St Teresa's Catholic Primary School

Calculation Policy – Subtraction

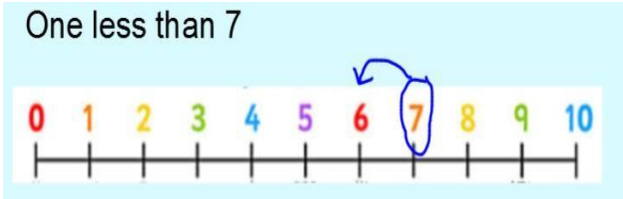
Respect – Resilience – Read – Retain

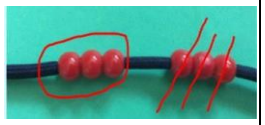
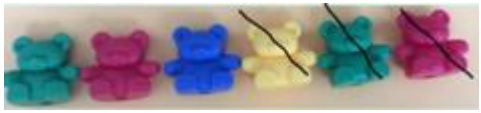
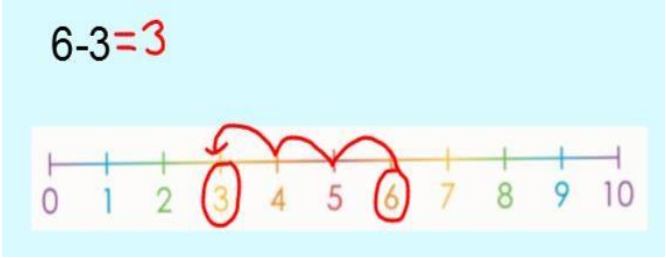
'Do the little things well'

EYFS

Key Vocabulary: take away, difference between, how many are left/ left over? How many are gone?, one less, two less, ten less. How many fewer is…than…? How much less is…? minuend, subtrahend, difference.

Counting fluency: To count forwards and backwards in steps of 1s, 2s, 5s and 10s.

	Objective and Strategies	Concrete	Pictorial	Abstract
EYFS	To find one less than a number.	Use physical objects to find the solution by taking away one object from thewhole. **Can you find one less than the number?**   	**Can you find one less than the number?** **<u>Modelled on a number line</u>** Circle the biggest number in the number sentence and countback one on the number line to find the solution.  	Record as a written calculation. 7 – 1 = 6
	Subtract two single digit numbers.	Use a range of physical objects, including number beads. Children will find thesolution by making the number first then removing several objects from the whole.	**<u>Modelled on a number line</u>** Circle the biggest number in the number sentence and countback in ones on the number line to find the solution.	Record as a written calculation.

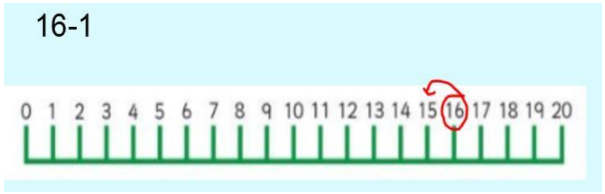
		6 - 3 = 3   		6 – 3 = 3

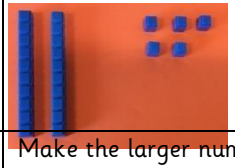
Year 1

Key Vocabulary: subtract, take away, difference between, how many are left/ left over? How many are gone? One less, two less, ten less. How many fewer is…than…? How much less is…? *mi*nuend,subtrahend, difference.

Counting fluency: To count forwards and backwards in steps of 1s, 2s, 5s and 10s.

Year 1 calculation methods.

	Objective and Strategies	Concrete	Pictorial	Abstract
	To find one more than a number.	**Modelled using counters** **One less than 16** Use physical objects and find the solution (difference) by taking away one object from the group (minuend), counting backwards. 	**Number line** Circle the biggest number (minuend) in the number sentence and countback one (subtrahend) on the number line to find the solution (difference).  **Modelled using 100 square35 – 10 = 25**	Record as a written calculation. 16-1=15 35 – 10 = 25

	To find 10 more than a number	**<u>Modelled using Base 10</u> Ten less than 35** **Step 1-** Make the number (minuend) usingbase 10 or concrete resources.  **Step 2-** Take 10 (subtrahend) away. **Step 3-** Calculate the final answer by counting how many are left (difference). 	**Step 1-** Circle the number you arestarting at (minuend) e.g. 35 **Step 2-** Count back 10 (subtrahend). **Step 3-** The tenth number you land on isyour answer (difference) e.g. 25 | 1	2	3	4	5	6	7	8	9	10
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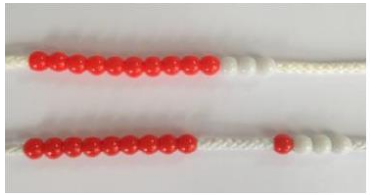
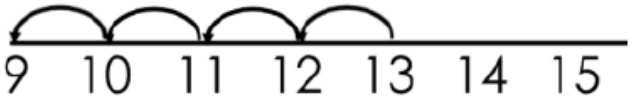
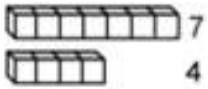
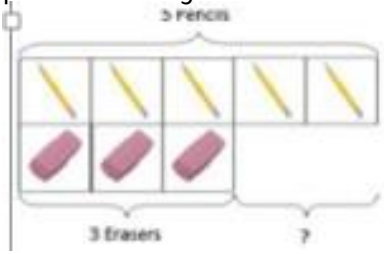
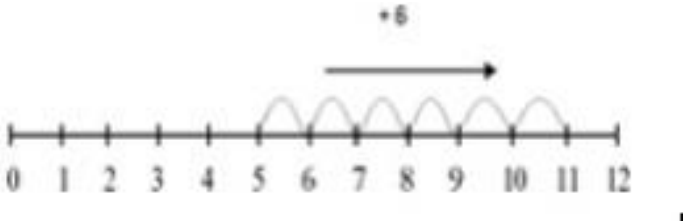
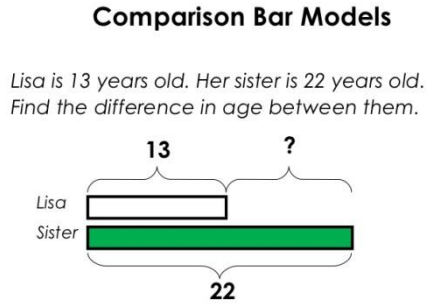
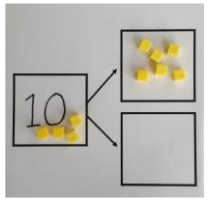
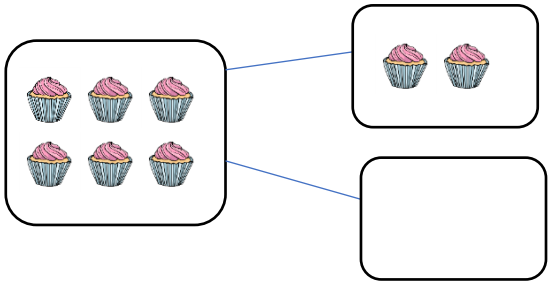
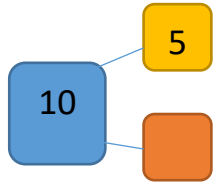
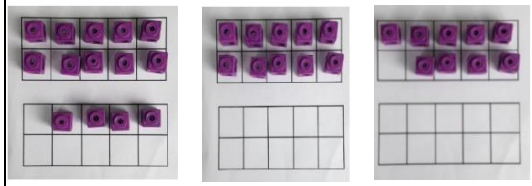
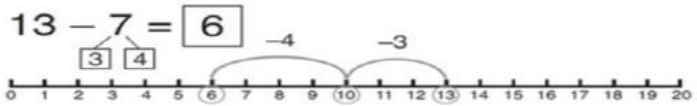
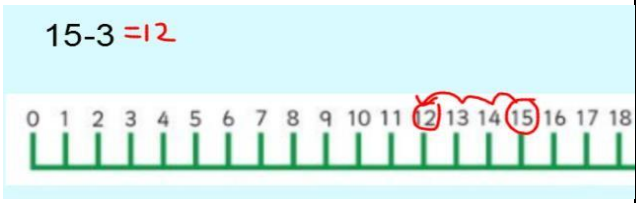
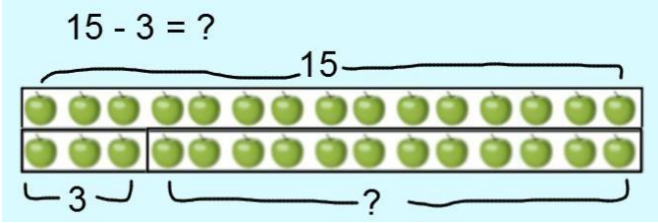
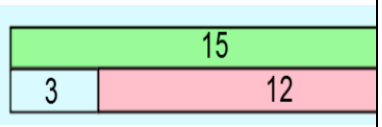
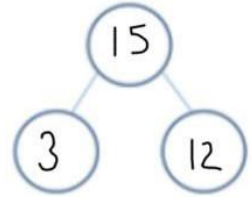
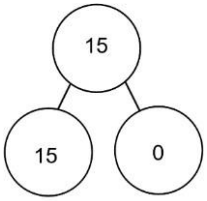
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60		
	To count back to subtract	Make the larger number in your subtraction. Move the beads along your bead string as you count backwards in ones. 13 – 4  Use counters and move them away from the group as you take them away counting backwards as you go. 	Count back on a number line or number track  Start at the bigger number and count back the smaller number showing the jumps on the number line.	Put 13 in your head, count back 4. What number are you at? Use your fingers to help.

	To find the difference between 2 numbers	Children begin to compare amounts by representing withobjects.  7 'Seven is 3 more than four' 4 'I am 2 years older than my sister' Children use objects to represent problems usingthe bar model.  	<u>Number line- counting on</u> Find the difference by counting on from the smaller number(subtrahend) to the bigger number (minuend). **11 – 5 = 6**  Draw bars to find the difference between 2 numbers.  	Children apply to word problems. **Hannah has 12 sweets and her sisterhas 5 sweets. How many more sweetsdoes Hannah have than her sister?**
	Part Part Whole Model	 Link to addition- use the part whole model to help explain the inverse between addition and subtraction. If 10 is the whole and 6 is one of the parts. What is the other part? 10 - 6 =	Use a pictorial representation of objects to show the part part whole model. 	 Move to using numbers within the part whole model.

	Make 10	14 – 9 =  Make 14 on the ten frame. Take away the four first to make 10 and then takeaway one more so you have taken away 5. You are left with the answer of 9.	Model with a number line.  Start at 13. Take away 3 to reach 10. Then take away the remaining 4 so you have taken away 7 altogether. You have reached your answer.	16 – 8= How many do we take off to reach the next 10? How many do we have left to take off?
	To subtract one digit and two digits numbers to 20, including zero		**15 – 3 = 12** Children represent pictorially by drawingobjects and crossing out to show what has been taken away. <u>Number line- counting back</u> Circle the biggest number (minuend) in the number sentence and countback in ones on the number line to find the difference.  <u>Bar model</u> Use the bar model to represent the model pictorially.  <u>Part-Whole Model</u>	Record as a written calculation. **15-3=12** Understand subtraction verbally. ***Put 15 in your head, count back 3,what number are you at?*** Use the bar model or part whole modelto find all related addition and subtraction facts  

			15-0=15  	15=3+12 15=12+3 15-3=12 15-12=3 Record as a written calculation. **15 – 0 = 15**

Year 2

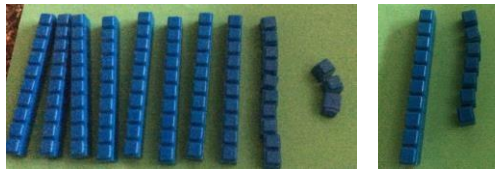
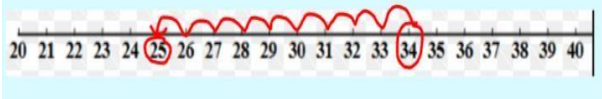
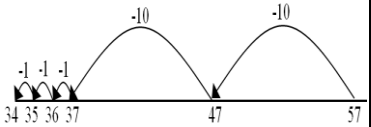
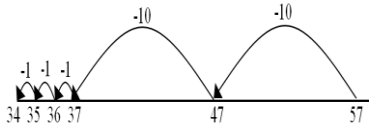
Counting fluency: To count forwards and backwards in steps of 2s, 3s, 4s, 5s and 10s.

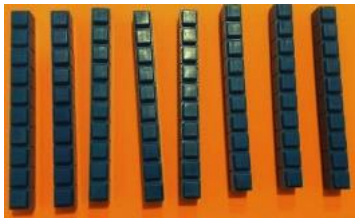
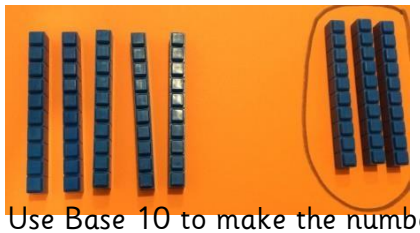
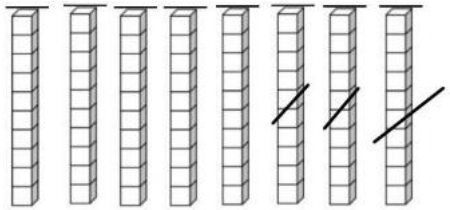
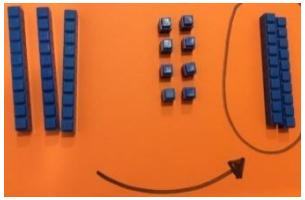
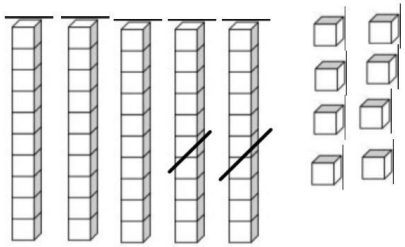
Mental strategies

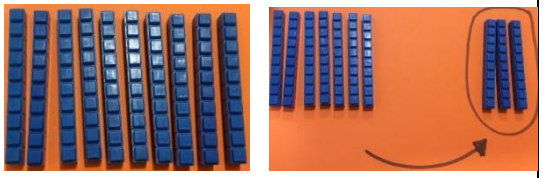
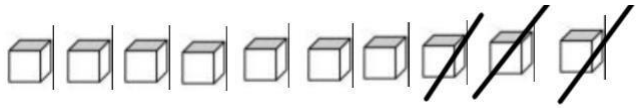
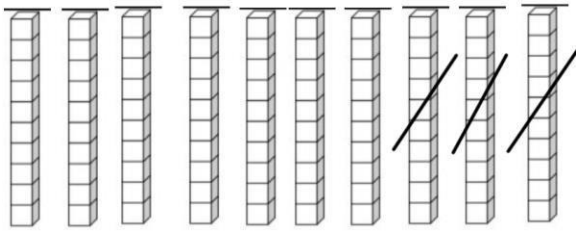
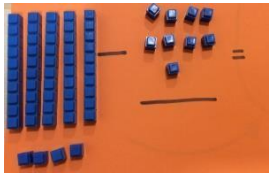
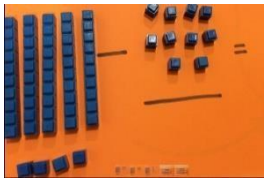
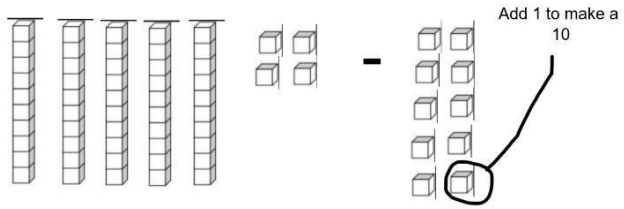
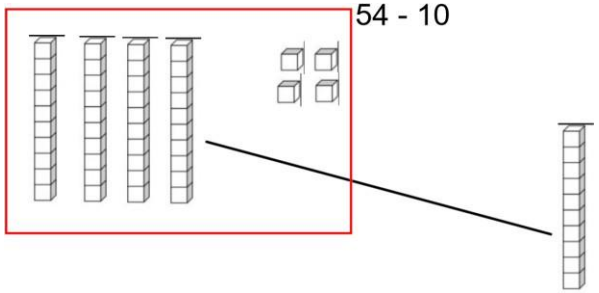
Skill	Strategy
To subtract 9 to a 2-digit number by adjusting.	**54-9** Make the number with base ten equipment, then subtract 10. You then need to add 1 because 9 is actually one less than 10. Children will begin to do this mentallywithout equipment. For 54-9 you would first subtract 10 54-10 = 44 then add 1, 44+1=45 so 54-9=45.

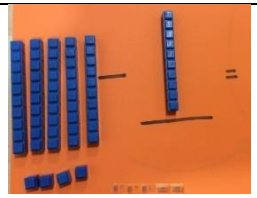
Year 2 calculation methods.

	Objective and Strategies	Concrete	Pictorial	Abstract

Year 2	To subtract numbers using objects, pictures and mentally including: -a 2-digit number and ones -a 2-digit number and tens -two 2-digit numbers	Use the base ten to represent the numbers (minuend) then use knowledge of exchanging tens for ten ones tosubtract the subtrahend. **34-9= 25**  **45-20= 25**  **93-76= 17** 	**<u>Modelled using a number line or 100 square</u>** Count back from largest (minuend) to smallest(subtrahend) number to find the difference. **34-9=25**  **45-20=25**  **93-76=17**  	<u>Use of a written method</u> Record by drawing their own number line. 
	To use partioning to subtract with two digit numbers.	**Use base 10 the make the number and subtract the tens and then the ones.**	**<u>Model subtracting 10s on the number line then the ones</u>**  	<u>Record subtracting tens and then ones.</u> 45 – 28 = 45 – 20 = 25 25 – 8 = 17

	To subtract tens from the tens number up to 100.	<u>Modelled using Base 10</u> 80 – 30 = 50   Use Base 10 to make the number (minuend). Then takeaway the number of tens (subtrahend) required andregroup to find the difference.	<u>Modelled using pictorial representations of Base 10</u>80 – 30 = 50  Children would cross out how many tens they are subtracting and count how many they have left to find the difference.	Record as a written calculation. 80 – 30 = 50
	To subtract tensfrom a 2-digit number	<u>Modelled using Base 10</u> 58 – 20 = 28  	<u>Modelled using pictorial representations of Base 10</u>58 – 20 = 28 	Record as a written calculation. 58 – 20 = 28

	To derive related facts up to 100.	**Modelled using Base 10** 10 – 3 = 7  100 – 30 = 70 	**Modelled using pictorial representations of Base 10** **10 – 3 = 7**  **100 – 30 = 70.** 	Record as a written calculation. **10 – 3 = 7** **10 – 30 = 70.**
	To subtract 9 from a2-digit number by adjusting	**Modelled using Base 10** 54 – 9 = 63 Step 1: Make the number sentence Step 2: If the number needed to subtract is 9, make this a ten by adding one more. This will be exchanged for1 ten.  	**Modelled using pictorial representations of Base 10** **54 – 9 = 45** Step 1- Add 1 to the 9 to make 10.  Step 2- Subtract 10 from the minuend.  Step 3- Now add the 1 back odd to find the difference.	Record as a written calculation. **54 – 9 = 45**

		 Step 3: Subtract 10 from the number (minuend), because the original number was 9, 1 willneed to be subtracted from thedifference.		

Year 3

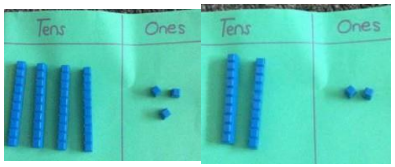
Key Vocabulary: subtract, take away, difference between, how many are left/ left over? How many are gone?, one less, two less, ten less, hundred less. How many fewer is…than…? How much lessis…? tens boundary, hundreds boundary, minuend, subtrahend, difference.

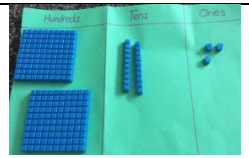
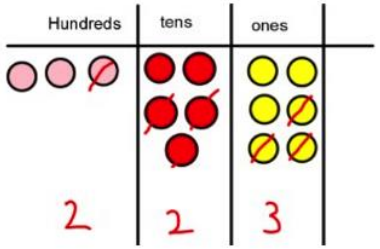
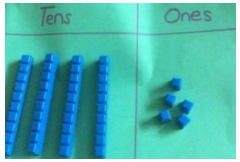
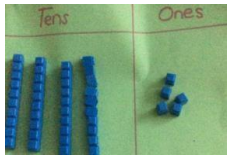
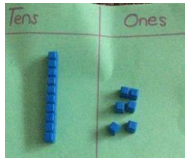
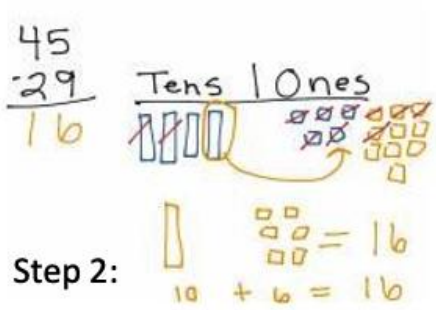
Counting fluency: To count forwards and backwards in steps of 2s, 3s, 4s, 5s, 6s, 8s, 10s and 100s from any given number.

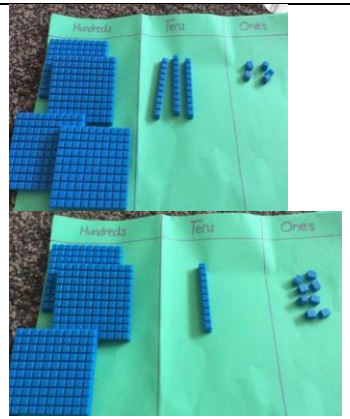
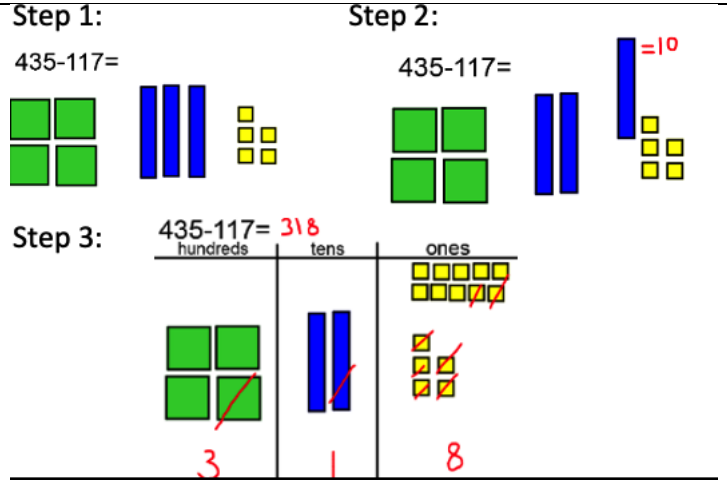
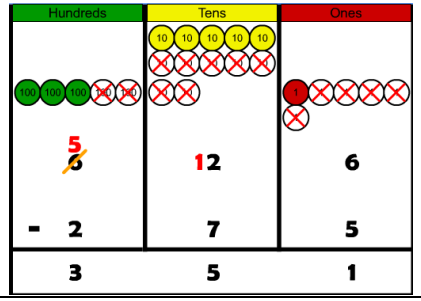
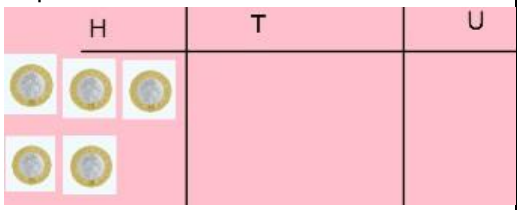
Mental strategies

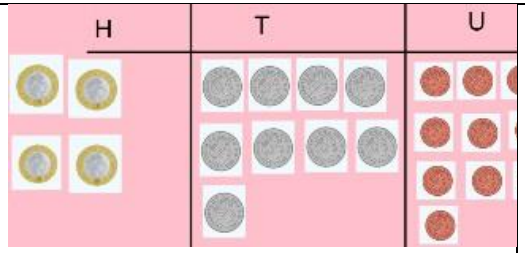
Skill	Strategy
*Subtract a 3-digit number and ones,including crossing boundaries.	**345-3** If the ones in the second number (subtrahend) can be taken from the first number (minuend) then subtract the ones only 345-3= 342. **432-8** If the ones in the subtrahend are more than the minuend then use partitioning to solve. For 432-8 you would partition 8 into 2 and 6 then432 – 2= 430-6 = 424.
*Subtract a 3- digit number and tensincluding crossing boundaries.	**554-40** If the tens in the second number (subtrahend) can be taken from the first number (minuend) then subtract the tens 554-40= 514 **543-70** If the tens in the subtrahend are more than the minuend then use partitioning to solve. For 543-70 you would partition 70 into 40 and 30 andthen 543 - 40 = 503 -30 =473. Alternatively you could count back in steps of ten from the minuend.
*Subtract a 3-digit number and hundreds including crossing boundaries.	**754-400** If the hundreds in the second number (subtrahend) can be taken from the first number (minuend) then subtract the hundreds 754-400= 354Alternatively you could count back in steps of one hundred from the minuend.
*Subtract ones from a 3-digit tens number.	**340-7** Use knowledge of place value to solve. 10-3= 7 so 40-7= 33 then add on the 300. 340-7=333

* Subtract a 2-digit number from amultiple of 10 including crossing boundaries	**90-27** Use knowledge of place value and partitioning to solve. Partition 27 into 20 and 7 and subtract each part from 90. 90- 20= 70 and useknowledge of number bonds that 10-7= 3 so 70-7= 63 Or use the counting on method to find the difference. If I start with 27 and add 3 I get to 30 then I need to add 60 more to get to 90 so90-27= 63
Subtract a 2-digit number from a 2-digit number, including crossing boundaries.	**56-32** If the ones and tens can be subtracted without exchange then subtract by partitioning. 56-32 would be 50-30 = 20 and 6 – 2 = 4 thenrecombine 20 and 4 to make 24 so 56-32=24. **45-27** If the ones in the second number (subtrahend) is more than the first number (minuend) then use partitioning to solve. For 45-27 you couldpartition 27 into 20 and 7 first. Then subtract from the minuend. 45-20= 25 then 25-7=18 so 45-27=18 Or use the counting on method to find the difference. If I start with 27 and add 3 I get to 30 then I need to add 10 more to get to 40then another 5 more to get to 45. I then recombine 3 with 10 with 5 so 45-27= 18
*Subtract near multiples of 10 and 100and adjust .	**43-9** When subtracting 9 you would subtract 10 (1 more than 9) from the minuend then add 1 because 10 is actually one more than 9. For 43-9, you would do43-10=33 +1 = 44. **543- 99** When subtracting 99 you would subtract 100 (1 more than 99) from the minuend then add 1 because 100 is actually one more than 99. For 543-99, you wouldo 543-100=443 +1 = 444.

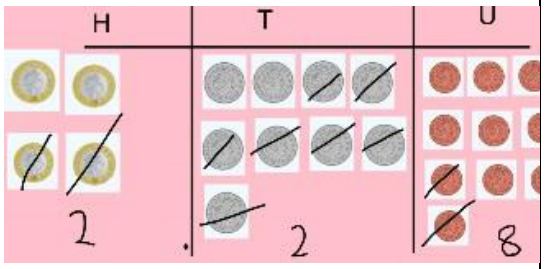
	Objective and Strategies	Concrete	Pictorial	Abstract
Year 3	To subtract 2 and 3 digit numbers without exchange.	Use base 10 to make the number (minuend) then take away the ones, tens then the hundreds to findthe difference. **43 – 21 = 22**  **356 - 133= 223**	Children draw pictorial representations to showthe regrouping in order to find how many are left.	Written Method (Formal Written Method (condensed method) Children begin to use a condensed columnar method of subtraction.

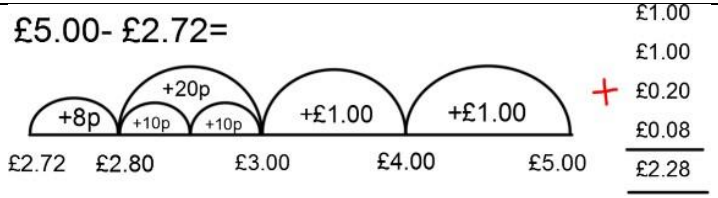
		 	**43-21=22**  **56 - 133= 223** 	43 - 21 22 365 - 133 232
	To subtract 2 and 3 digit numbers with exchange.	Use base 10 to make the number (minuend) then regroup by exchanging a ten for ten ones and a hundred for ten tens where necessary so that youcan subtract the subtrahend. **45-29=16**    Step 1: Make the minuend Step 2: Exchange 1 ten for 10 ones. Step 3: Subtract two tens and 9 ones. **435 – 117 = 318**	Children draw pictorial representations to show the regrouping in order to find the difference. **45 - 29 = 16**  **435-117= 318**	<u>Written Method</u> Children begin to use a condensed columnar method of subtraction with exchange in one column. 45 - 29 16 435 - 117 318

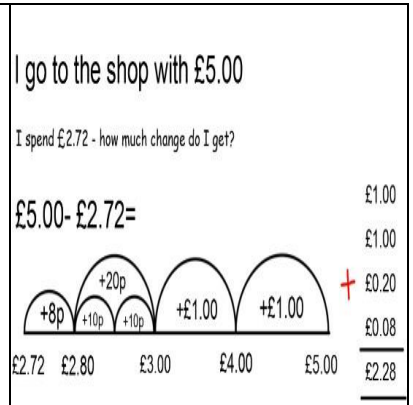
		 Step 1: Make the minuend Step 2: Exchange 1 ten for 10 ones. Step 3: Subtract one hundred,1 ten and 7 ones.	 	
	To subtract amounts of money to give change.	Use base money to make the number (minuend) thenregroup by exchanging a ten for ten ones and a hundred for ten tens where necessary so that you can subtract to find the difference. **£5-2.72** Step 1: Make the Number  Step 2: Exchange	Children draw pictorial representations to show the regrouping in order to find how many are left, this can be in the form of a number line. **<u>Modelled using a number line.</u>** Children start with the smallest number (subtrahend) and add to the nearest tenth, thennearest 1, until you reach the biggest number (minuend). Children will then need to add the jumps to calculate the change.	<u>Formal written method</u> Children complete subtractions involving decimals which are presented in word problem format. They use zeros for place holders and know that decimal points should line up under each other.



Step 3: Subtract to solve







Year 4

Key Vocabulary: subtract, take away, difference between, how many are left/ left over? How many are gone? One less, two less, ten less, hundred less. How many fewer is…than…? How much lessis…? tens boundary, hundreds boundary, inverse, minuend, subtrahend, difference.

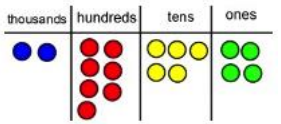
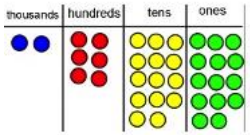
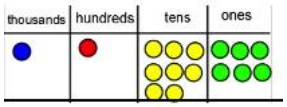
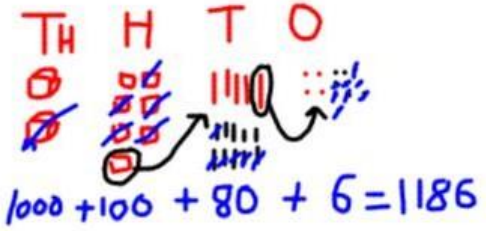
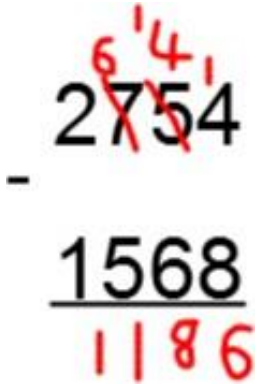
Counting fluency: To count backwards and forwards in steps of 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s, 11s, 12s, 100s and 1000s from any given starting number.

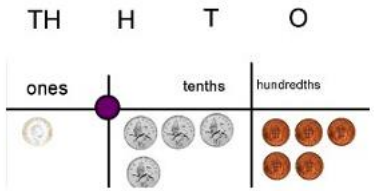
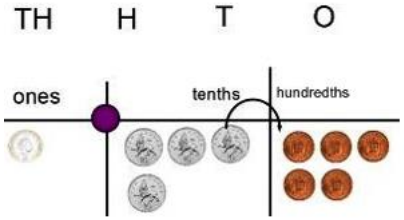
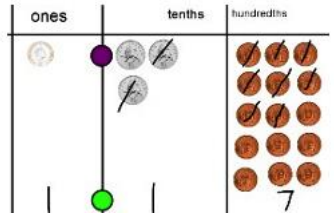
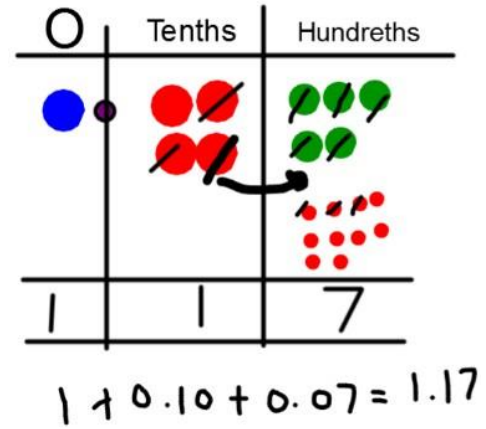
Mental strategies

Skill	Strategy
*Subtract a 4-digit number and ones,including crossing boundaries.	**3345-3** If the ones in the second number (subtrahend) can be taken from the first number (minuend) then subtract the ones only 3345-3= 3342. **2432-8** If the ones in the subtrahend are more than the minuend then use partitioning to solve. For 2432-8 you would partition 8 into 2 and 6 then2432 – 2= 430-6 = 2424.
*Subtract a 4- digit number and tensincluding crossing boundaries.	**5554-40** If the tens in the second number (subtrahend) can be taken from the first number (minuend) then subtract the tens 5554-40= 5514 **2543-70** If the tens in the subtrahend are more than the minuend then use partitioning to solve. For 2543-70 you would partition 70 into 40 and 30 andthen 2543 - 40 = 2503 -30 =2473. Alternatively you could count back in steps of ten from the minuend.

*Subtract a 4-digit number and hundreds including crossing boundaries.	**8754-400** If the hundreds in the second number (subtrahend) can be taken from the first number (minuend) then subtract the hundreds 8754-400= 8354 **2543-700** If the hundreds in the subtrahend are more than the minuend then use partitioning to solve. For 2543-700 you would partition 700 into 500 and 200 andthen 2543 - 500 = 2043 -200 =1843. Alternatively you could count back in steps of one hundred from the minuend.
*Subtract a 4-digit number and thousands including crossing boundaries.	**4527- 2000** If the thousands in the second number (subtrahend) can be taken from the first number (minuend) then subtract the thousands 4527-2000=2527 Alternatively you could count back in steps of one thousand from the minuend.
*Subtract a 3-digit multiple of 10 froma 3-digit number.	**345-130** If all the digits on the second number (subtrahend) can be subtracted then solve by portioning. For 345-130, you would do 300-100=200, 40-30=10 and 5-0=5then recombine 200+10+5=215 **546-270** If all or some of the digits in the subtrahend are more than the minuend then use partitioning to solve. For 546-270, you would partition 270 in 200 and70 and so 546- 200= 346 then subtract 70 to get 276. OR using the counting up method. For 546-270, start with 270, add 30 to get to 300 then add 200 to get to 500 then add 46 to get to 546. Then recombine 30+200+46= 276.
*Subtract a 3-digit multiple of 10 froma 4 or 4-digit number e.g. 4000-340.	**200-27** Use knowledge of place value and partitioning to solve. Partition 27 into 20 and 7 and subtract each part from 200. 200- 20= 180 and useknowledge of number bonds that 10-7= 3 so 180-7= 173. Or use the counting on method to find the difference. If I start with 27 and add 3, I get to 30 then I need to add 70 more to get to 100 then another 100 more to get to 200. I then recombine 3 and 70 and 100 so 200-27=173.
* Subtract a 2/3-digit number from a3/2-digit number, including crossing boundaries.	**237-24** If the ones and tens can be subtracted without exchange then subtract by partitioning. 237-24 would be 237-20=217 and then subtract 4 = 213. **432-171** If the ones or tens in the second number (subtrahend) is more than the first number (minuend) then use partitioning to solve. For 242-171 you couldpartition 171 into 100, 70 and 1 first. Then subtract from the minuend. 432-100= 332 then 332-70=262 then 263-1=261 so 432-171=261 Or use the counting on method to find the difference. If I start with 171 and add 29 I get to 200 then I need to add 200 more to get to 400then another 32 more to get to 432. I then recombine 29 with 200 with 32 to get 261 so 432-171=261
*Subtract near multiples of 10, 100 and100 then adjust.	**543-29** When subtracting 29 you would subtract 30 (1 more than 29) from the minuend then add 1 because 30 is actually one more than 29. For 543-29, youwould do 543-30=513+1 = 514 **543- 299** When subtracting 299 you would subtract 300 (1 more than 299) from the minuend then add 1 because 300 is actually one more than 299. For 543-299,you would do 543-300=243 +1 = 244. **5437- 3999** When subtracting 3999 you would subtract 4000 (1 more than 3999) from the minuend then add 1 because 4000 is actually one more than 3999. For 5437-3999, you would do 5437-4000=1437+1= 1438

Year 4 Calculation Methods

	Objective and Strategies	Concrete	Pictorial	Abstract
Year 4	To subtract numbers with up to 4 digits using a formal written method.	Use base 10 to make the number (minuend) then regroup by exchanging a ten for ten ones, a hundredfor ten tens or a thousands for ten hundreds wherenecessary so that you can subtract the subtrahend **2754-1568=1186**  Step 1: Make the minuend.  Step 2: Exchange 1 ten for 10 ones.  Step 3: Subtract one hundred,1ten and 7 ones.	Children draw pictorial representations to show the regrouping in order to find the difference. **2754 - 1568= 1186**  	<u>Formal written method</u> Children use a condensed method of subtraction, includingexamples with multiples exchanges. **2754– 1568 = 1186** 

	To subtract numbers with up to 4 digits using a formal written method, including decimals to two decimal places. To subtract amounts of money to give change- adapted from year 3	Use the place value counters to make the number (minuend) then regroup by exchanging, where necessary: a thousand for ten hundreds, a hundred for ten tens, a ten for ten ones, a one for ten tenthsand ten tenths for a hundredth so that you can subtract. **£1.45-28p=£1.17** Step 1: Make the number  Step 2: Exchange *because you can't subtract 8 from 5. Children will need to exchange 10p for 10x1p.  Step 3: Subtract to solve  	Children draw pictorial representations toshow the regrouping in order to find the difference. £1.45-28p=£1.17  	<u>Formal written method</u> Children complete subtractions involving decimals which are presented in word problem format. They use zeros for place holders and know that decimal points should line up under each other. **Bella spends 28p in the shop.** **She spends £1.45 of her pocket money.** **How muchchange will she receive?** £1.45 - 28p £1.^{3}4^{1}5 - .28 £1.17

Year 5

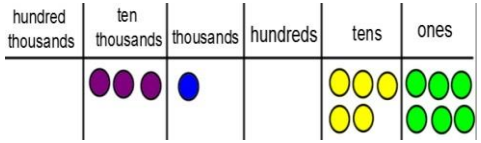
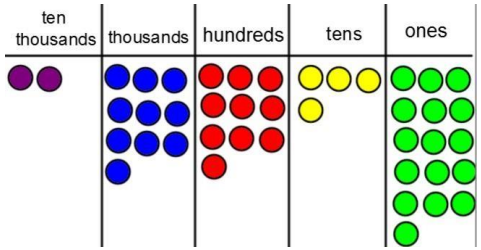
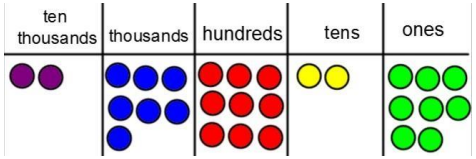
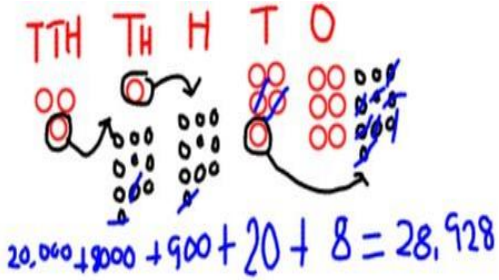
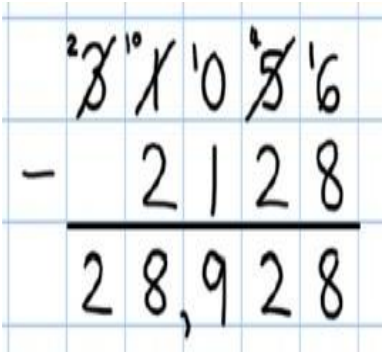
Key Vocabulary: subtract, take away, difference between, how many are left/ left over? How many are gone? One less, two less, ten less, hundred less. How many fewer is…than…? How much lessis…? tens boundary, hundreds boundary, one boundary, tenths boundary, inverse, minuend, subtrahend, difference.

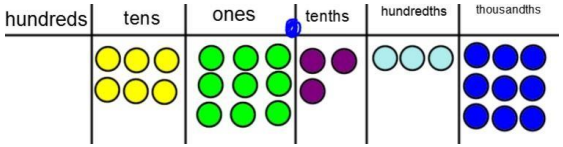
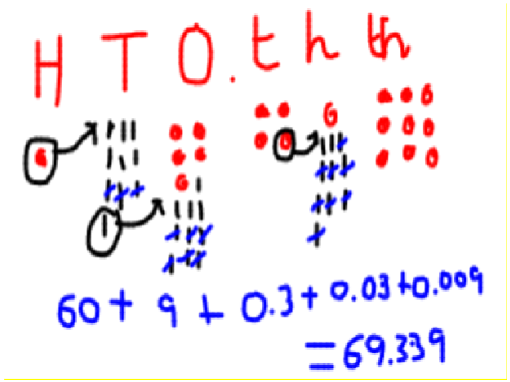
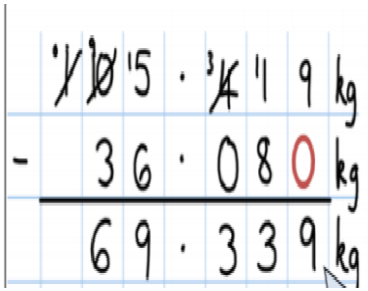
Counting Fluency: To count backwards and forwards in steps of 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s, 11s, 12s, 100s and 1000s from any given starting n

Skill	Strategy	
*Subtract a 4/5-digit multiple of100.	**5400-3900**	For large numbers use knowledge of place value to solve. For 5400-3900, make each number 100 times smaller and do 54-39=15 then make thesolution 100 times bigger. 15x100=1500 so 5400-3900=1500. Or use the counting on method. For 5400-3900, start with 3900, add 100 to get to 4000 the another 1000 to get to 5000 then another 400to get to 5400. Next recombine 100+1000+400= 1500 so 5400-3900=1500
*Subtract near multiples of 10, 100, 1000, 10,000 then adjust, includingcrossing boundaries.	**2335-58**	Subtract the nearest multiple of 10 (60) then add 2 because 58 is two more than 60 2335-60= 2275-+2= 2277
	2345-297	Subtract the nearest multiple of 100 (300) then add 3 because 300 is three more than 297 2345-300= 2045+3= 2048
	5438- 3995	Add the nearest multiple of 1000 (4000) then add 5 because 4000 is five more than 3995 5438-4000= 1438+5= 1443
*Subtract tenths from a 1-digitwhole number and tenths.	**5.7-0.4**	If the tenths in the second number (subtrahend) are smaller than the tenths in the first number (minuend) then subtract the tenths and onesseparately 5.7 - 0.4= 5.3
	6.5-0.7	If the tenths in the second number (subtrahend) are larger than the tenths in the first number (minuend) then use your knowledge of numberbonds to partition. For 6.5- 0.7, partition 0.7 into 0.5 and 0.2. Then subtract 0.5 from 6.5 to get 6 then subtract 0.2 = 5.8 so 6.5-0.7= 5.8
*Subtract two 1-digit whole numbersand tenths.	**4.7- 2.5**	If the ones and tenths in the second number (subtrahend) are smaller than the ones and tenths in the first number (minuend) then subtractthe tenths and ones separately. For 4.7-2.5, subtract the ones 4-2= 2 and then the tenths 0.7-0.5=0.2 then recombine. 4.7-2.5=2.2
	6.4 – 3.7	If the tenths in the second number (subtrahend) are larger than the tenths in the first number (minuend) use your knowledge of place valueto solve. Make both numbers ten times bigger then calculate 64-37= 27. To adjust make your answer 10 times smaller 27 ÷ 10 = 2.7 so 6.4-3.7= 2.7

*Subtract 2-digit numbers withtenths and hundredths.	**0.46-0.23**	If the ones, tenths and hundredths in the second number (subtrahend) are smaller than the ones and tenths in the first number (minuend)then subtract the hundredths, tenths and ones separately. For 0.46-0.23 subtract the ones 0-0=0, subtract the tenths 0.4-0.2=0.2 then subtract the hundredths 0.06-0.03=0.03 then recombine 0+0.2+0.03= 0.23
	0.76-0.59	If the tenths/ hundredths in the second number (subtrahend) are larger than the tenths/ hundredths in the first number (minuend) use yourknowledge of place value to solve. Make both numbers 100 times bigger then calculate 76-59=17 To adjust make your answer 100 times smaller 17 ÷ 100 = 0.17 so 0.76-0.59=0.17
*Subtract a 1-digit whole numberand tenths from a whole number.	**8-5.6**	Use the counting on method to find the difference. If I start with 5.6 and add 0.4, I get to 6 then I need to add 2 more to get to 8. I then recombine 0.4 and 2 so 8-5.6=2.4

Objective and Strategies	Concrete	Pictorial	Abstract

Year 5	To subtract numbers with more than 4 digits.	Use the place value counters to make the number (minuend) then regroup by exchanging, where necessary: a thousand for ten hundreds, a hundred for ten tens, a ten for ten ones, a one for ten tenths and ten tenths for ahundredth so that you can subtract. **31056 – 2128 = 28,928** Step 1- M ake the number.  Step 2- Exchange.  Step 3- Subtract to solve. 	Children draw pictorial representations toshow the regrouping in order to find how many are left. **31056 – 2128 = 28,928** 	<u>Formal written method</u> Children use a condensed method of subtraction including those with different numbers of digits. **31056 – 2128 = 28,928** 

	To solve problems involving measure using decimal notation up to three decimal places.	Use the place value counters to make the number then regroup by exchanging, where necessary: a thousand for ten hundreds, a hundred forten tens, a ten for ten ones, a one for ten tenths, a hundredths for ten tenths and a thousandth for ten hundredths. **105.419kg – 36.080kg** Step one- Make the number. Step 2- Exchange. Step 3- Subtract to solve. 	Children draw pictorial representations toshow the regrouping in order to find the difference. **105.419kg – 36.080kg** 	<u>Formal written method</u> Children complete subtractions involving decimals which are presented in word problem format. They usezeros for place holders and know that decimal points should line up under each other. **105.419kg – 36.080kg** 

Year 6

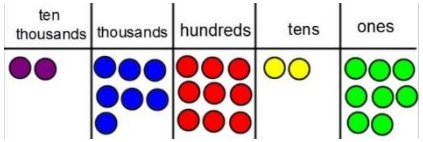
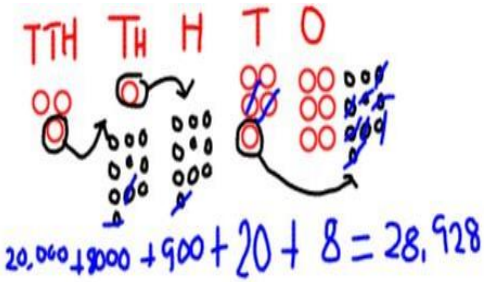
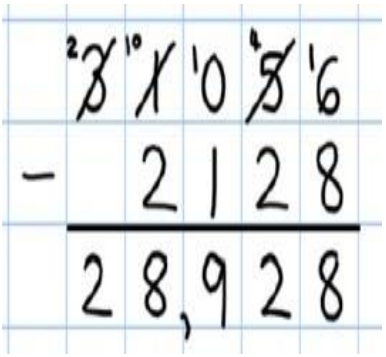
Year 6 Calculation Methods

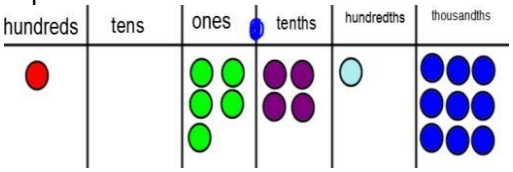
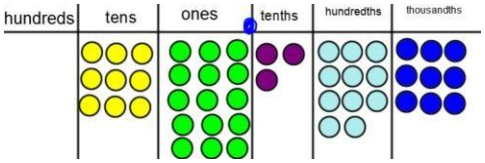
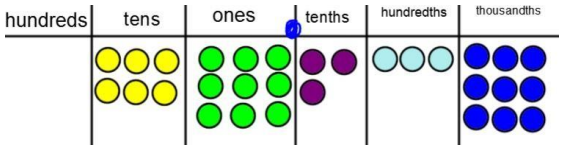
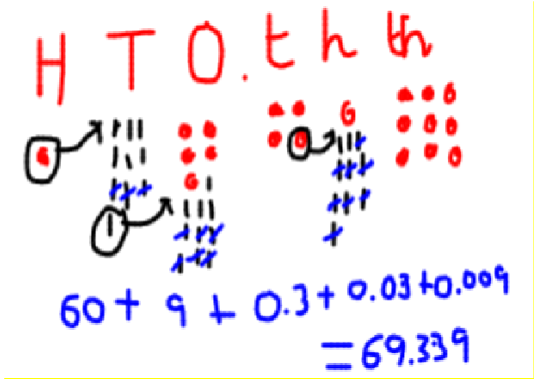
Key Vocabulary: subtract, take away, difference between, how many are left/ left over? How many are gone?, one less, two less, ten less, hundred less. How many fewer is…than…? How much lessis…? tens boundary, hundreds boundary, one boundary, tenths boundary, inverse, minuend, subtrahend, difference.

Counting Fluency: To consolidate counting backwards and forwards in steps of 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s, 11s, 12s, 100s, 1000s and 10,000s from any starting number.

Mental Strategies

Skill	Strategy
Reconsolidate all strategies from Y4 and 5.	
*Subtract large numbers.	**53,765-3330** For large numbers use partitioning to solve. For 53,765-3330, partition the subtrahend into 3000 and 300 and 30 and subtracteach part. 53,765-3000=50,765 then subtract 300 = 50, 465 the subtract 30= 50,435
*Subtract near multiples of 0.01, 0.1, 10, 100, 1000 then adjust, including crossingboundaries.	**6.7 – 3.8** Subtract the nearest whole number (4) then add 0.2 because 4 is actually 0.2 more than 3.8 so 6.7- 4=2.7 +0.2= 2.9 **4.92- 2.96** Subtract the nearest whole number (3) then add 0.04 because 3 is actually 0.04 more than 2.96 so 4.92-3= 1.92+0.04= 1.96
*Subtract decimals with different numbersof places.	**0.45-0.3** Subtract by partitioning using your knowledge of place value. First subtract the ones 0 - 0 = 0, then the tenths 0.4 - 0.3 = 0.1then the hundredths 0.05-0.00=0.05 Then recombine 0 + 0.1 + 0.05= 0.15 or use knowledge of place value to solve. Make each number 100 times bigger and subtract. 45-30=15 then make the solution 100times smaller. 15÷100=1.5 so 0.45-0.3=1.5

	*Subtract any number with up to threedecimal places from a whole number.	**4-0.34** **14-0.432**	Use the counting on method and knowledge of place value to find the difference. If I start with 0.34 and add 0.66, I get to 1 then Ineed to add 3 more to get to 4. I then recombine 0.66 and 3 so 4-0.34=3.66 Use the counting on method and knowledge of place value to find the difference. If I start with 0.432 and add 0.568, I get to 1 thenneed to add 13 more to get to 14. I then recombine 0.568 and 13 so 14-0.432=13.568	
Year 6	To subtract numbers with increasingly large and complex numbers.	Use the place value counters to make the number (minuend) then regroup byexchanging, where necessary: a thousand for ten hundreds, a hundred for ten tens, a ten for ten ones, a one for ten tenths and ten tenths for a hundredth so that you can subtract. **31056 – 2128 = 28,928** Step 1- Make the number Step 2- Exchange. Step 3- Subtract to solve.  	Children draw pictorial representations toshow the regrouping in order to find how many are left. **31056 – 2128 = 28,928**  	Formal written method Children use a condensed method of subtraction including those with different numbers of digits. **31056 – 2128 = 28,928** 

	To solve problems involving the conversion of units of measure, using decimal notation up to 3 decimal places.	Use the place value counters to make the number then regroup by exchanging, where necessary: a thousand for ten hundreds, a hundred forten tens, a ten for ten ones, a one for ten tenths, a hundredths for ten tenths and a thousandth for ten hundredths. **105.419 kg - 36080g** As this is a mixed measure problem, children wouldfirst convert so they are working with the same unit. **105.419kg – 36.080kg** Step one- Make the number.  Step 2- Exchange.  Step 3- Subtract to solve.  	Children draw pictorial representations toshow the regrouping in order to find the difference. **105.419kg – 36.080kg**  	<u>Formal written method</u> Children complete subtractions involving decimals which are presented in word problem format. They usezeros for place holders and know that decimal points should line up under each other. They convert measures so that they are working with the same unit. **105.419 kg - 36080g** would convert into **105.419kg – 36.080kg**