2 = 5 5 = 3 + 2
First… Then… Now… e.g. **First** there were 4 children on the bus, **then** 3 children got on. **Now** there are 7 children on the bus. **Year R/1**	Role play getting 'on the bus' or use a toy bus.  $4 + 3 = 7$	 $7 + 3 = 10$  4 + 2 = 6 2 + 3 = 5 	7 + 3 = 10 4 + 2 = 6 2 + 3 = 5
We can look for pairs of addends which sum to 10. __ plus __ is equal to 10, then 10 plus __ is equal to __. **Year 2**	 $7 + 6 + 3 = 16$ 10  $7 + 6 + 3 = 16$ 10	3 + 5 + 7 = 15  	3 + 5 + 7 = 3 + 7 + 5 = 10 + 5 = 15  $7 + 6 + 3 = 16$ 10 $8 + 7 = 15$ 2 5

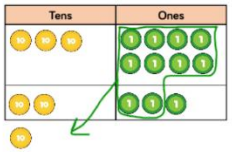
First I partition the __: __ plus __ is equal to __. Then __ plus __ is equal to ten … and ten plus __ is equal to __. **Year 2**	 7 + 5 = 7 + 3 = 10 10 + 2 = 12	  7 + 5 = 7 + 3 = 10 10 + 2 = 12	7 + 5 5 = 2 + 3 7 + 3 = 10 10 + 2 = 12  8 + 7 7 = 2 + 5 8 + 2 = 10 10 + 5 = 15
I know that __ plus __ is equal to __. (single-digit fact) So __ plus __ is equal to __. (related two-digit plus single digit fact) **Year 2**	 4 + 3 = 7   24 + 3 = 20 + 4 + 3 = 27 	 3 + 6 = 9 23 + 6 = 29	24 + 3 = 20 + 4 + 3 = 27
I know that __ plus __ is equal to __. So __ tens plus __ tens is equal to __ tens. __ tens and __ ones, plus __ tens is equal to __ tens and __ ones. **Year 2**	 40 + 30 = 70 so 45 + 30 = 75	 45 + 30 = 75  2 + 3 = 5 2 tens + 3 tens = 5 tens 20 + 30 = 50	20 + 30 2 + 3 = 5 2 tens + 3 tens = 5 tens 20 + 30 = 50 45 + 30 40 + 30 = 70 so 45 + 30 = 75

First I partition the __ into __ and __, and the __ into __ and __.
__ plus __ is equal to __... (addition of the tens)
__ plus __ is equal to __... (addition of the ones)
and __ plus __ is equal to __. (addition of the tens and ones)
So __ plus __ is equal to __. (summary of the overall calculation)

Year 2

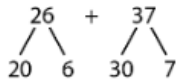
38 + 23 = 61

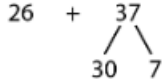




38 = 30 + 8
23 = 20 + 3

3 + 8 = 11 30 + 20 = 50
30 + 20 = 50
50 + 11 = 50 + 10 + 1 = 61





20 + 30 = 50
6 + 7 = 13
50 + 13 = 63

26 + 30 = 56
56 + 7 = 63

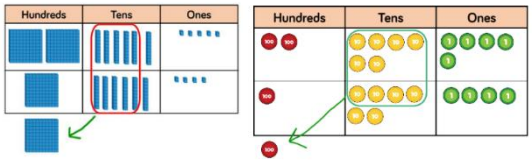
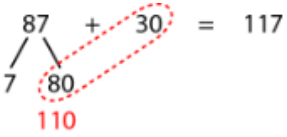
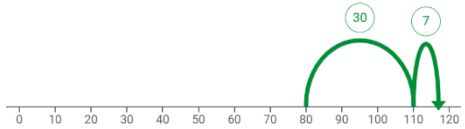
or

20 + 30 = 50
6 + 7 = 13
50 + 13 = 63

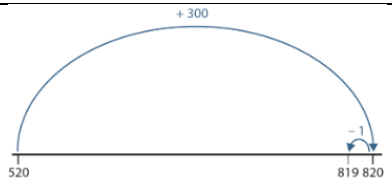
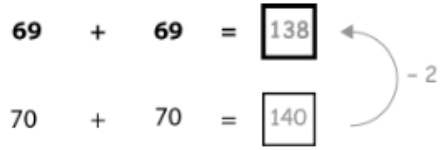
26 + 30 = 56
56 + 7 = 63

38 = 30 + 8
23 = 20 + 3

30 + 20 = 50
3 + 8 = 11
50 + 11 = 50 + 10 + 1 = 61

Stem sentences	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
I know that __ plus __ is equal to __. (single-digit addends) So __ tens plus __ tens is equal to __ tens. (multiple-of-ten addends) __ plus __ is equal to one hundred and __. **Year 3** In column addition we start at the right-hand side.	265 + 164 = 429  5 ones + 4 ones = 9 ones 6 tens + 6 tens = 12 tens = 1 hundred and 2 tens 2 hundreds + 1 hundred = 3 hundreds 3 hundreds + 1 hundred = 4 hundreds 4 hundreds + 2 tens + 9 ones = 429	 87 + 30 = 80 + 7 + 30 = 110 + 7 = 117  87 + 30 = 80 + 30 + 7 = 110 + 7 = 117	265 + 164 429 1

<table>
<tr>
<td>First we add: __ plus __ is equal to __ …
… then we adjust: __ minus __ is equal to __.

Year 3</td>
<td> 
35 + 49 =
34 + 50 =
84</td>
<td> 
520 + 299 =
520 + 300 = 820
820 – 1 = 819</td>
<td>  </td>
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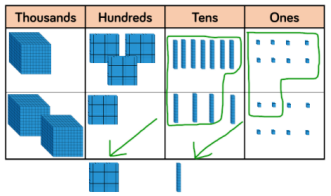
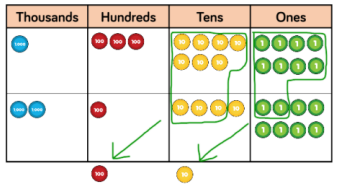
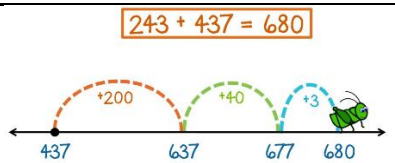
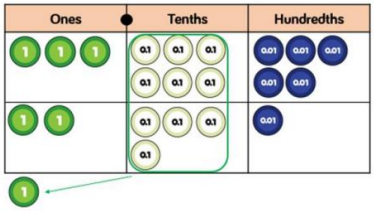
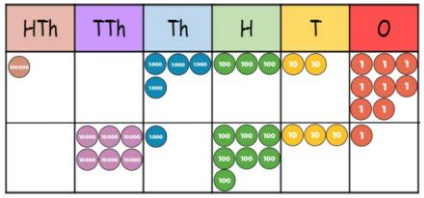
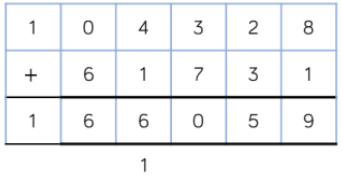
<td>If the column sum is equal to ten or more, we must regroup.

Year 4</td>
<td> 
 
1,378 + 2,148 = 3,526</td>
<td>  </td>
<td>6, 5 8 4
+ 2, 7 3 9
9, 3 2 3
1 1 1

£ 2 4 . 5 5
+ £ 1 7 . 8 2
£ 4 2 . 3 7
1 1</td>
</tr>
<tr>
<td>Add decimals with up to 3 decimal places

Year 5</td>
<td>  </td>
<td></td>
<td>3.65
+ 2.41
6.06
1</td>
</tr>
<tr>
<td>Add numbers with more than 4 digits

Year 5 and 6</td>
<td> 
104,328 + 61,731 = 166,059</td>
<td></td>
<td>  </td>
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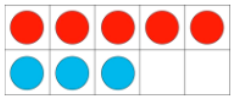
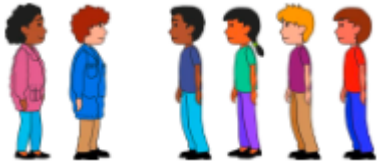
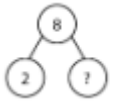
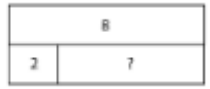
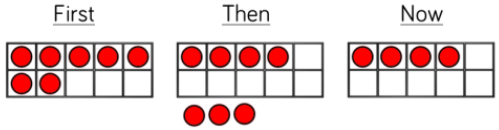
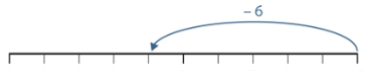
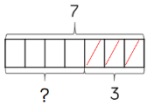
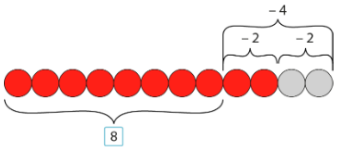
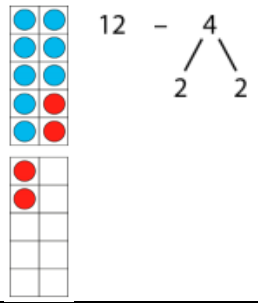
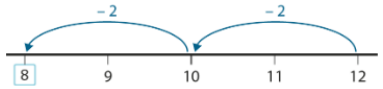
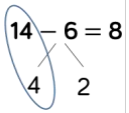
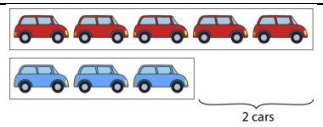
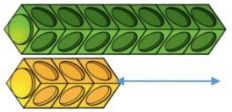
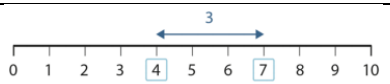
Subtraction

Stem sentences	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
__ is the whole, __ is a part, __ is a part. __ = __ minus __ and __ minus __ = __ **Year R/1**	I have 8 counters. 5 counters are red. How many are blue?  There are 6 children. 2 have their coat on. How many do not have their coat on? 	There are 8 flowers. 2 are red and the rest are yellow. How many are yellow?   8 – 2 = 6	There are 8 flowers. 2 are red and the rest are yellow. How many are yellow? 8 – 2 = 6
First… Then… Now… e.g. **First** there were 4 children in the car, **then** 1 child got out. **Now** there are 3 children in the car. **Year R/1**	 7 – 3 = 4	10 – 6 = 4  7 – 3 = 4 	10 – 6 = 4
We partition the __ into __ and __. First we subtract the __ from __ to get to 10. Then we subtract the remaining __ from 10. We know 10 minus __ is equal to __. **Year 2**	 12 – 4 = 12 – 2 = 10 10 – 2 = 8 	 12 – 4 = 12 – 2 = 10 10 – 2 = 4	

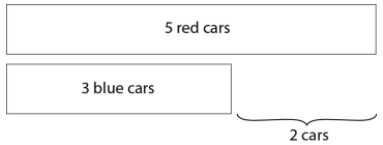
<table>
<tr>
<td>There are more __ than __.
There are fewer __ than __.
The difference between __ and __ is __.

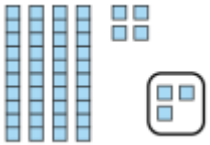
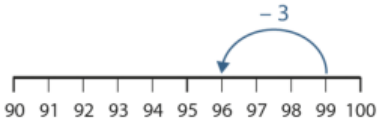
Year 2</td>
<td> 

The difference between 2 and 5 is 3.
The difference between 5 and 2 is 3.

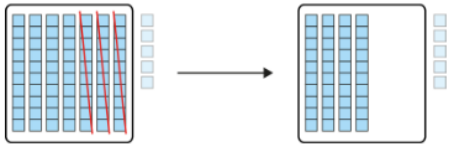
 
7 – 3 = 4</td>
<td> 

The difference between 4 and 7 is 3.
The difference between 7 and 4 is 3.

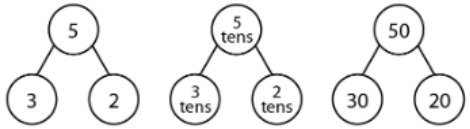
 
</td>
<td>5 – 3 = 2</td>
</tr>
<tr>
<td>I know that __ minus __ is equal to __. (single-digit fact)
So __ minus __ is equal to __. (related two-digit minus single digit fact)
I know that ten minus __ is equal to __ so __ minus __ is equal to __.

Year 2</td>
<td> 
7 – 3 = 4
47 – 3 = 44</td>
<td> 

9 – 3 = 6
99 – 3 = 96</td>
<td>47 – 3 = 44</td>
</tr>
<tr>
<td>I know that __ minus __ is equal to __.
So __ tens minus __ tens is equal to __ tens.

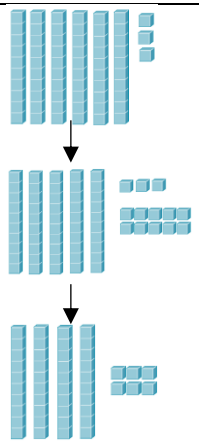
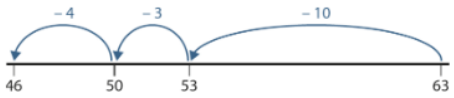
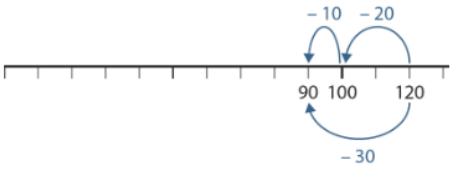
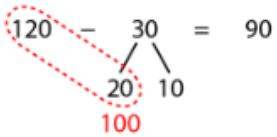
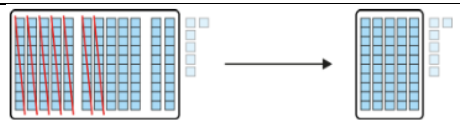
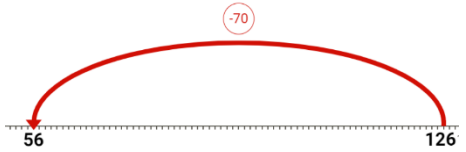
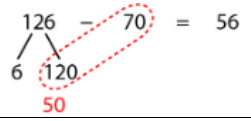
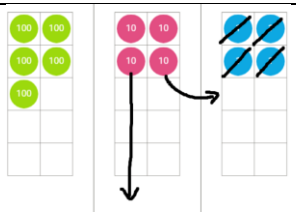
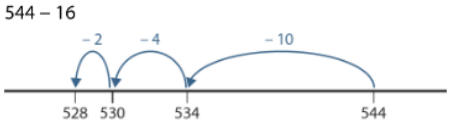
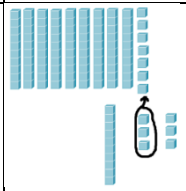
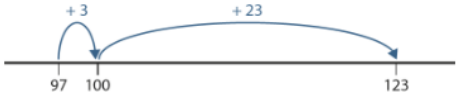
Year 2</td>
<td> 
70 – 30 = 40 so 75 – 30 = 45</td>
<td> 

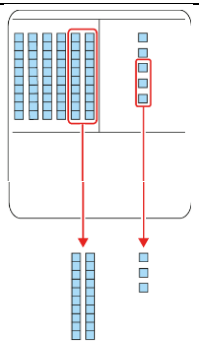
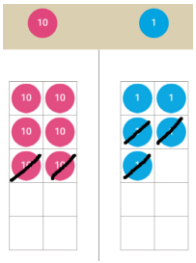
75 – 30 = 45

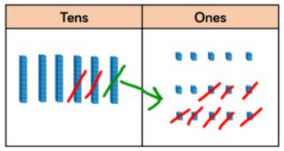
 

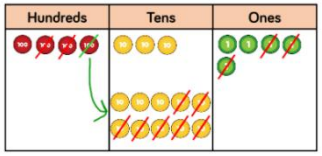
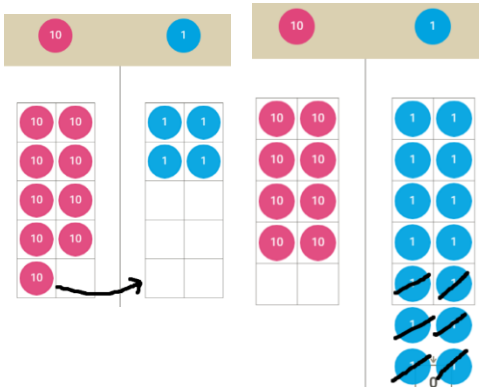
5 – 3 = 2
5 tens – 3 tens = 2 tens
50 – 30 = 20</td>
<td>5 – 3 = 2
5 tens – 3 tens = 2 tens
50 – 30 = 20

70 – 30 = 40 so 75 – 30 = 45</td>
</tr>
</table>

Year 2		   120 – 30 = 120 – 20 = 100 100 – 10 = 90	63 – 17 = 63 – 10 – 7 53 – 3 – 4 = 46 120 – 30 = 120 – 20 = 100 100 – 10 = 90
I know that __ minus __ is equal to __. (bridging ten) So __ tens minus __ tens is equal to __ tens. (bridging ten tens) One hundred and __ minus __ is equal to __. **Year 3**	 126 – 70 = 56	 	126 – 70 = 120 – 70 + 6 = 50 + 6 = 56
We partition the __ into __ and __. First we subtract the __ from __ to get to a multiple of 10. Then we subtract the remaining __ from the multiple of 10. We know 10 minus __ is equal to __ so __ minus __ is equal to __. **Year 3**			Count back to multiples of 10/100
We partition the __ into __ and __. First we add the __ to __ to get to 100. Then we add the remaining __ to 100. We know 100 plus __ is equal to __. **Year 3**		 123 – 97 = 26	Count on to multiples of 10/100

<table>
<tr>
<td>We line up the ones; __ ones plus __ ones.
We line up the tens: __ tens plus __ tens.
The __ is in the ones column – it represents __ ones.
__ ones minus __ ones is equal to __ ones.
The __ is in the tens column – it represents __ tens.
__ tens minus __ tens is equal to __ tens.
In column subtraction we start at the right-hand side.
Year 3</td>
<td>  </td>
<td>Children could draw place value counters.
  </td>
<td>6 5
– 2 3
4 2

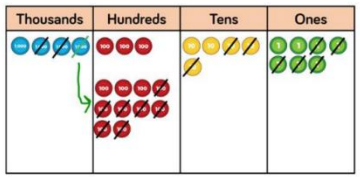
4 6 2
– 2 5 1</td>
</tr>
<tr>
<td>If there is an insufficient number to subtract from in a given column, we must exchange from the column to the left.
Year 3</td>
<td> 
65 – 28 = 37

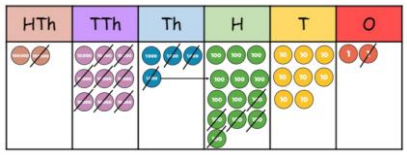
435 – 273 = 162
  </td>
<td>Children could draw place value counters.
  </td>
<td>10s 1s
9 14
– 6

10s 1s
9 14
– 6
8 8

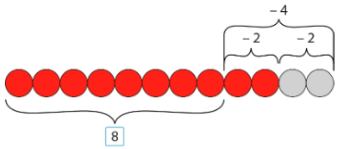
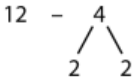
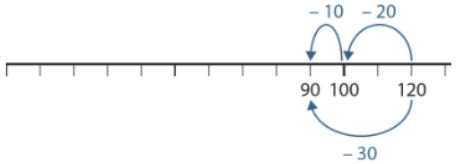
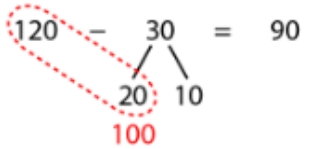
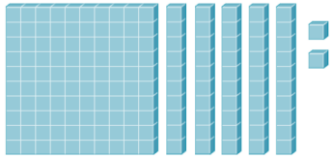
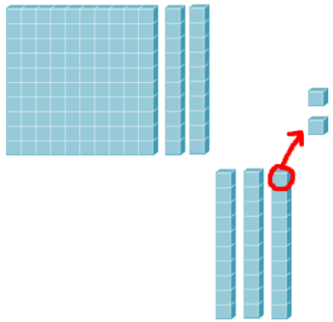
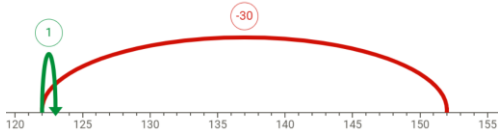
100s 10s 1s
2 2 3
– 1 4 2

100s 10s 1s
2 12 3
– 1 4 2

100s 10s 1s
2 12 3
– 1 4 2
0 8 1</td>
</tr>
<tr>
<td>If there is an insufficient number to subtract from in a given column, we must exchange from the column to the left.
Year 4</td>
<td> 
3 1
4357
– 2735
1622</td>
<td>See Year 3 examples</td>
<td>5 14 12
6, 5 3 8
– 2, 7 8 9
3, 7 4 9

8 14
£ 2 9 . 5 0
– £ 1 8 . 9 4
£ 1 0 . 5 6</td>
</tr>
<tr>
<td>If there is an insufficient number to subtract from in a given column, we must exchange from the column to the left.
Years 5 and 6</td>
<td> 
4357 – 2735 = 1622</td>
<td>See Year 3 examples</td>
<td>2 9 3 13 8 2
– 1 8 2 5 0 1
1 1 1 8 8 1</td>
</tr>
</table>

Subtraction – Key mental strategies for Key Stage 2

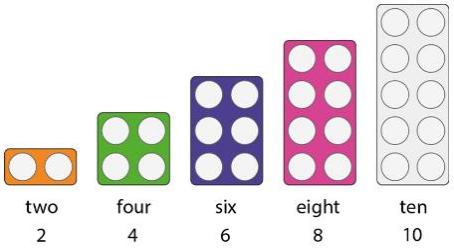
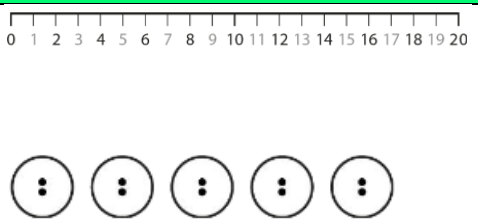
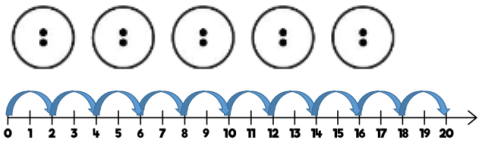
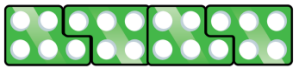
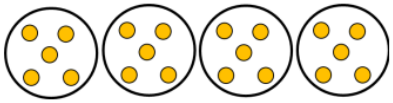
Strategy	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
Bridging through a multiple of 10, 100, etc **Years 3, 4, 5 and 6**	 12 – 4 = 12 – 2 = 10 10 – 2 = 8 	 120 – 30 = 120 – 20 = 100 100 – 10 = 90	 120 – 30 = 120 – 20 = 100 100 – 10 = 90
Compensating – rounding to the nearest multiple 10, 100, etc and adjusting **Years 3, 4, 5 and 6**	 152 – 29 		152 – 30 = 122 122 + 1 = 123

Multiplication and Division Ready to Progress

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recall/Use		• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations	• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	• identify common factors, common multiples and prime numbers • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
Calculations		• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs	• write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	• multiply two-digit and three-digit numbers by a one-digit number using formal written layout	• multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally drawing upon known facts • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	• multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • perform mental calculations, including with mixed operations and large numbers

Problems	• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	• solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	• solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	• solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	• solve problems involving addition, subtraction, multiplication and division

Multiplication

Stem sentences	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
One group of two, two groups of two, three groups of 2, … Ten, twenty, thirty, … One five, two fives, three fives, … **Year R/1**			2, 4, 6, 8, 10…
There are __ coins. Each coin has a value of __p. This is __p. **Year 1**	 Representing each group by one object		Five 2p coins = 10p
There are __ in each group. There are __ groups. There are __ in a group and __ groups.			5 + 5 + 5 + 5 = 20 5 x 4 = 20 4 x 5 = 20

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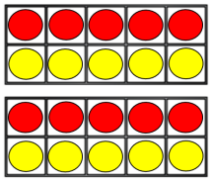
<td>  </td>
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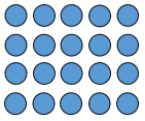
an array
</td>
<td></td>
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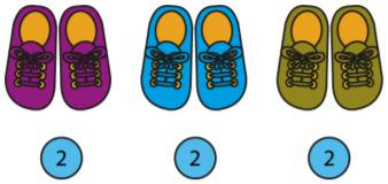
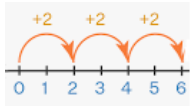
<tr>
<td>Factor times factor is equal to the product.
The product is equal to factor times factor.

Year 2</td>
<td> 
Unitising equal groups – representing each group by one object</td>
<td> 
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</td>
<td>2 x 3 = 6

6 = 2 x 3
<table>
<tr><td>3</td><td>×</td><td>2</td><td>=</td><td>6</td></tr>
<tr><td>factor</td><td>×</td><td>factor</td><td>=</td><td>product</td></tr>
</table>
<table>
<tr><td>6</td><td>=</td><td>3</td><td>×</td><td>2</td></tr>
<tr><td>product</td><td>=</td><td>factor</td><td>×</td><td>factor</td></tr>
</table>
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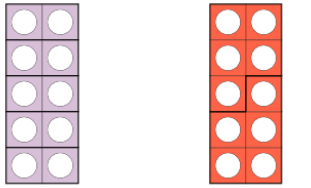
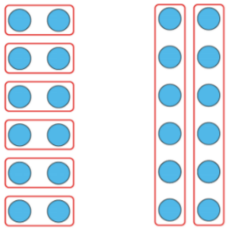
<td>__ times __ can represent __ in a group and __ groups.
It can also represent __ groups of __.

Multiplication is commutative.

Year 2</td>
<td> 
2 x 5 = 10 5 x 2 = 10</td>
<td> 
2 x 6 = 12 6 x 2 = 12
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<tr><td colspan="3">6</td><td colspan="3">6</td></tr>
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<td>2 x 6 = 6 x 2</td>
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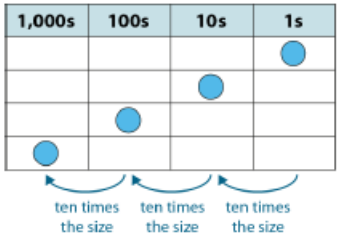
<tr>
<td>To multiply a whole number by 10

Year 3</td>
<td> 
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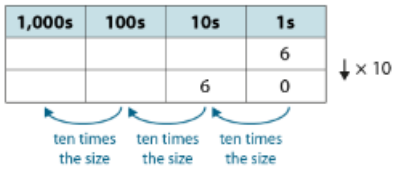
<td> 
</td>
<td>6 x 10 = 60

12 x 10 = 120</td>
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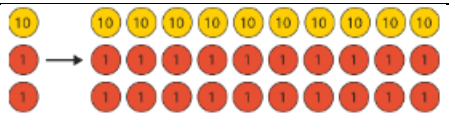
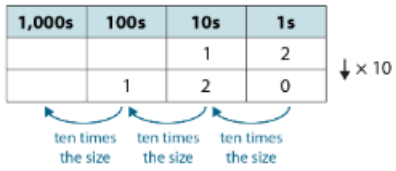
<td>  </td>
<td> 
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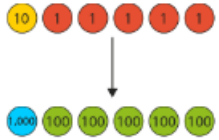
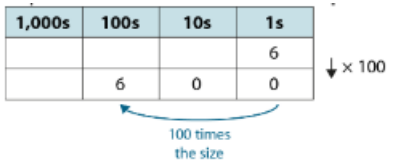
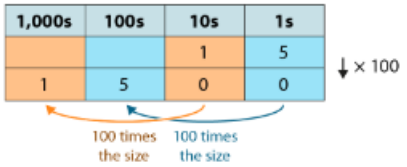
<tr>
<td>All multiples of 100 have both a tens and ones digit of 0.
When a number is multiplied by 100, the product is a multiple of 100.

Year 4</td>
<td>  </td>
<td> 

 
</td>
<td>2 x 100 = 200
There are 100 times as many people as before.

15 x 100 = 1500</td>
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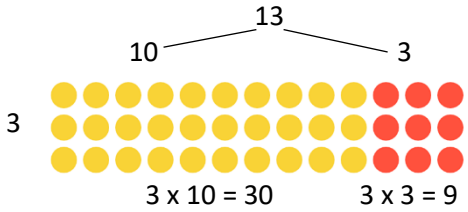
<tr>
<td>__ is equal to __ plus __, so __ times __ is equal to __ times __ plus __ times __.

Partition __ x __ into __ x___ and __x___

Multiplication is distributive.

Year 3/4</td>
<td> 
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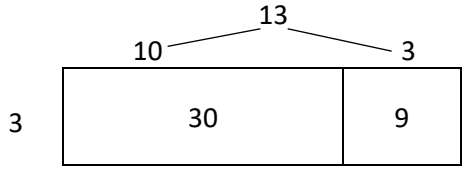
<td> 
</td>
<td>13 x 3 = 10 x 3 + 3 x 3
= 30 + 9
= 39</td>
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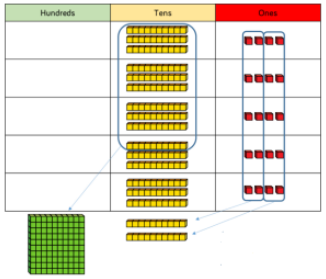
We work from the least significant digit, on the right, to the most significant digit, on the left.

Multiplication is distributive.

Year 3/4



34 x 5 = 170



170				
34	34	34	34	34

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

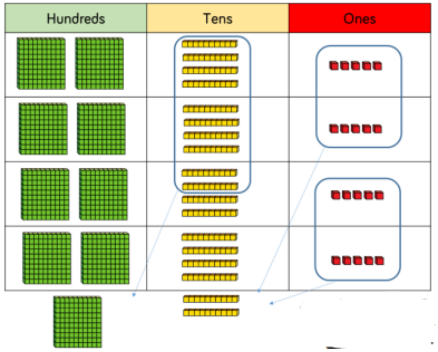
	H	T	O	
		3	4	
×			5	
	1	7	0	
	1	2		

Multiply 3-digit numbers by 1-digit numbers.

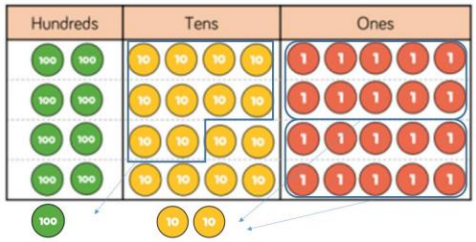
If there are ten or more ones, we must regroup the ones into tens and ones.
If there are ten or more tens, we must regroup the tens into hundreds and tens.
If there are ten or more hundreds, we must regroup the hundreds into thousands and hundred.

Multiplication is distributive.

Year 4



245 x 4 = 980



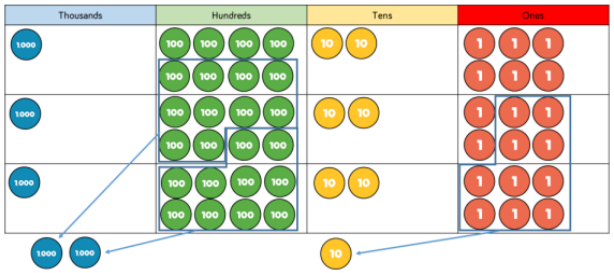
980			
245	245	245	245

	H	T	O
	2	4	5
×			4
	9	8	0
	1	2	

Multiply 4-digit numbers by 1-digit numbers.

Year 5

1,826 x 3 = 5,478

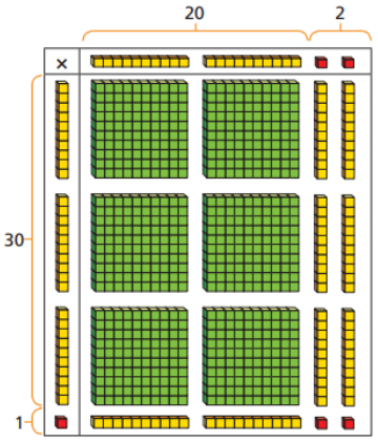


5478		
1826	1826	1826

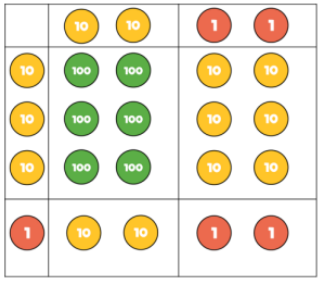
	Th	H	T	O
	1	8	2	6
×				3
	5	4	7	8
	2		1	

Multiplying 2-digit numbers by 2-digit numbers.

Year 5/6



22 x 31 = 682



×	20	2
30	600	60
1	20	2

600 + 60 + 20 + 2 = 682

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

Multiplying 3 and 4-digit numbers by 2-digit numbers.

Year 5/6

234 x 32 = 7,488

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

6,000 + 900 + 120 = 7,020
400 + 60 + 8 = 468
7,020 + 468 = 7,488

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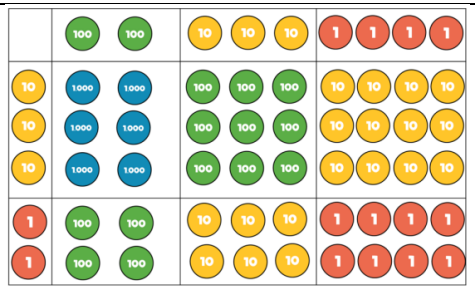
<td>  </td>
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<tr><td></td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>×</td><td></td><td>3</td><td>2</td></tr>
<tr><td></td><td>4</td><td>6</td><td>8</td></tr>
<tr><td>+ 1 7</td><td>1 0</td><td>2</td><td>0</td></tr>
<tr><td>7</td><td>4</td><td>8</td><td>8</td></tr>
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<table>
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<tr><td></td><td>2</td><td>7</td><td>3</td><td>9</td></tr>
<tr><td>×</td><td></td><td></td><td>2</td><td>8</td></tr>
<tr><td></td><td>2</td><td>1 9</td><td>1</td><td>2</td></tr>
<tr><td>+ 1 5</td><td>4</td><td>7</td><td>8</td><td>0</td></tr>
<tr><td>7</td><td>6</td><td>6</td><td>9</td><td>2</td></tr>
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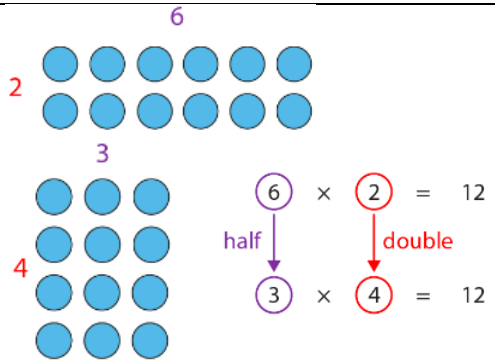
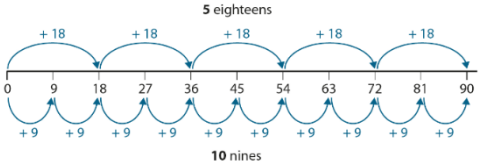
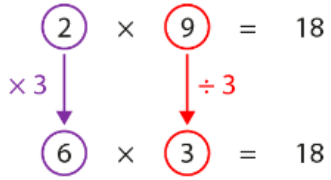
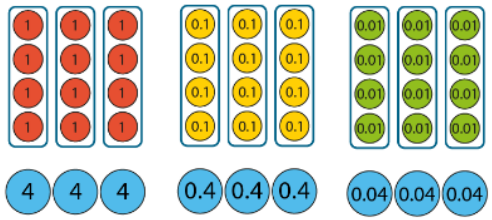
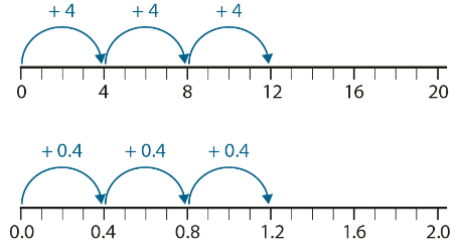
</td>
</tr>
<tr>
<td>If there is a multiplicative increase in one factor and a multiplicative decrease in the other, the product remains the same.

If I multiply one factor by __, I must divide the other factor by __ for the product to remain the same.

Year 5/6</td>
<td>  </td>
<td>  </td>
<td>  </td>
</tr>
<tr>
<td>If one factor is made one tenth of the size, the product will be one tenth of the size.

If one factor is made one hundredth of the size, the product will be one hundredth of the size.</td>
<td> 
4 x 3 = 12
0.4 x 3 = 1.2
0.04 x 3 = 0.12</td>
<td>  </td>
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<tr><td>×</td><td></td><td></td><td>4</td></tr>
<tr><td>1</td><td>8</td><td>2</td><td>4</td></tr>
<tr><td></td><td>2</td><td>2</td><td></td></tr>
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</td>
</tr>
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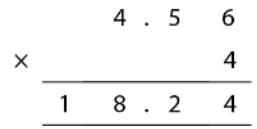
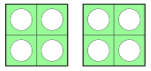
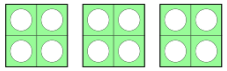
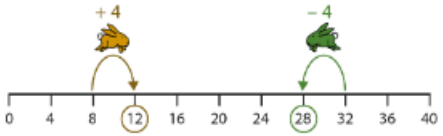
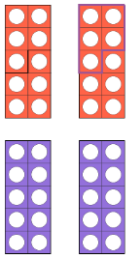
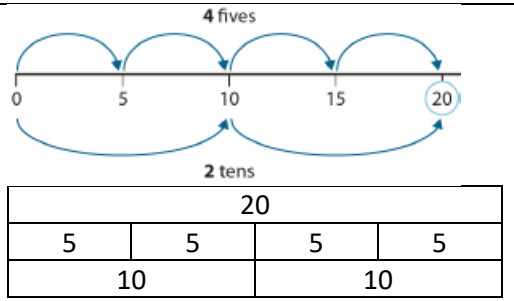
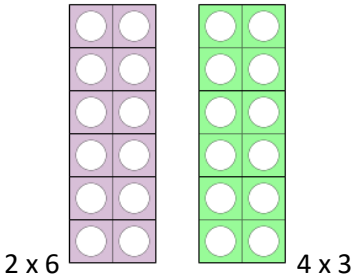
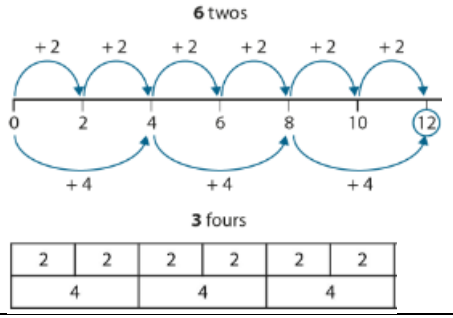
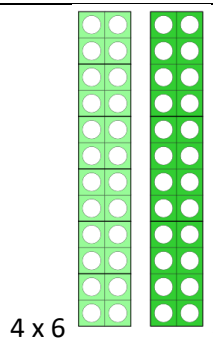
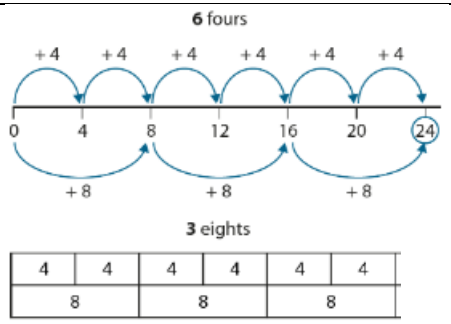
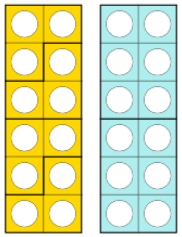
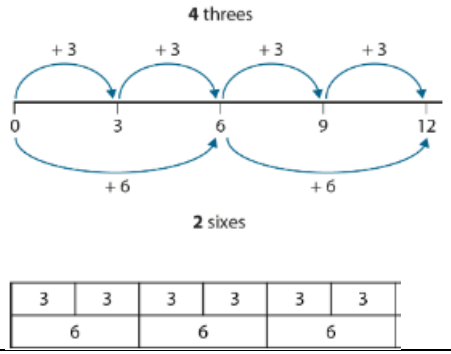
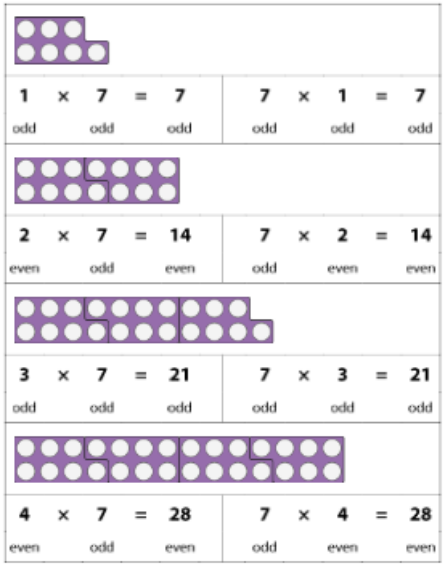
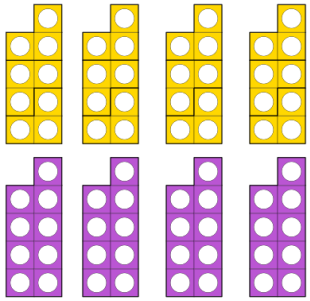
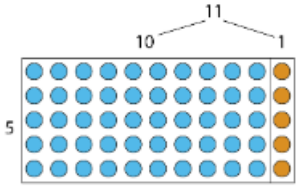
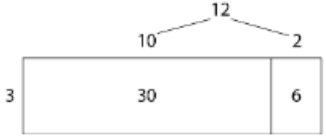
I move the digits of the number I am multiplying __ places to the left until I get a whole number; then I multiply; then I move the digits of the product __ places to the right. **Year 5/6**			

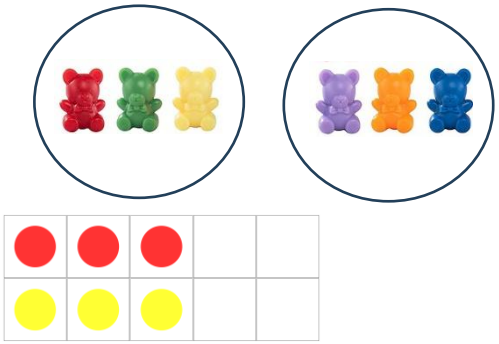
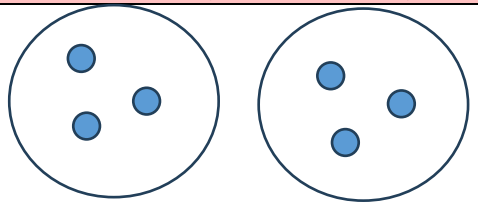
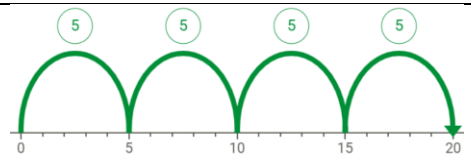
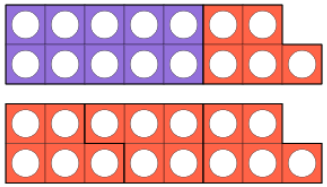
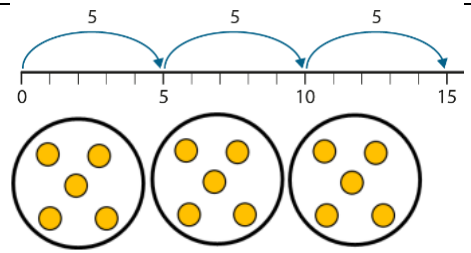
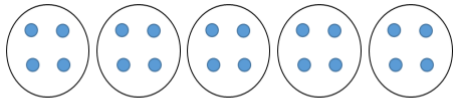
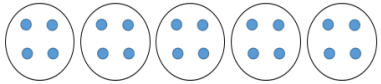
Multiplication – Key mental strategies for Key Stage 2

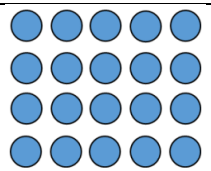
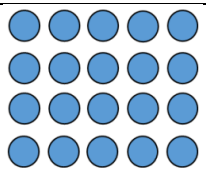
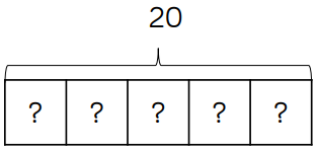
Strategy	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
Adjacent multiples of __ have a difference of __. **Year 3 onwards**	4 x 2  4 x 3 		4 x 3 = 4 x 2 + 4 4 x 9 = 4 x 10 - 4
Products in the 10 times table are double the products in the 5 times table. Products in the 5 times table are half of the products in the 10 times table. **Year 3 onwards**	5 x 4  10 x 2		5 x 4 = 10 x 2
Products in the 4 times table are double the products in the 2 times table. Products in the 2 times table are half of the products in the 4 times table. **Year 3 onwards**			2 x 6 = 4 x 3

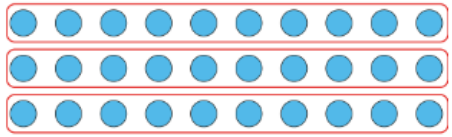
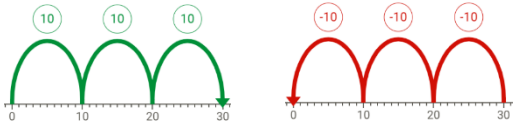
Products in the 8 times table are double the products in the 4 times table. Products in the 4 times table are half of the products in the 8 times table. **Year 3 onwards**	 4 x 6 8 x 3		4 x 6 = 8 x 3
Products in the 6 times table are double the products in the 3 times table. Products in the 3 times table are half of the products in the 6 times table. **Year 3 onwards**	 3 x 4 6 x 2		3 x 4 = 6 x 2
When both factors are odd, the product is odd. When one factor is odd and the other factor is even, the product is even. **Year 3 onwards**			odd x odd = odd odd x even = even even x odd = even even x even = even

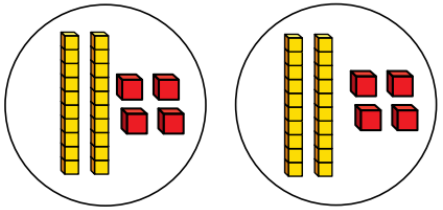
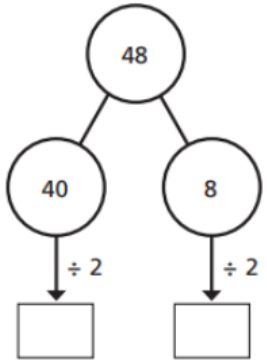
Products in the 9 times table are triple the products in the 3 times table. **Year 4 onwards**	3 x 12  9 x 4		3 x 12 = 9 x 4
Products in the 10 times table can be used to find products in the 11 times table and 12 times table. **Year 4 onwards**			12 x 3 = 10 x 3 + 2 x 3 = 30 + 6 = 36

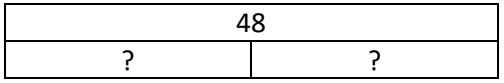
Division

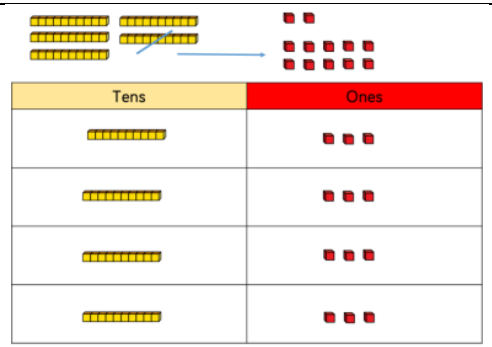
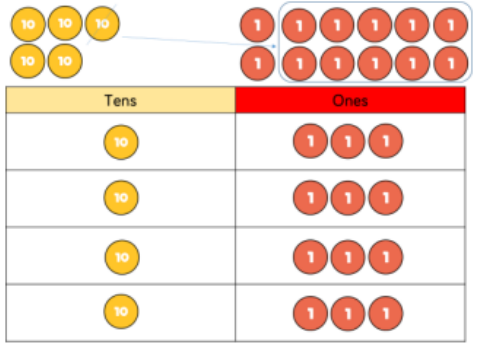
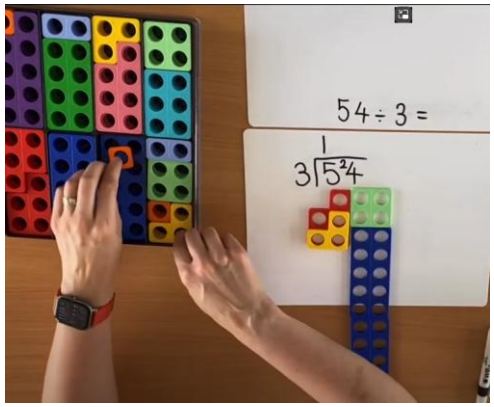
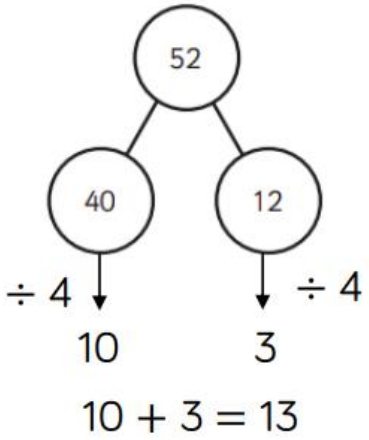
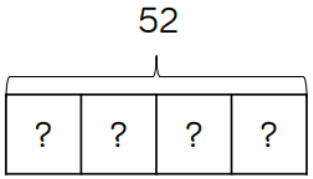
Stem sentences	Concrete (Can we make it?)	Pictorial (Can we draw it?)	Abstract (Can we write the equation?)
Sharing equally **Year R/1**			6 biscuits shared between 2 children gives 3 biscuits each.
The _____ costs __p. Each coin has a value of __p. So I need __ coins. **Year 1/2**			Five 2p coins = 10p
Grouping __ is divided into groups of __. There are __ groups. We can skip count using the divisor to find the quotient. **Year 1/2**	 (The divisor pieces would be placed on top of the dividend pieces) 		5 + 5 + 5 = 15 15 ÷ 5 = 3 There are 20 apples altogether. They are put in bags of 5. How many bags are there?
Sharing __ divided between __ is equal to __ each. We can skip count using the divisor to find the quotient.	 20 ÷ 5 = 4	 20 ÷ 5 = 4	20 ÷ 5 = 4 There are 20 apples altogether. They are shared equally between 5 bags. How many apples are in each bag?

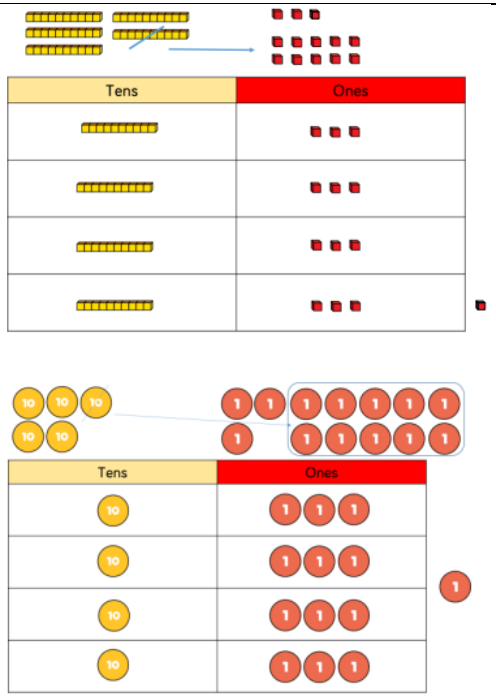
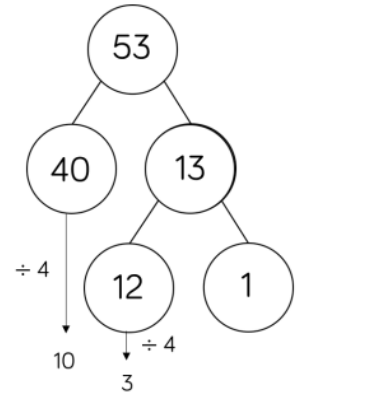
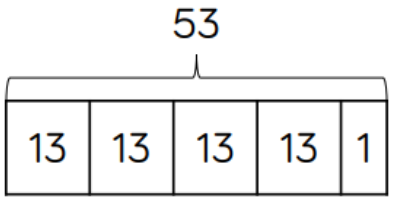
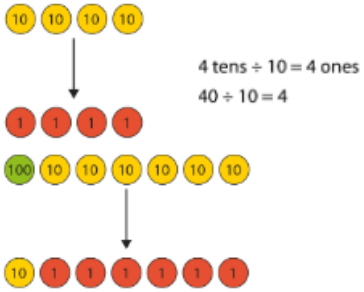
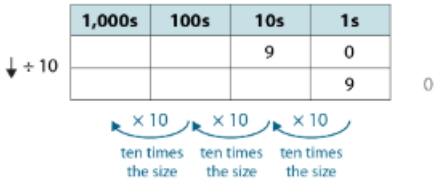
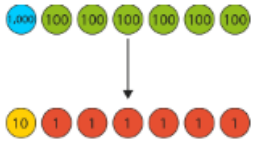
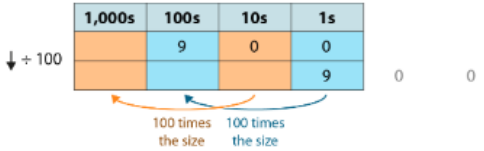
<table>
<tr>
<td>Year 1/2</td>
<td>  </td>
<td> 

</td>
<td></td>
</tr>
<tr>
<td>Ten times __ is equal to __ so __ divided into groups of ten is __.
If the divisor is __, we can use the __ times table to find the quotient.

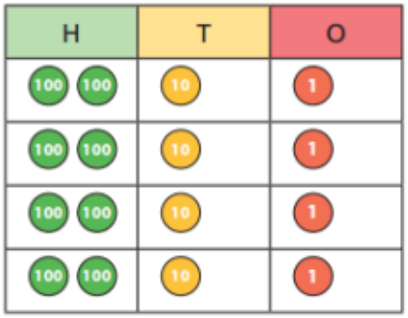
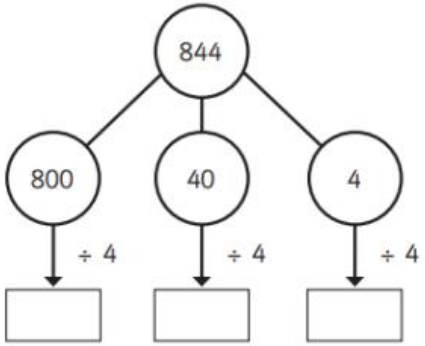
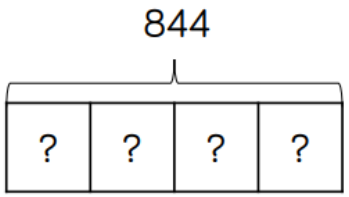
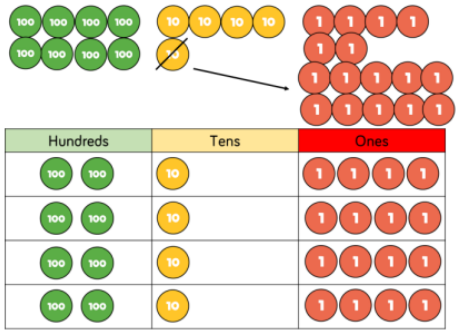
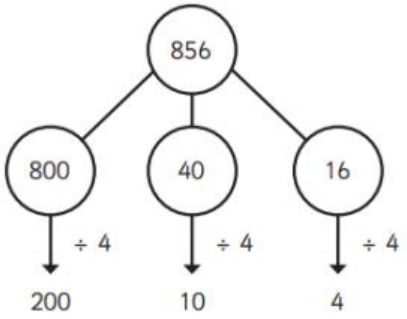
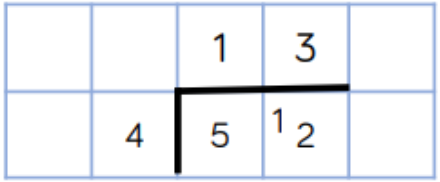
Year 2</td>
<td> 
30 represents the total number of counters.
10 represents the number in each group.
3 represents the number of groups.</td>
<td> 
</td>
<td>10 x 3 = 30
3 x 10 = 30
30 ÷ 10 = 3</td>
</tr>
<tr>
<td>Dividing a 2-digit number by a 1-digit number with no exchange.

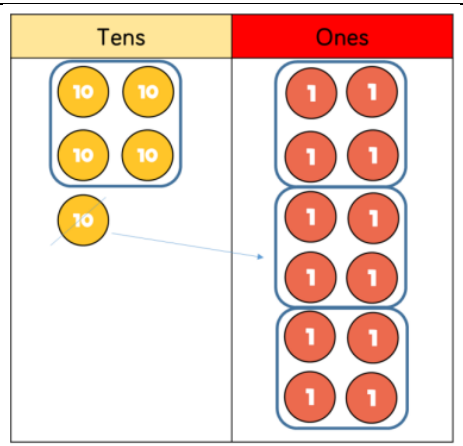
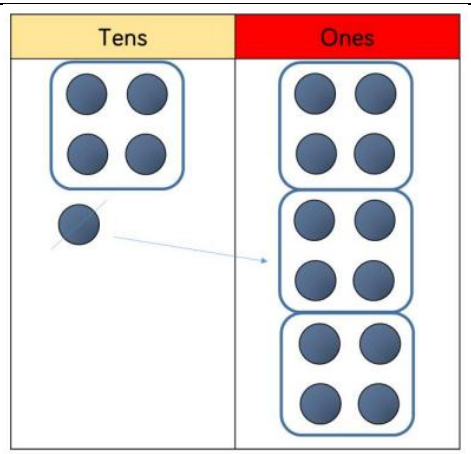
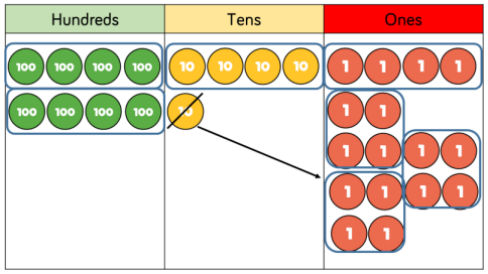
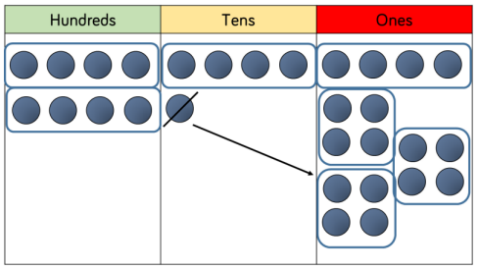
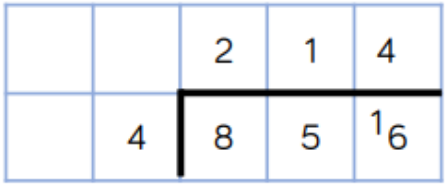
Year 3</td>
<td> 
</td>
<td> 


</td>
<td>48 ÷ 2 = 24</td>
</tr>
</table>

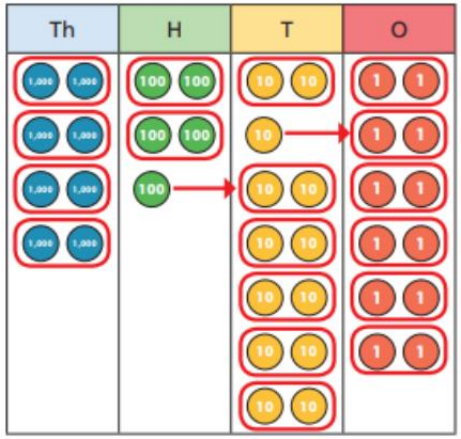
Dividing a 2-digit number by a 1-digit number with an exchange. **Year 3/4**	   (click on picture for hyperlink to youtube video)	 10 + 3 = 13  	52 ÷ 4 = 13

Dividing a 2-digit number by a 1-digit number with an exchange and remainders. __ is divided into groups of __. There are __ groups and a remainder of __. The remainder is always less than the divisor. **Year 3/4**		 	53 ÷ 4 = 13 r 1
To divide a multiple of ten by 10, remove the zero from the ones place. **Year 3/4**			90 ÷ 10 = 9 150 ÷ 10 = 15
To divide a multiple of 100 by 100, remove two zeros (from the tens and ones places). **Year 4**			900 ÷ 100 = 9

			1500 ÷ 100 = 15
Sharing Dividing a 3-digit number by a 1-digit number without an exchange. **Year 4**	844 ÷ 4 = 211 	 844 ÷ 4 = 211 	844 ÷ 4 = 211
Sharing Dividing a 3-digit number by a 1-digit number with an exchange. **Year 4**	856 ÷ 4 = 214 	856 ÷ 4 = 214 	856 ÷ 4 = 214
Grouping Dividing a 2-digit number by a 1-digit number with an exchange. **Year 5**	52 ÷ 4 = 13	52 ÷ 4 = 13	52 ÷ 4 = 13 

	  (click on picture for hyperlink to youtube video)		
Sharing Dividing a 3-digit number by a 1-digit number with an exchange. **Year 5**	856 ÷ 4 = 214 	856 ÷ 4 = 214 	856 ÷ 4 = 214 
Grouping Dividing a 4-digit number by a 1-digit number with an exchange.	8,532 ÷ 2 = 4,266		8,532 ÷ 2 = 4,266

Year 5



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

Short Division

Year 6

Abstract

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

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

15	30	45	60	75	90	105	120	135	150

Long Division

Year 6

Abstract

		0	3	6
1	2	4	3	2
	–	3	6	0
			7	2
	–		7	2
				0

(×30)

(×6)

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

$$432 \div 12 = 36$$

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

	0	4	8	9
15	7	3	3	5
–	6	0	0	0
	1	3	3	5
–	1	2	0	0
		1	3	5
–		1	3	5
				0

(×400

(×80)

(×9)

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