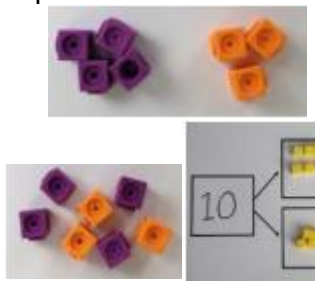
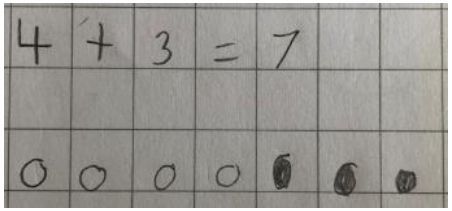
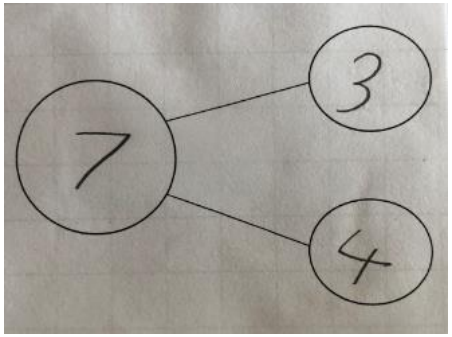
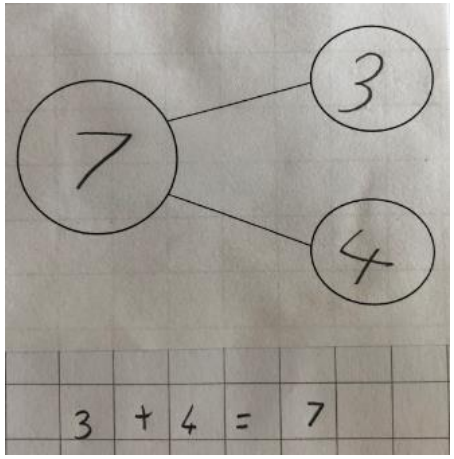
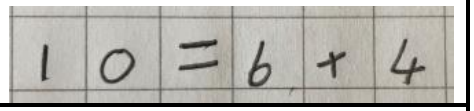
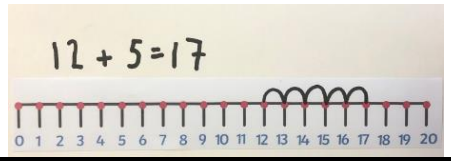
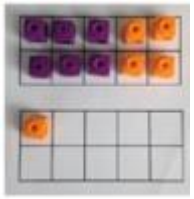
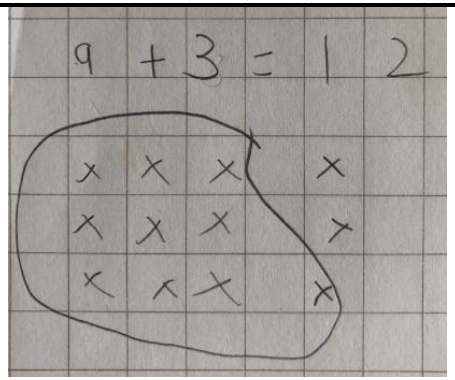
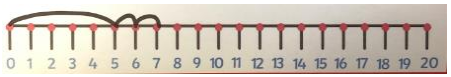
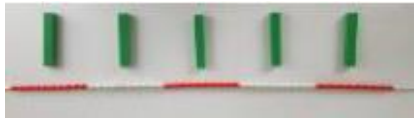
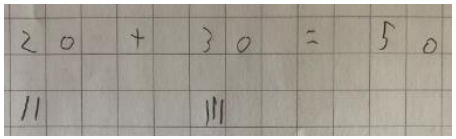
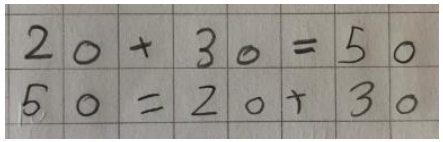
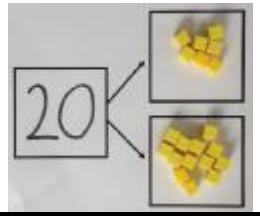
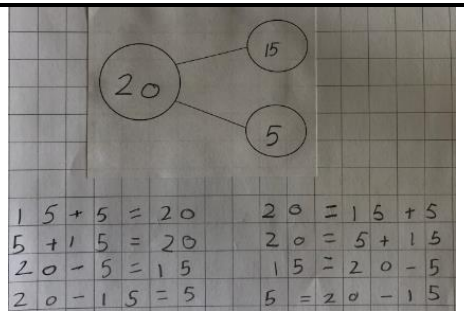
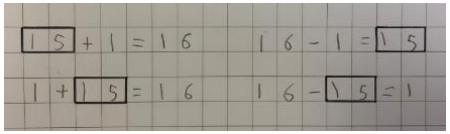
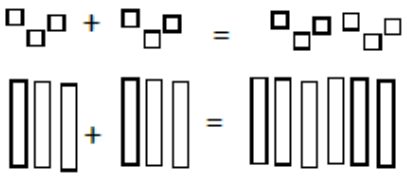
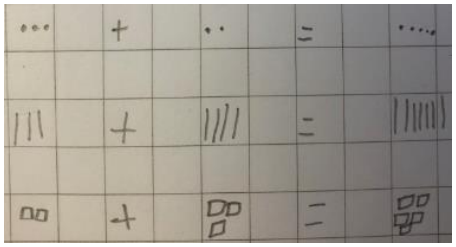
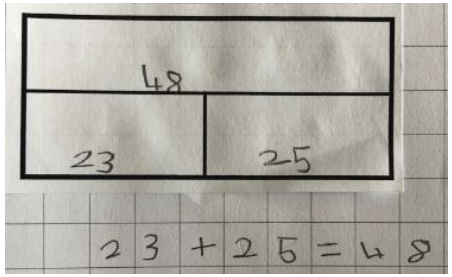
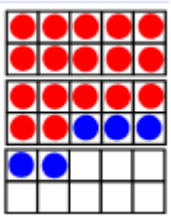
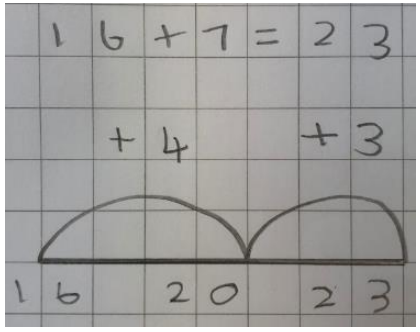
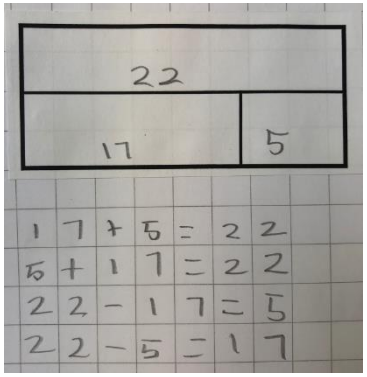
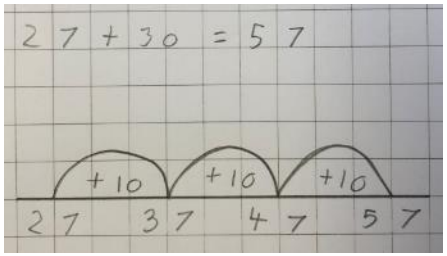
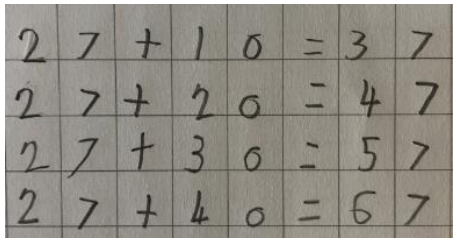
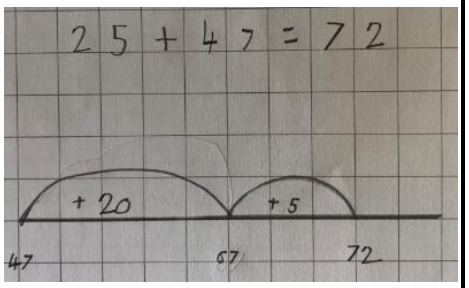
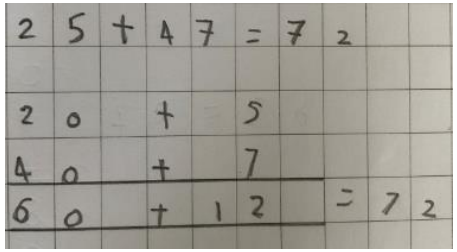
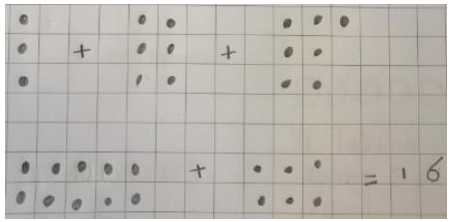
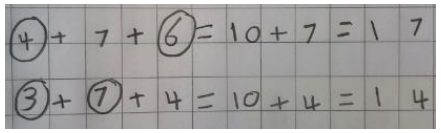
Ryton Federation Calculation Policy

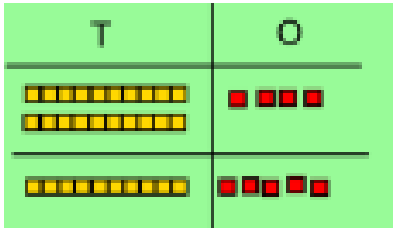
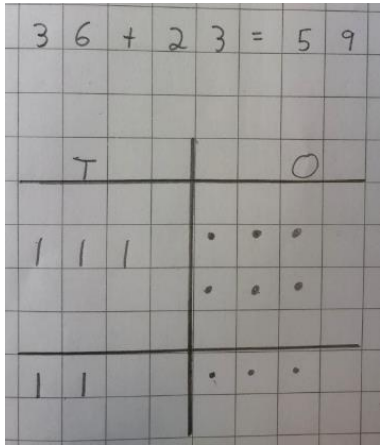
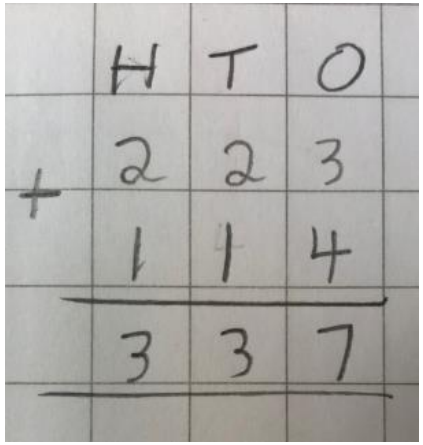
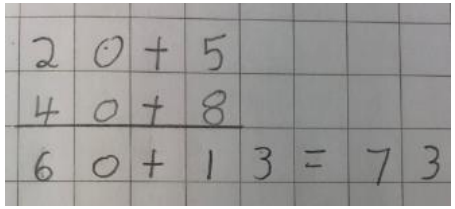
Sarah Williams CWL
[Date]

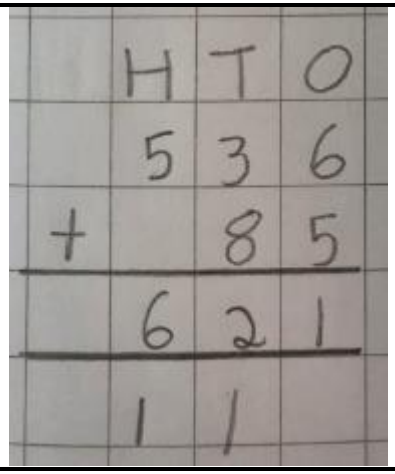
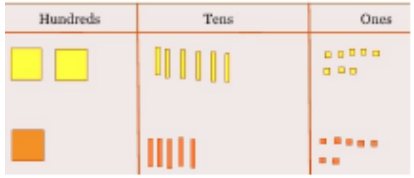
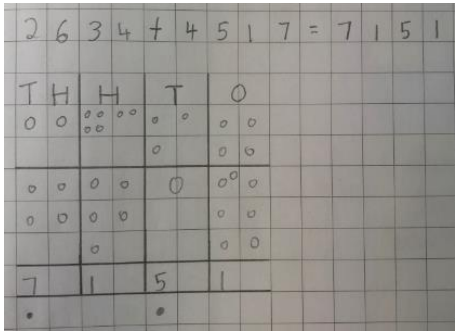
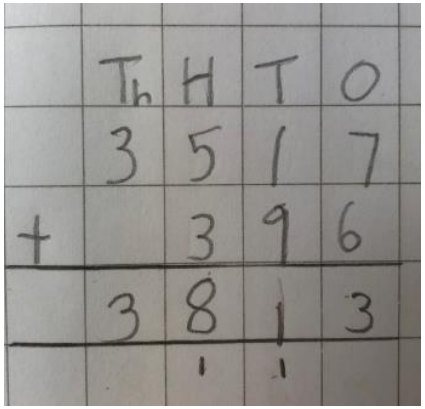
Year 1 Addition				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Combining two parts to make a whole: part-whole model	Use part whole model.  Use cubes to add two numbers together as a group or in a bar. 	Use pictures to add two numbers together as a group or in a bar.   	Use the part-part whole diagram to move into the abstract.   	Addition Add More And Make Sum Total Altogether Double Near double Half Halve One more, two more…ten more How many more to make…? How many more is … than …? How much more is …?
Starting at the bigger number and counting on	Start with the larger number on the bead string and then count on the smaller number one by one to find the answer. 	Start with the larger number on the number line and count on in ones or in one jump to find the answer.  	Place the larger number in your head and count on the smaller number to find the answer	
Regrouping to make 10	Start with the bigger number and use the smaller number to make 10.	Use pictures or a number line. Regroup or partition the smaller number using the part part whole model to make 10	7 + 4 = 11	

(This is an essential skill for column addition further up the school).	 Use tens frames 		If I am at seven, how many more do I need to make 10? How many more do I add on now?	
Represent and use number bonds and related subtraction facts within 20	2 more than 5 		Emphasis should be on the language “ 1 more than 5 is equal to 6.” “2 more than 5 is 7.” “8 is 3 more than 5.”	
Year 2 Addition				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Adding multiples of ten	50 = 30 + 20 			Addition Add More And Make Sum Total Altogether Double Near double Half Halve One more, two more…ten more, one hundred more How many more to make…?
Use known number facts Part-part whole model	Children explore ways of making numbers to and within 20. 			

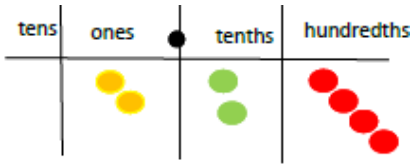
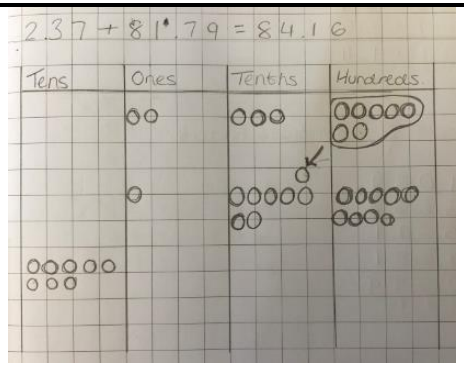
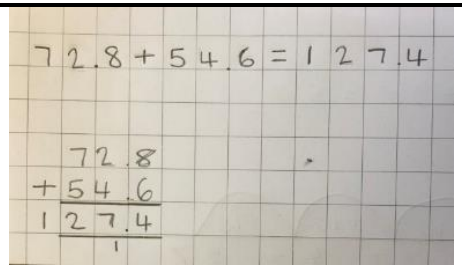
		Also with equals sign at the beginning.		How many more is … than …? How much more is …? Equals Is the same as Number bonds/pairs/facts Tens boundary
Using known facts		Children draw own representations of H, T and O 	3 + 4 = 7 *leads to* 30 + 40 = 70 *leads to* 300 + 400 = 700	
Bar model	 3 + 4 = 7	 7 + 3 = 10		
Adding a two digit number and ones	Use tens frame to make 10 and then explore the pattern.  17 + 5 = 22 27 + 5 = 32	Use number line to model 	Children use knowledge of composition of number 	

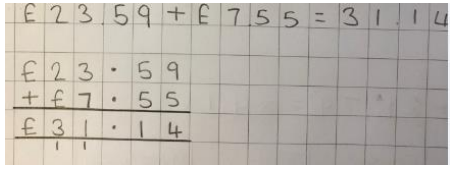
Add a 2 digit number and tens	Explore that the ones digit won't change.			
Add two 2-digit numbers	Model using dienes 	Use number line and bridging ten methods if necessary. 		
Add three 1 digit numbers	Combine to make 10 first if possible. 	Regroup and draw representations. 	Combine the two numbers that make/bridge the ten then add on the remaining number. 	

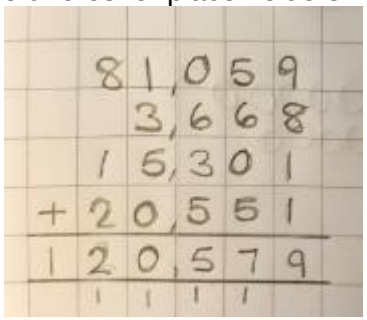
Year 3 Addition				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Column addition – no regrouping	Model using dienes. 	Children move to drawing the dienes using a tens frame. 	Add the ones first, then the tens and then the hundreds. 	Addition Add More And Make Sum Total Altogether Double Near double Half Halve One more, two more…ten more, one hundred more How many more to make…? How many more is … than …? How much more is …? Equals Is the same as Number bonds/pairs/facts Tens boundary/hundreds boundary
Column addition with regrouping	Model exchanging 10 ones	Children can draw a representation of the grid to further support their understanding, carrying the regrouped ten underneath the line	Start by partitioning the numbers before formal column to show the exchange 	

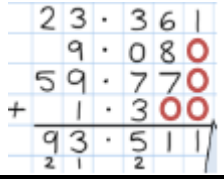
				
Year 4-6 Addition				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Y4 – Add numbers with up to 4 digits	Children continue to use dienes or move onto place value counters to add. 	Draw representations using a place value grid 	Continue from previous work to exchange to hundreds as well as tens. Relate to money and measures. 	Addition Add More And Make Sum Total Altogether Double Near double Half Halve One more, two more…ten more, one hundred more How many more to make…? How many more is … than …? How much more is …? Equals Is the same as Number bonds/pairs/facts
Y5 – Add numbers with	As Year 4 – introduce decimal place value counters and model exchange for addition.			

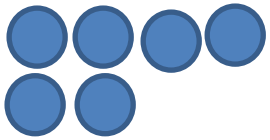
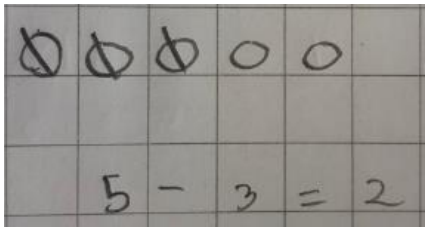
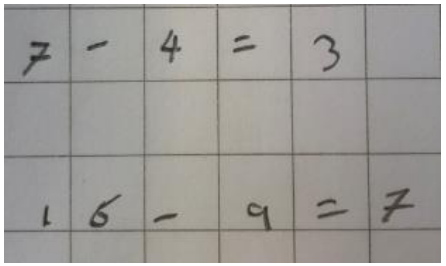
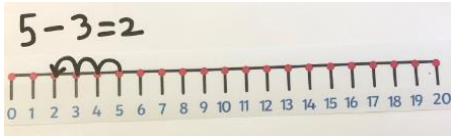
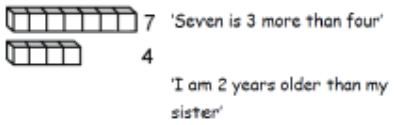
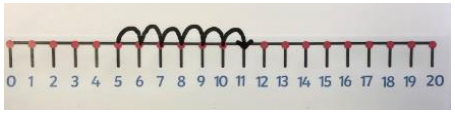
<table>
<tr>
<td>more than 4 digits.

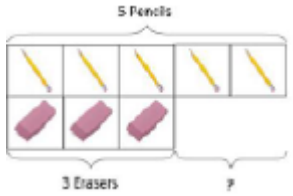
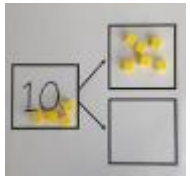
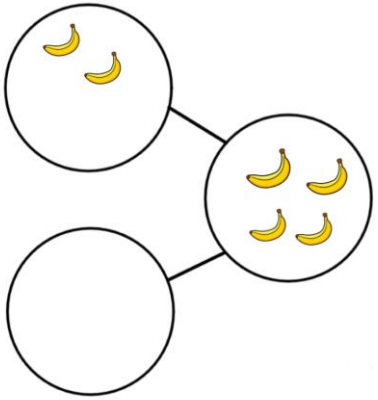
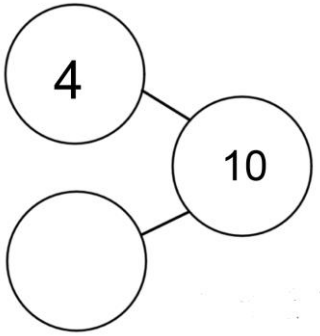
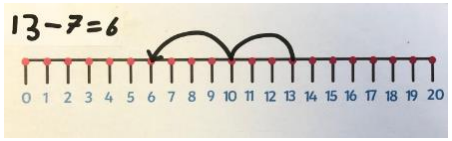
Add decimals with 2 decimal places, including money</td>
<td> 
</td>
<td> 
</td>
<td> 

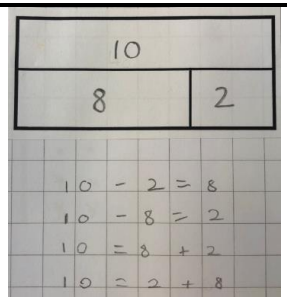
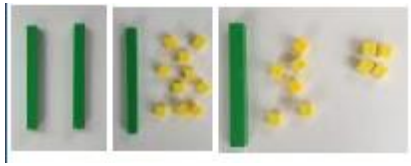
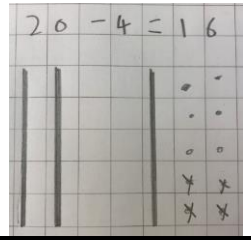
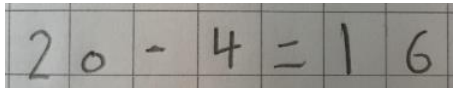
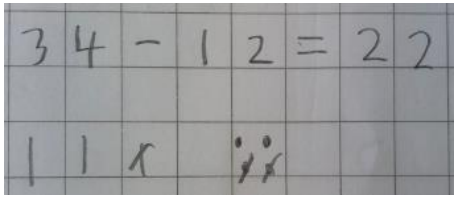
 
</td>
<td rowspan="2">Tens boundary/hundreds boundary/ones boundary/tenths boundry
Inverse</td>
</tr>
<tr>
<td>Y6 – Add several numbers of increasing complexity.

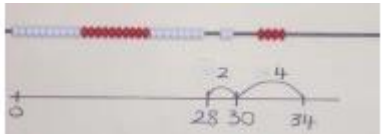
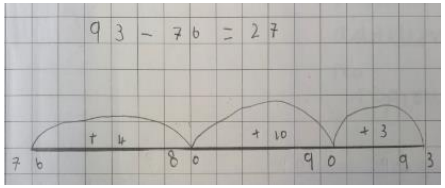
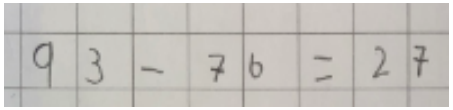
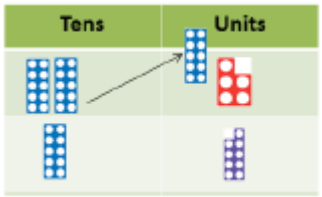
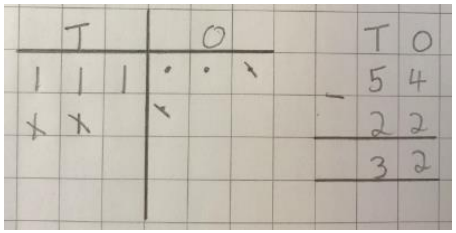
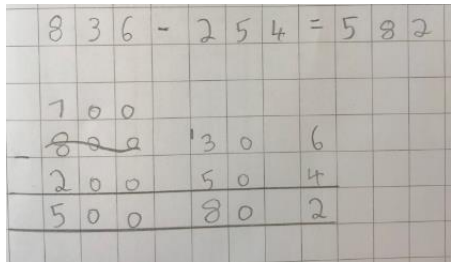
Include adding money, measures and decimals with different numbers of decimals</td>
<td>As Y5</td>
<td>As Y5</td>
<td>Insert zeros for place holders
 

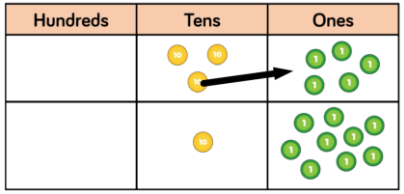
 
</td>
</tr>
</table>

Year 1 Subtraction				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Taking away ones	Use physical objects (counters, cubes etc) to show how objects can be taken away.  6-4 = 2	Cross out objects to show what has been taken away. 		Subtract Take away How many are left/left over? How many have gone? Ones less, two less, ten less… How many fewer is … than …? How much less is …? Difference between
Counting back	Move objects away from the group counting backwards.   Move the beads along the bead string as you count backwards,	Count back in ones using a number line. 	Put 13 in your head. Count back 4. What number are you at?	
Find the difference	Compare objects and amounts.  Use objects to create bar models	Count on using a number line to find the difference. 	Sophie has 12 football cards. Her sister has 5. How many more does Sophie have than her sister?	

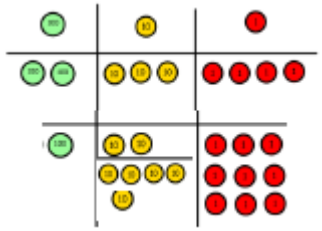
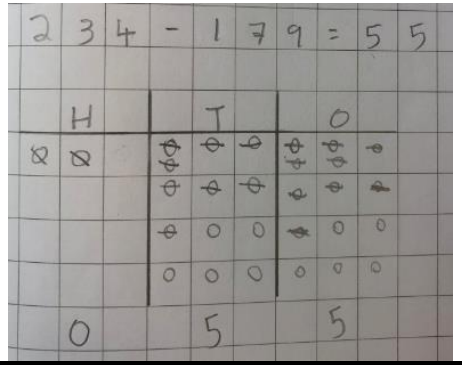
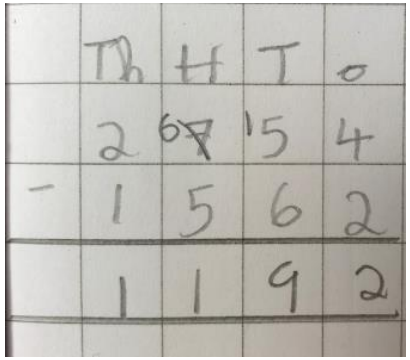
				
Represent and use number bonds and related subtraction facts within 20 (part-part whole model)	Link to addition. Use the PPW model to model the inverse. 	Use pictorial representation to show the part. 	Move to using numbers within the part-part whole model. 	
Make 10	14-9  Make 14 on the tens frame. Take 4 away to make 10, then take 5 away to make 9.	13-7  Jump back 3 to 10, then jump back another 4.	16 – 8 How many do we need to take away to make 10? How many do we need to take away after?	
Bar model	5 – 2 = 3 Using actual objects 	5 – 2 = 3 Using images 		

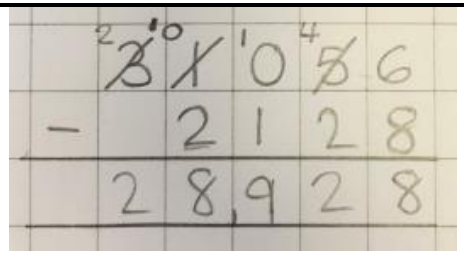
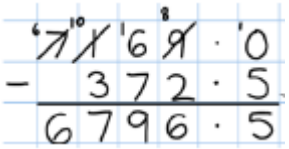
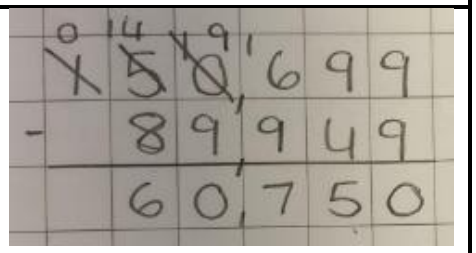
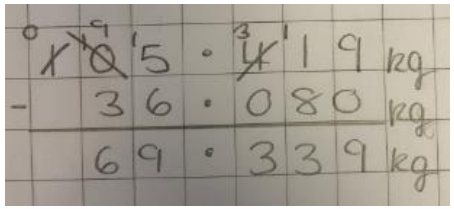
				
Year 2 Subtraction				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Regroup a ten into ten ones	Use a place value chart to show how to change a ten into ten ones 	20-4 	20 – 4 = 16 	Subtract Take away How many are left/left over? How many have gone? Ones less, two less, ten less, one hundred less… How many fewer is … than …? How much less is …? Difference between Equals Is the same as Number bonds/pairs/facts Tens boundary
Partitioning to regroup without subtracting	34-13 = 21  Use the dienes to show how to partition the number when subtracting without regrouping	Children draw representations of dienes and cross off. 43 – 21 = 22 	43 – 21 = 22	

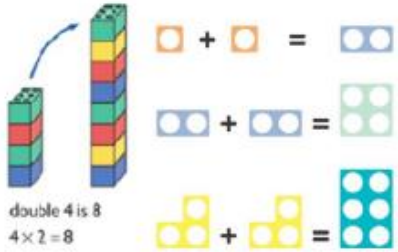
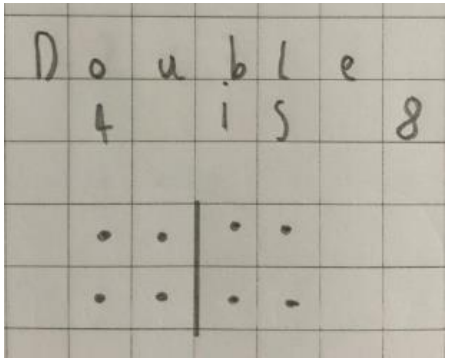
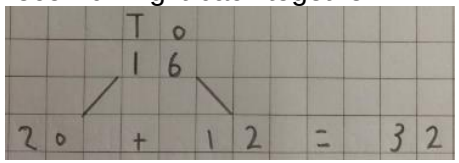
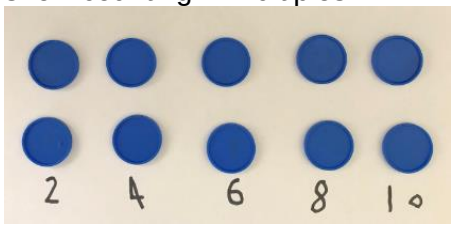
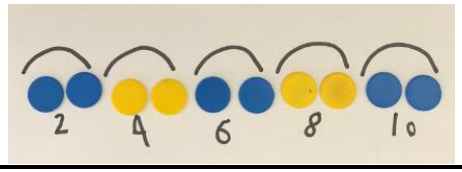
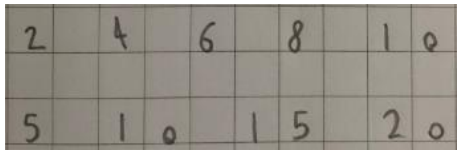
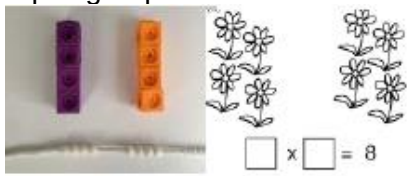
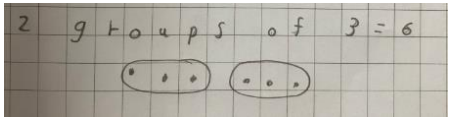
Make 10 strategy *(Progression should be crossing one ten, crossing, crossing more than one ten, crossing the hundreds)*	34 – 28  Use the bead string to model counting to the next 10 and the rest.	Use the number line to count onto the next 10 and the rest.  	 	
Year 3 Subtraction				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Column subtraction without regrouping	Use Base 10 or Numicon to model. 47 – 32  	Draw representations to support understanding  	47 – 24 = 23 40 + 7 – 20 + 4 20 + 3	Subtract Take away How many are left/left over? How many have gone? Ones less, two less, ten less, one hundred less… How many fewer is … than …? How much less is …? Difference between Equals Is the same as Number bonds/pairs/facts Tens boundary Hundreds boundary
Column subtraction with regrouping	Begin with Base 10 or Numicon then move to place value counters modelling the exchange of a ten into ten ones. 35 – 19	Children may draw Base 10 or place counters and cross them off.	Begin by partitioning into place value columns.  Then move to formal method.	

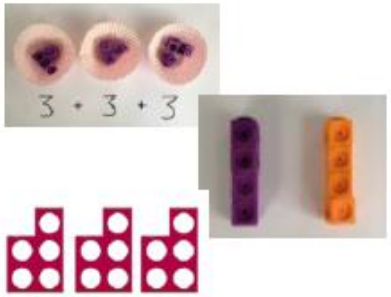
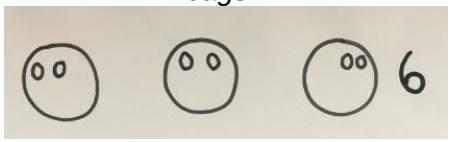
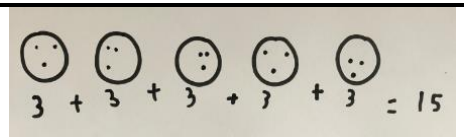
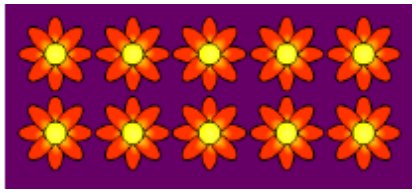
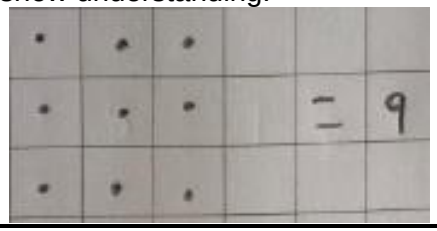
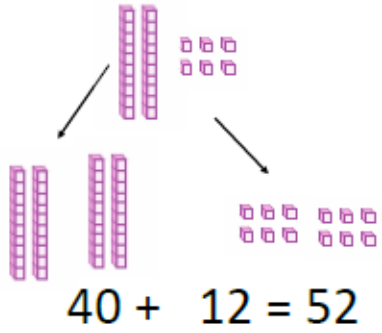
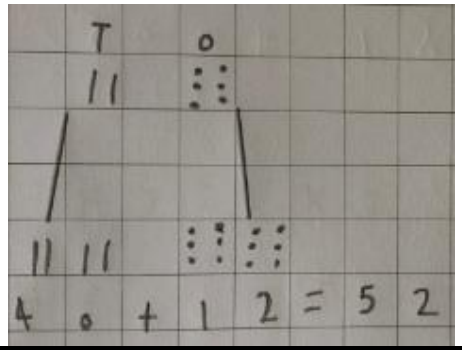
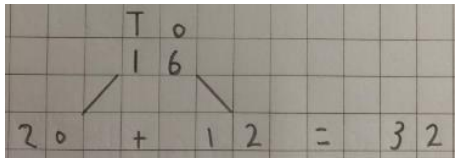
				

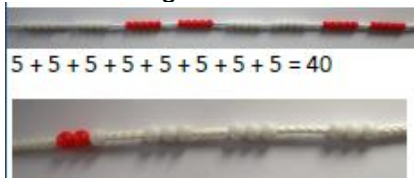
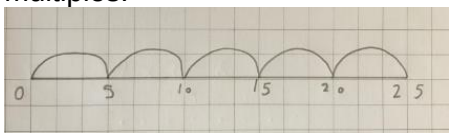
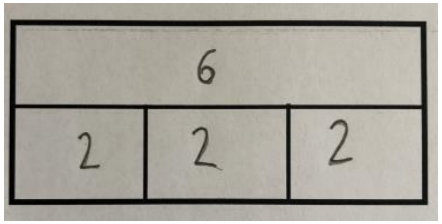
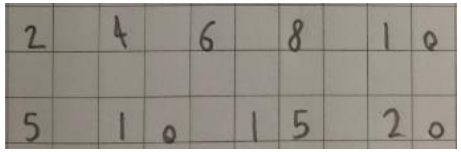
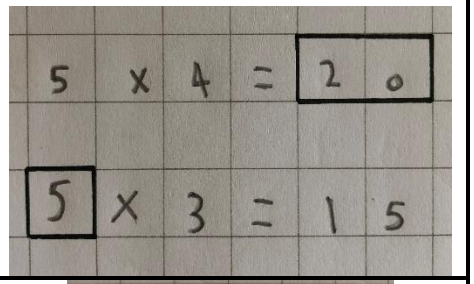
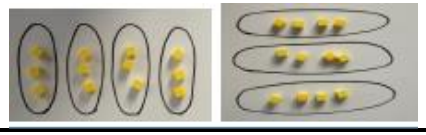
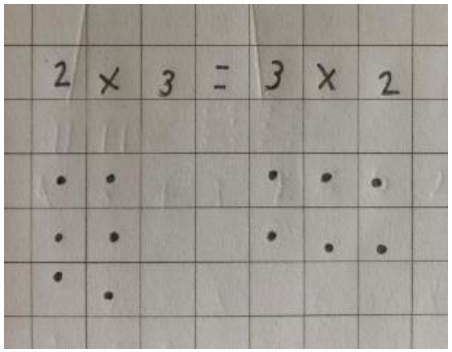
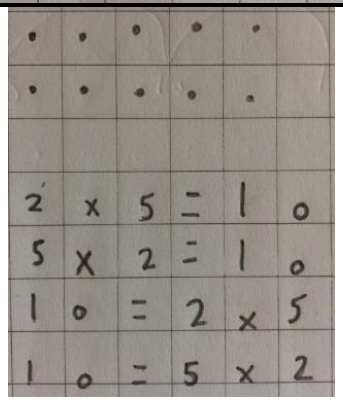
Year 4-6 Subtraction

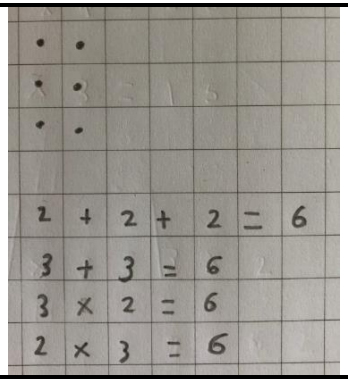
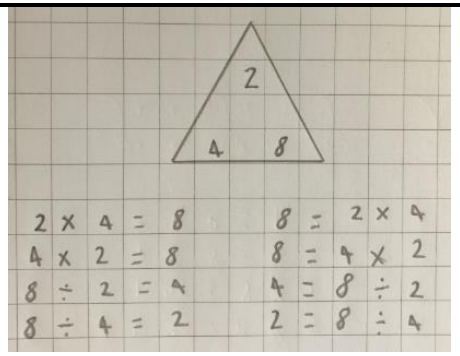
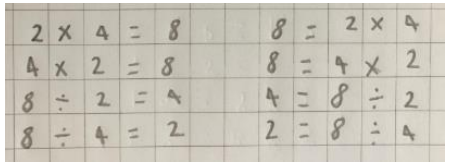
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Subtracting tens and ones. Year 4 subtract with up to 4 digits *Introduce decimal subtraction through context of money*	234 – 179 Model process of exchange using Base 10 or Numicon and then move to place value counters. 	Children to draw the place value counters and show the exchange. 		Subtract Take away How many are left/left over? How many have gone? Ones less, two less, ten less, one hundred less… How many fewer is … than …? How much less is …? Difference between Equals Is the same as Number bonds/pairs/facts Missing number Tens boundary, hundreds boundary, ones boundary, tenths boundary Inverse
Year 5 subtract with at least 4 digits, including measures and money.	As Year 4	As Year 4		

Subtract with decimal values, including mixtures of integers and decimals. Include where the decimal needs to be aligned.			 Recognise the use of zero as a place holder. £7169 - £372 	
Year 6 Subtract with increasingly large and more complex numbers and decimal values			 	
Year 1 Multiplication				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary

Doubling	Use practical activities using manipulatives including cubes and Numicon to demonstrate doubling. 	Draw pictures to show how to double numbers. 	Partition a number and then double each part before recombining it back together. 	multiplication multiply multiplied by multiple doubling array number patterns
Counting in multiples	Count the groups as children are skip counting. Children may use their fingers as they are skip counting. 	Children make representations to show counting in multiples.  	Count in multiples of a number aloud. Write sequences with multiples of numbers. 	
Making equal groups and counting the totals	Use manipulatives to create equal groups. 	Draw and make representations. 2 groups of 3 = 6 	2 x 4 = 8	
Repeated addition	Use different objects to add equal groups.	Use pictorial representations, including number lines, to solve problems.	Write addition sentences to describe objects and pictures.	

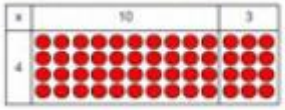
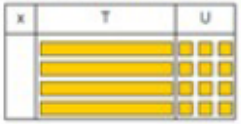
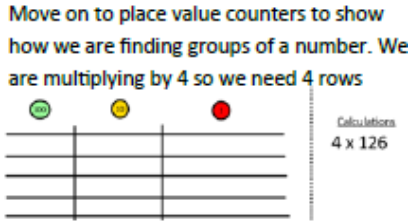
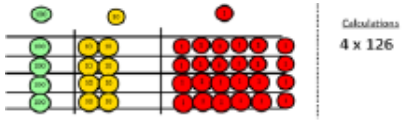
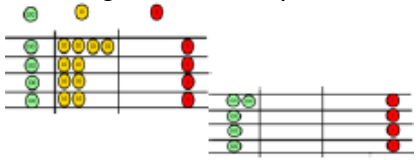
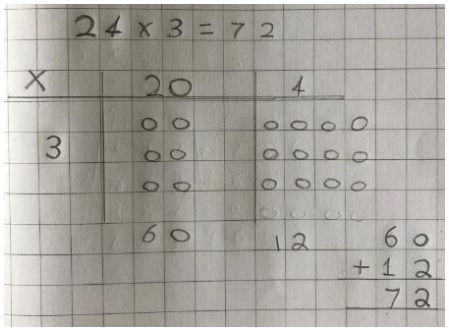
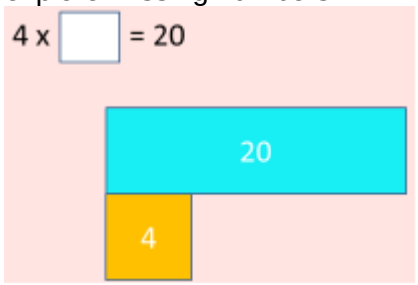
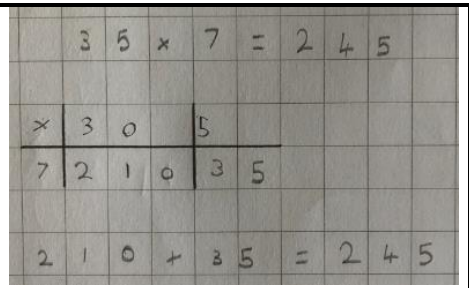
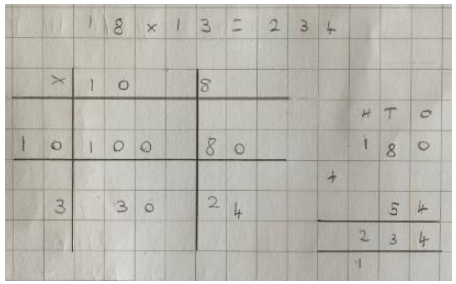
		*e.g. There are 2 sweets in each bag. How many sweets are in 3 bags?* 		
Understanding arrays	Use objects laid out in arrays to find answers. 	Draw representations of arrays to show understanding. 	2 x 3 = 6 2 x 5 = 10	
Year 2 Multiplication				
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Doubling	Model doubling using dienes and place value counters. 	Draw pictures to represent how to double numbers. 	Partition a number then double each part before recombining it. 	
Counting in multiples of	Count the groups as children are skip counting.	Number lines and bar models should be used to show	Count in multiples of a number aloud.	

2,5 and 10 from zero (repeated addition)	Use counting sticks in class 	representation of counting in multiples.  	Write sequences with multiples of numbers.  	multiplication multiply multiplied by multiple groups of times once, twice, three times … ten times repeated addition equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact
Multiplication is commutative	Create arrays using counters, cubes or Numicon.   Pupils should understand that arrays can represent different equations and that, as multiplication is commutative, the order of the multiplication does not affect the answer. 	Use pictorial representations of arrays to show different calculations and explore commutativity. 	 Use an array to write multiplication and reinforce repeated addition.	

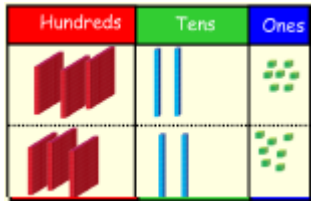
				
Using the inverse *This should be taught alongside division, so pupils learn how they work alongside each other.*		 Ensure number sentences with = at the start and end are taught.	Show all 8 related fact family sentneces. 	

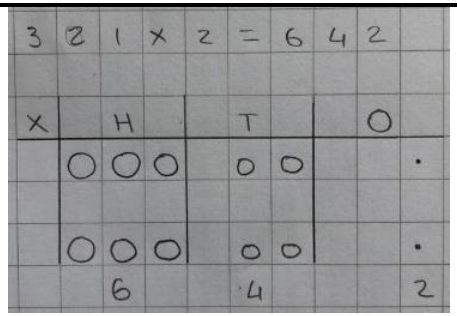
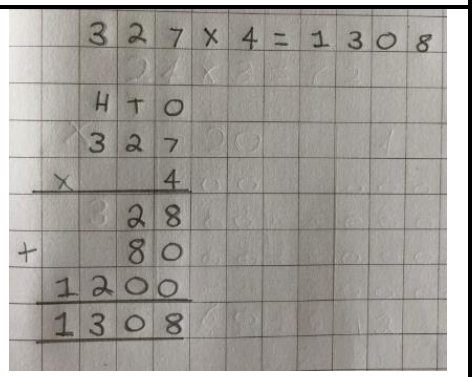
Year 3 Multiplication

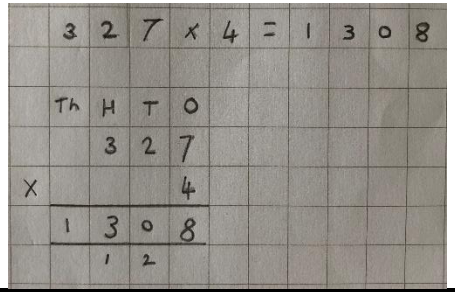
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary

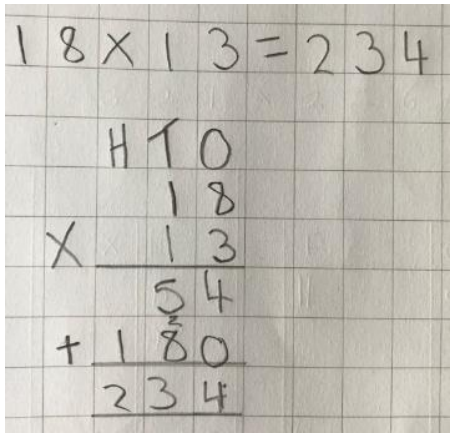
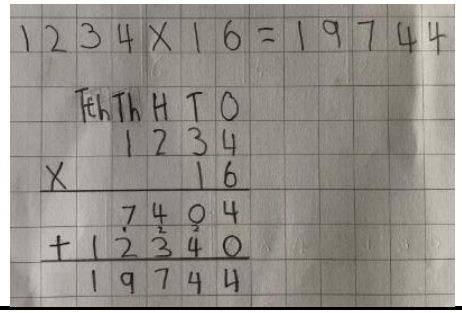
Grid method *Make sure that other methods for multiplication are reinforced e.g multiplying by 4 = doubling and doubling again or multiplying by 9 by multiplying by 10 and subtracting.*	Show the links with arrays to first introduce the grid method.  Move onto Base ten to move towards a more compact method.  Move onto Place Value counters to show how we are finding groups of a number. We are multiplying by 4 so we need 4 rows.  Fill each row with 126.  Add up each column, starting with the ones, making exchanges where required. 	Children can represent their work with concrete resources in a pictorial way that they understand.  Bar models can be used to explore missing numbers.  	 Then once secure moving onto  	multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times … ten times repeated addition equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact

<table>
<tr><td colspan="5">Year 4 Multiplication</td></tr>
<tr><td>Objective and strategy</td><td>Concrete</td><td>Pictorial</td><td>Abstract</td><td>Vocabulary</td></tr>
<tr><td>Grid method recap 2 digit by 1 digit

Then 3 digits by 1 digit</td><td>Use Place Value counters as in Y3</td><td>As Y3</td><td>As Y3</td><td rowspan="2">multiplication
multiply
multiplied by
multiple, factor
groups of
times
product
once, twice, three times … ten times
repeated addition
doubling
array
row, column
number patterns
multiplication table
multiplication fact, division fact</td></tr>
<tr><td>Column multiplication</td><td>Children can continue to be supported by Place Value counters at the multiplication stage. It is important at this stage that the multiply the ones first.
321 x 2
 

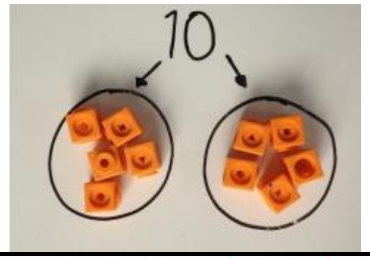
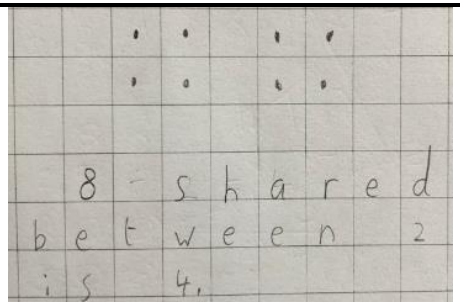
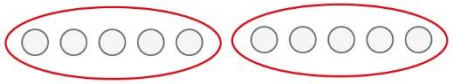
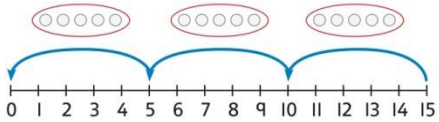
It is important to model the corresponding long multiplication next to it.</td><td> 
</td><td> 

This may lead to a compact method.
 
</td></tr>
<tr><td colspan="5">Year 5/6 Multiplication</td></tr>
<tr><td>Objective and strategy</td><td>Concrete</td><td>Pictorial</td><td>Abstract</td><td>Vocabulary</td></tr>
<tr><td>Column multiplication</td><td>As Y4</td><td>As Y4</td><td>As Y4</td><td></td></tr>
</table>

for 3 and 4 digit by 1 digit				multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times … ten times repeated addition doubling array row, column number patterns multiplication table multiplication fact, division fact
Column multiplication	Manipulatives may still be used with the corresponding calculation alongside.		 	

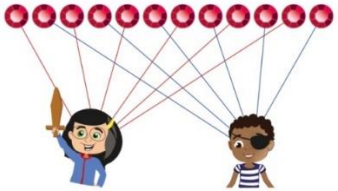
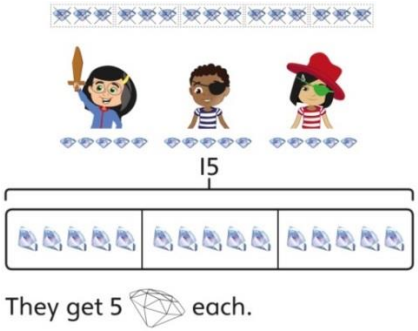
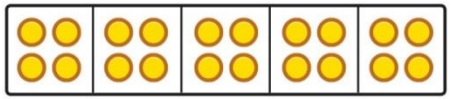
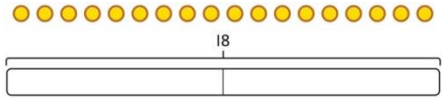
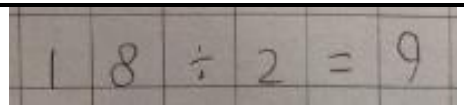
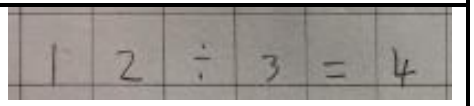
Year 1 Division

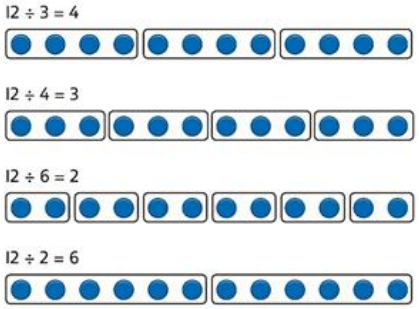
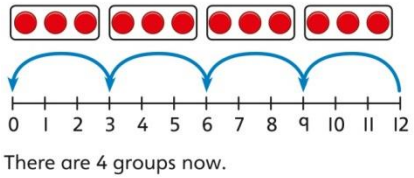
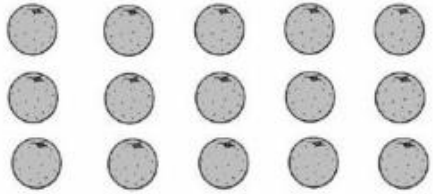
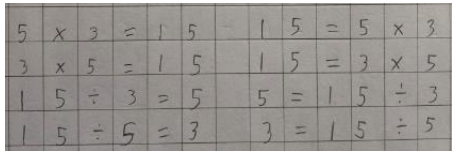
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Division as Sharing	I have 10 cubes can you share them equally between two groups?	Children draw pictures or shapes to share quantities	12 shared between 3 is 4. There is no requirement to use the symbol for division in Y1. This could be verbalised or written using stem sentences.	division dividing grouping sharing

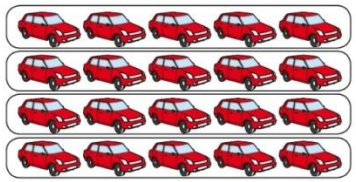
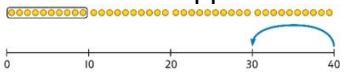
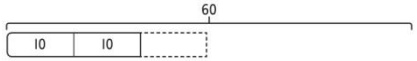
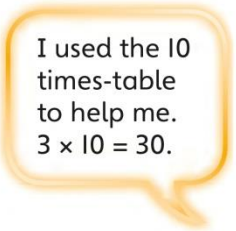
	  			
Division as grouping	 Divide quantities into equal groups	Represent a whole and work out how many equal groups.  *There are 10 in total.* *There are 5 in each group.* *There are 2 groups.*	Children may relate this to counting back in steps of 2, 5 or 10. 	

Year 2 Division

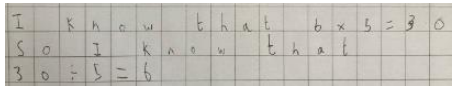
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary

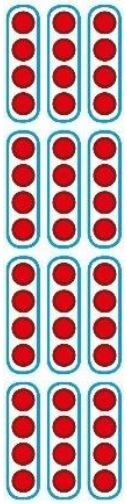
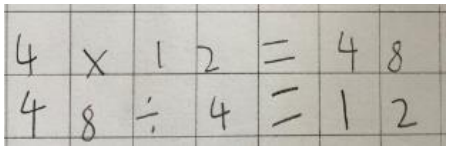
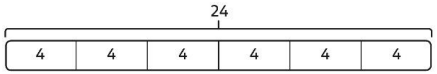
Division as sharing	Start with a whole and share into equal parts, one at a time.  *12 shared equally between 2. They get 6 each.* Start to understand how this also relates to grouping. To share equally between 3 people, take a group of 3 and give 1 to each person. Keep going until all the objects have been shared  *15 shared equally between 3. They get 5 each.*	Represent the objects shared into equal parts using a bar model.  *20 shared into 5 equal parts. There are 4 in each part.* Use a bar model to support understanding of the division.  *18 ÷ 2 = 9*		division dividing, divide, divided by, divided into grouping sharing, share, share equally left, left over one each, two each, three each … ten each group in pairs, threes … tens equal groups of multiplication table multiplication fact, division fact
Division as grouping	Children understand how to make equal groups from a whole. 	Children understand the relationship between grouping and the division statements.		

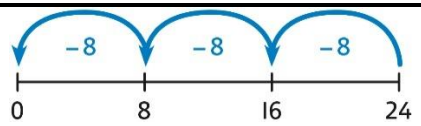
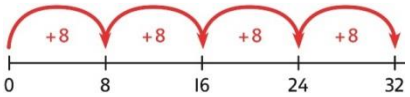
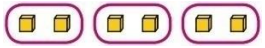
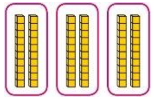
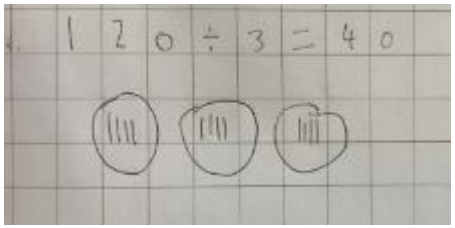
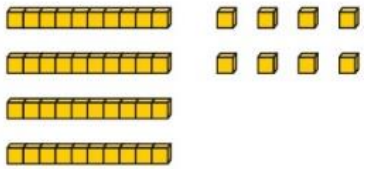
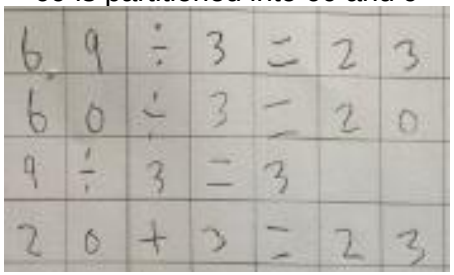
	 *8 divided into 4 equal groups. There are 2 in each group.*	 Children understand how to relate division by grouping to repeated subtraction.  *12 divided into groups of 3.* *12 ÷ 3 = 4* *There are 4 groups.*		
Division with arrays	Link multiplication to division by creating an array and thinking about the number sentences that can be created.  15 ÷ 3 = 5 15 ÷ 5 = 3 3 = 15 ÷ 5	Draw an array and use lines to split it into groups to make multiplication and division sentences. 	Find the inverse of multiplication and division sentences by creating eight linking number sentences.  	

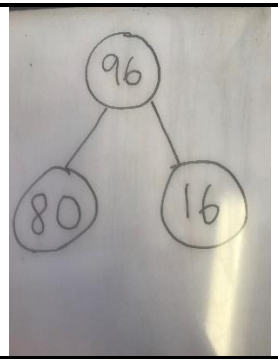
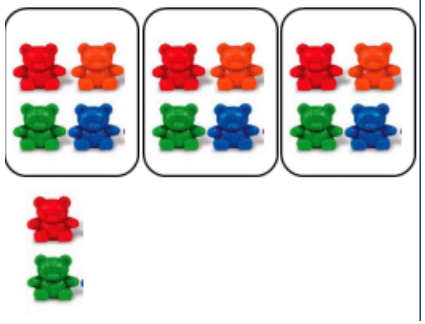
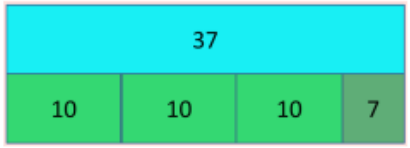
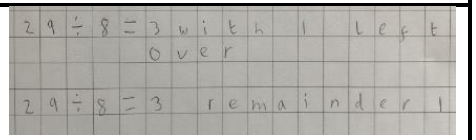
	5 = 15 ÷3 3 x 5 = 15 5 x 3 = 15 15 = 3 x 5 15 = 5 x 3			
Use known times-tables to solve division	Understand the relationship between multiplication facts and division.  *4 groups of 5 cars is 20 cars in total.* *20 divided by 4 is 5.*	Link equal grouping with repeated subtraction and known times-table facts to support division  *40 divided by 4 is 10.* Use a bar model to support understanding of the link between times-table knowledge and division. 	Relate times-table knowledge directly to division. 1 × 10 = 10 2 × 10 = 20 **3 × 10 = 30** 4 × 10 = 40 5 × 10 = 50 6 × 10 = 60 7 × 10 = 70 8 × 10 = 80  *I know that 3 groups of 10 makes 30, so I know that 30 divided by 10 is 3.* *3 × 10 = 30 so 30 ÷ 10 = 3*	

Year 3 Division

Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Use known times-tables to solve division	Use knowledge of known times-tables to calculate divisions.  *24 divided into groups of 8.* *There are 3 groups of 8.*	Use knowledge of known times-tables to calculate divisions.	Use knowledge of known times-tables to calculate divisions. 	division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each … ten each group in pairs, threes … tens equal groups of

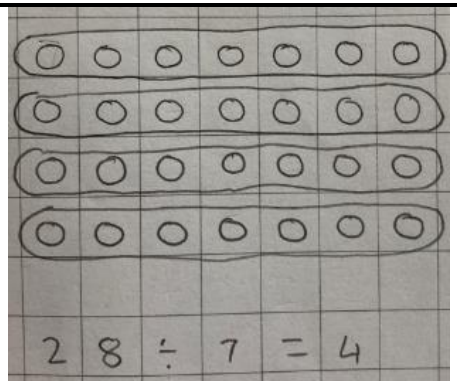
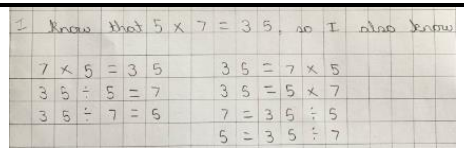
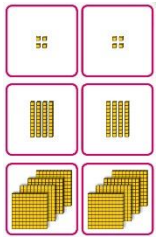
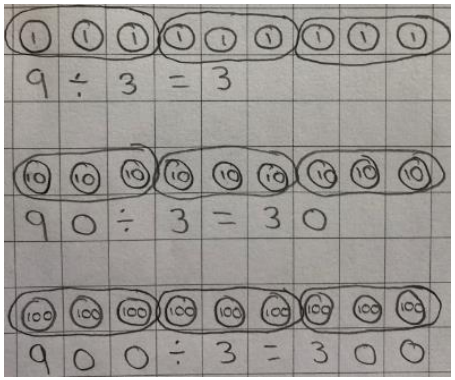
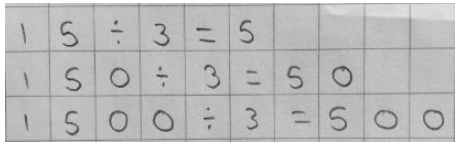
		 48 ÷ 4 = 12 *48 divided into groups of 4.* *There are 12 groups.*  A bar model may represent the relationship between sharing and grouping.  *24 ÷ 4 = 6* *24 ÷ 6 = 4* Children understand how division is related to both repeated subtraction and repeated addition.		multiplication table multiplication fact, division fact

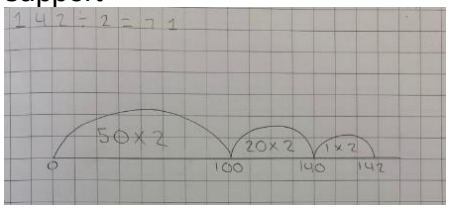
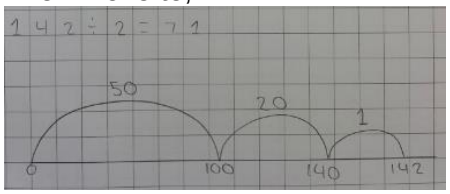
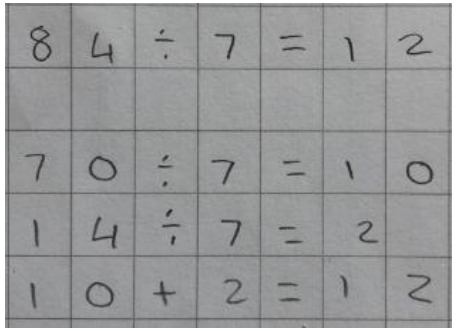
		 *24 ÷ 8 = 3*  *32 ÷ 8 = 4*		
Use known facts to divide multiples of 10	Use place value equipment to understand how to divide by unitising. *Make 6 ones divided by 3.*  *Now make 6 tens divided by 3.*  What is the same? What is different?	Divide multiples of 10 by unitising.  12 tens shared into 3 equal groups. 4 tens in each group.	Divide multiples of 10 by a single digit using known times-tables. 	
Divide a 2 digit number by a 1 digit number using partitioning	Children explore dividing 2-digit numbers by using place value equipment.  *48 ÷ 2 = ?*	Children explore which partitions support particular divisions. 42 ÷ 2 =  96 ÷ 8	69 ÷ 3 = 69 is partitioned into 60 and 9 	

				
Children have an awareness of remainders *Using the word remainder not the letter r*	14 ÷ 3 = Divide objects between groups and see how much is left over 	Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder.  Draw dots and group them to divide an amount and clearly show a remainder.  Use bar models to show division with remainders. 		

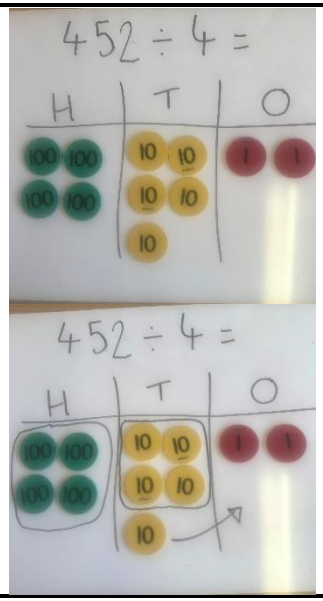
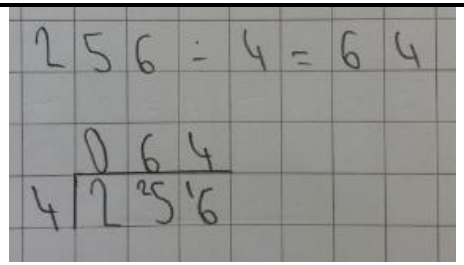
Year 4 Division

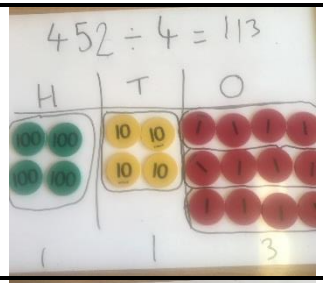
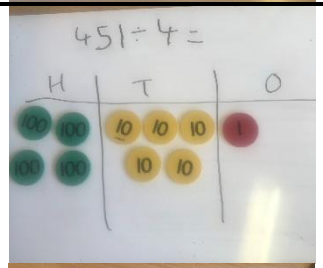
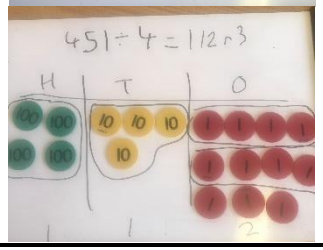
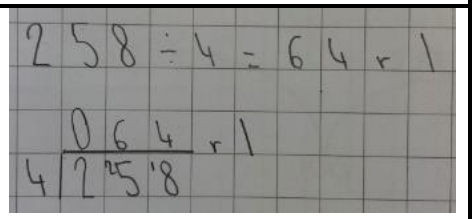
Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Understand the relationship	Use objects to explore families of multiplication and division facts.	Represent divisions using an array.	Understand families of related multiplication and division facts.	

between multiplication and division, including times-tables	 *4 × 6 = 24* *24 is 6 groups of 4.* *24 is 4 groups of 6.* *24 divided by 6 is 4.* *24 divided by 4 is 6.*			division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each … ten each group in pairs, threes … tens equal groups of multiplication table multiplication fact, division fact
Dividing multiples of 10 and 100 by a single digit	Use place value equipment to understand how to use unitising to divide.  *8 ones divided into 2 equal groups* *4 ones in each group* *8 tens divided into 2 equal groups* *4 tens in each group* *8 hundreds divided into 2 equal groups* *4 hundreds in each group*	Draw the place value counters to support with calculation.  *9 ÷ 3 = 3* *9 tens divided by 3 is 3 tens.* *9 hundreds divided by 3 is 3 hundreds.*	Use known facts to divide 10s and 100s by a single digit. 	

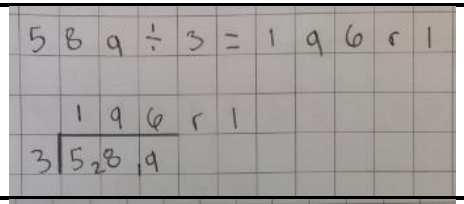
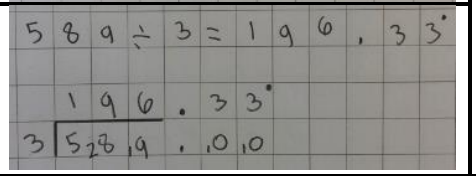
Informal methods of dividing 2-digit and 3-digit numbers by a single digit	Use place value equipment to explore why different partitions are needed. *42 ÷ 3 = ?* *I will split it into 30 and 12, so that I can divide by 3 more easily.* 	Children use a number line to support  Then move to, 	Represent how to partition flexibly where needed.  84 is partitioned into 70 and 14, as these are both divisible by 7.	

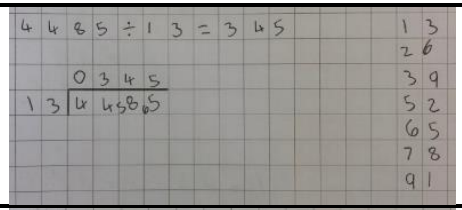
Year 5 division

Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Short Division (Bus stop) method		Children can draw the place value counters.		division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each … ten each group in pairs, threes … tens equal groups of multiplication table multiplication fact, division fact

				
Short Division (Bus stop) method with remainders	 	Children can draw the place value counters.		

Year 6 division

Objective and strategy	Concrete	Pictorial	Abstract	Vocabulary
Short Division (Bus stop) method with remainders	Manipulatives may still be used with the corresponding calculation alongside.			division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each … ten each group in pairs, threes … tens equal groups of
Short Division (Bus stop) method with decimal remainders	Manipulatives may still be used with the corresponding calculation alongside.			

2 digit Short Division (Bus stop) method				multiplication table multiplication fact, division fact
Long division