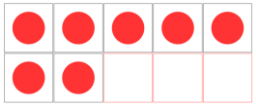
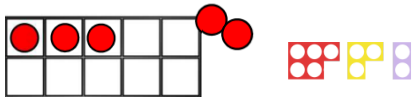
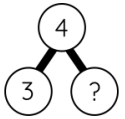
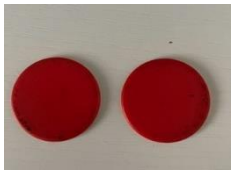
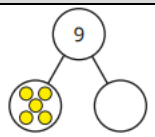
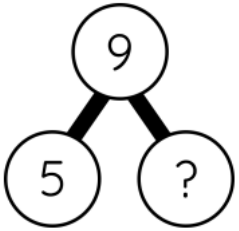
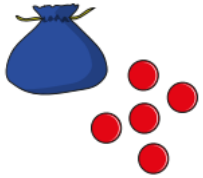
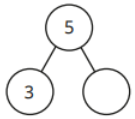
LEARNING AND FLOURISHING TOGETHER | PROUD TO BE PART OF PDET

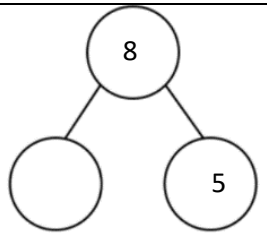
Calculation Policy

Subtraction

January 2024

EYFS:			
Vocabulary:	First Then Now Take away Minus Subtract Part Whole	**Manipulatives & scaffolds:**	Five and ten frames Fingers Numicon Interlocking cubes Double sided counters Part-whole model
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
1 less	 Act out the rhyme 'ten in the bed' with bears. Use a number line to show what happens each time a bear rolls out of the bed and discuss the '1 less' pattern as the number decreases.	 There are 7. 1 less than 7 is 6. 6 is 1 less than 7.	There are ___ There are ___ altogether. ___ is 1 less than ___ 1 less than ___ is ___
Take away	Use real objects (numicon, ten frames & counters) to explore the concept that the quantity of a group can be changed by taking away. 	Use stories alongside images to provide meaningful context.  First there were six people on the bus. Then two people got off the bus. Now there are four people left.	There are four cakes in the shop, three cakes are eaten. How many are left?  4 - 3 = ?

Y1			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between	**Manipulatives & scaffolds:**	Double sided counters Ten frames Part-whole model Dienes Bar model
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Find a part	I have 5 counters altogether. I have 2 in one hand, how many are in the other hand?  2 + __ = 5	 _____ + _____ = _____ _____ = _____ + _____ 5 is a part, _____ is a part and 9 is the whole.	There are 9 children on a train. 5 children get off the train. How many are left? 
Subtraction – find a part (Introducing the subtraction symbol)	 There are 8 counters in total in the bag. How many counters are in the bag?	 How many ice creams do not have flakes? There are __ ice creams that do not have flakes. 6 - __ = __	 _____ – _____ = _____

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

8 – 5 = 3</td>
<td></td>
<td></td>
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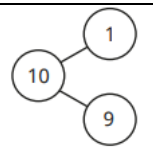
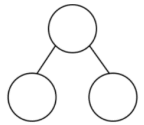
<tr>
<td>Fact families – the 8 facts</td>
<td> 
3 + 5 = 8 8 = 3 + 5
5 + 3 = 8 8 = 5 + 3
8 – 5 = 3 3 = 8 – 5
8 – 3 = 5 5 = 8 – 3</td>
<td>There are 6 apples. 
5 of them are red and 1 is green.
Write the fact family to show this.
__ + __ = 6 6 = __ + __
__ + __ = 6 6 = __ + __
6 - __ = __ __ = 6 - __
6 - __ = __ __ = 6 - __</td>
<td> 

____ + ____ = ____ ____ = ____ + ____
____ + ____ = ____ ____ = ____ + ____
____ – ____ = ____ ____ = ____ – ____
____ – ____ = ____ ____ = ____ – ____</td>
</tr>
<tr>
<td>Subtraction – take away/cross out (How many left?)</td>
<td> 
First there were 6 bears.
Then 3 of the bears were taken away.
Now there are 3 bears.</td>
<td>There are 7 birds in a tree.
3 birds fly away.
Complete the sentences.
▸ First there were _____ birds in the tree.
▸ Then _____ of the birds flew away.
▸ Now there are _____ birds in the tree.
  </td>
<td>Tell/write a ‘first, then, now’ story to describe what is happening in the picture.
 
Draw a part-whole model for your story.
  </td>
</tr>
</table>

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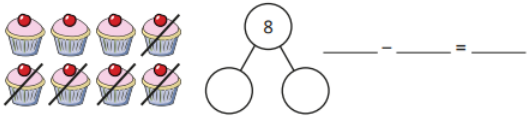
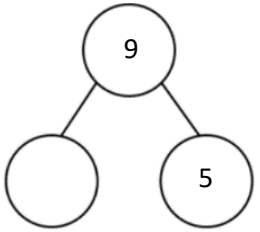
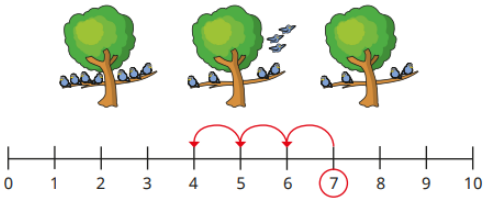
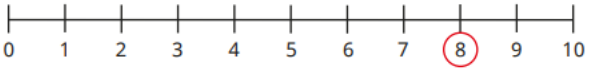
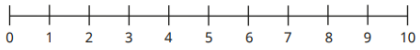
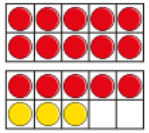
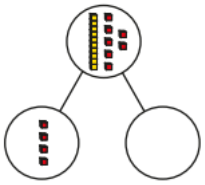
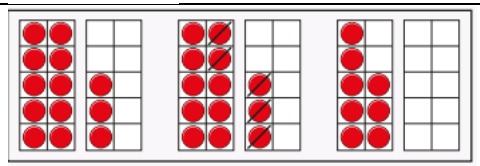
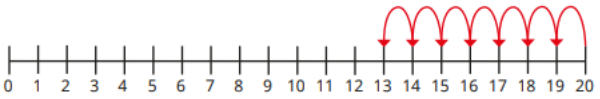
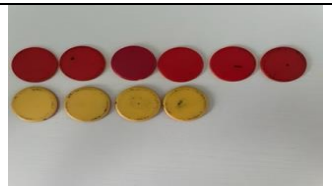
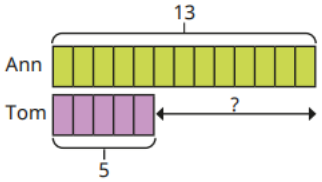
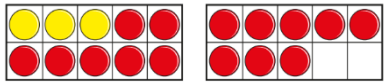
PROUD TO BE PART OF PDET

Subtraction – take away (How many left?)	 First there were 6 bears. Then 3 of the bears were taken away. Now there are 3 bears. **6 – 3 = 3**	First there were 8 cakes. Then 5 of the cakes were eaten. How many cakes are left? Complete the part-whole model and the subtraction sentence. 	 **9 – 5 = 4**
Subtraction on a number line	How many birds are left?  ▸ Why is 7 circled? ▸ Why are there 3 jumps? ▸ What number do the jumps end on? What does this mean?	Jo has 8 sweets. She gives 5 sweets to Ron. How many sweets does Jo have left? Use the number line to work it out. 	 6 – 4 = _____
Subtract ones using number bonds	 18 – 3 = _____	 **17 – 4 =**	**19 - 3**
Subtraction – counting back	 First there were __ counters Then __ were taken away Now there are __ counters	**20 – 7 =** 	**19 = 8 =**

Subtraction – find the difference	 There are __ more red counters. *focus on how many more there are	Ann has 13 marbles. Tom has 5 marbles.  How many more marbles does Ann have than Tom?	There are 11 pink pens and 7 green pens in a pot. How many more pink pens are there than green pens?
Y2			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between, tens boundary, cross ten	**Manipulatives & scaffolds:**	Double sided counters Ten frames Part-whole model Dienes Number lines Bar model
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Fact families – subtraction bonds within 20	 18 - __ = __ 18 - __ = __		__ - __ = __ __ = __ - __ __ - __ = __ __ = __ - __
Subtract ones	 10 – 3 = 7	 20 – 6 = 14	**10 – 3 =** **20 – 6 =**

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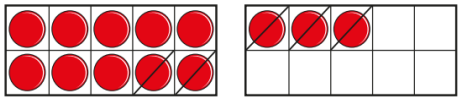
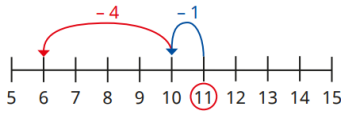
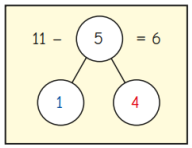
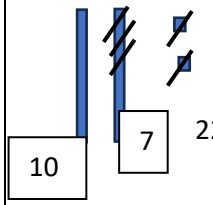
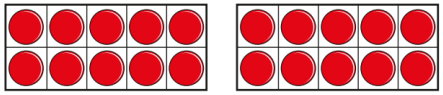
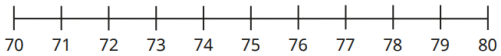
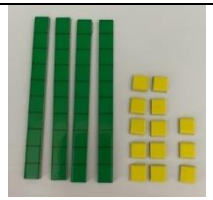
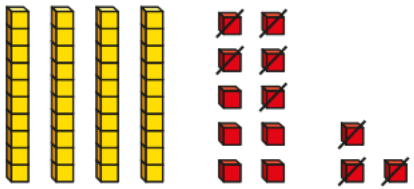
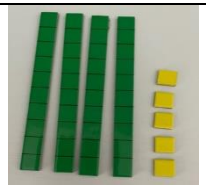
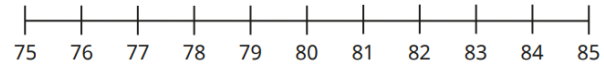
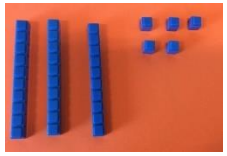
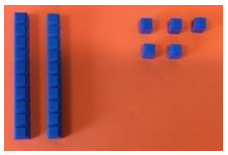
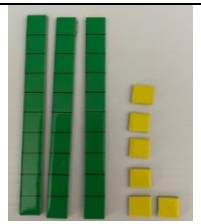
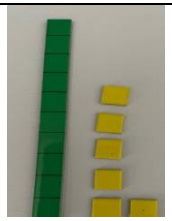
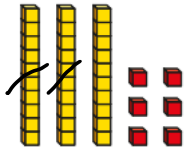
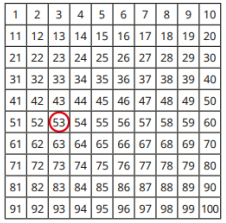
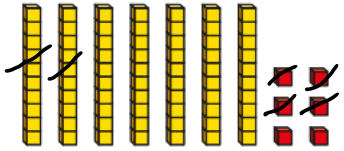
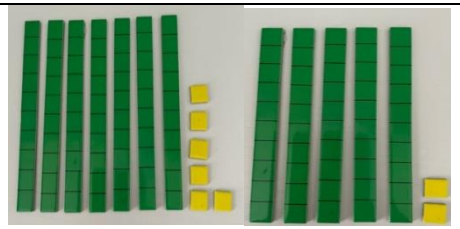
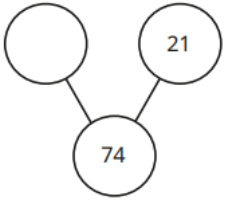
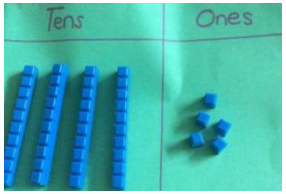
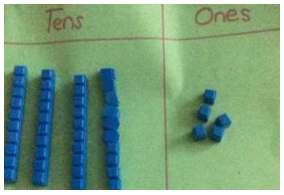
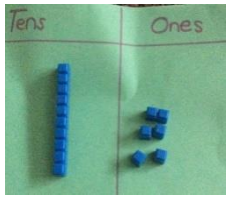
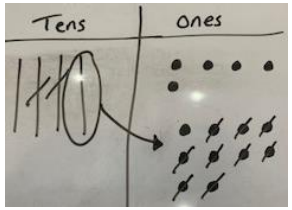
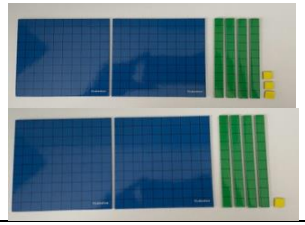
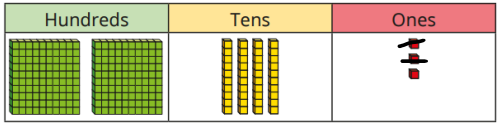
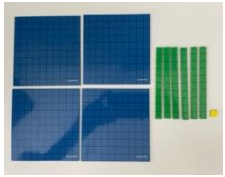
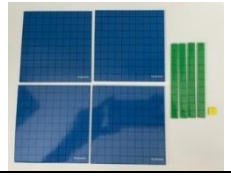
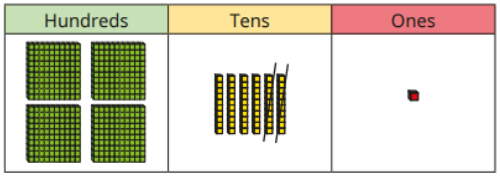
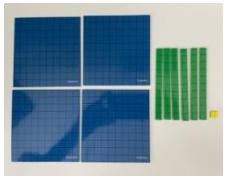
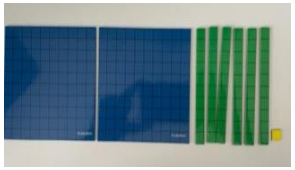
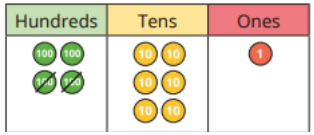
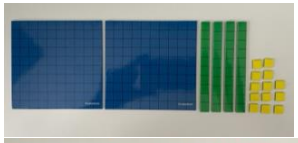
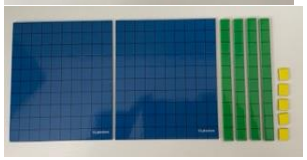
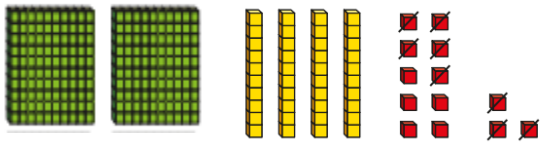
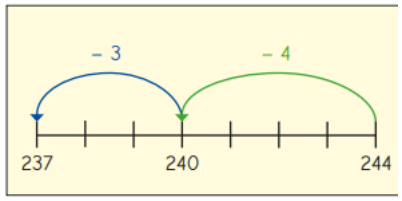
Subtract across a ten	 I need to subtract __ to get to 10 I need to subtract __ more __ less than __ is	  I need to subtract __ to get to 10 I need to subtract __ more __ less than __ is **22 – 5**  22-5 = 17	**15 – 7 =**
Subtract from a ten (using knowledge of number bonds)	Build 20 in tens frames:  Use the ten frames to work out the subtractions. 20 – 4 20 – 7 20 – 2 20 – 1 20 – 5 20 – 3	Here is a number line.  Use the number line to work out the subtractions. 80 – 4 80 – 7 80 – 2 80 – 1 80 – 5 80 – 3	**50 – 7 =** **90 – 9 =** **70 – 8 =**
Subtract a 1-digit number from a 2-digit number (across a 10)	 Build 53 *Explore why one ten is made up on ten ones	 Draw 53 Cross out 8 to subtract 53 – 8 =	**34 – 7 =** **42 – 6 =** **23 – 5 =**

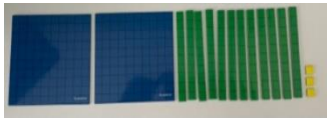
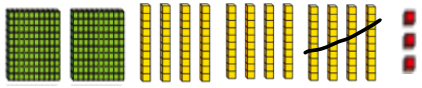
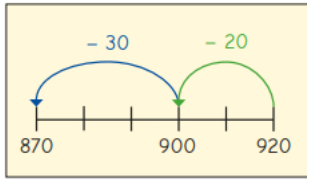
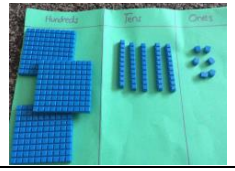
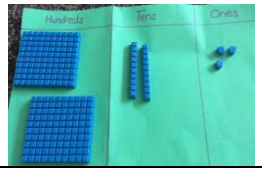
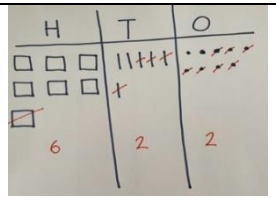
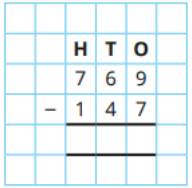
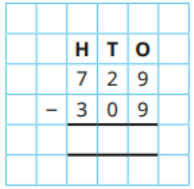
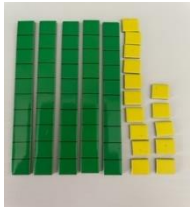
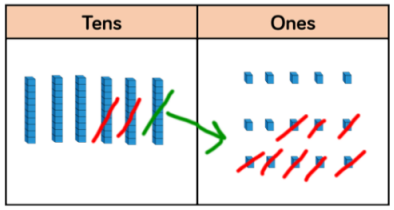
	 Subtract 8 53 – 8 = 45	 84 – 5 = 85 – 7 =	
10 less	  Build 35 Subtract 10 35 – 10 = 25	 35 – 10 =	35 – 10 =
Subtract 10s	  36 - 20 =	 36 – 20 -  53 – 20 = 53 – 40 = 53 – 50 =	76 – 30 = 76 – 50 = 76 – 70 =
Subtract two 2-digit numbers (not crossing a 10)	76 – 24 = .	 76 – 24 =	Work out the difference between these numbers: 56 and 21 39 and 34 97 and 47

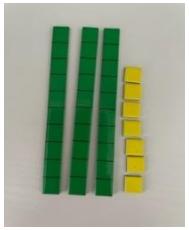
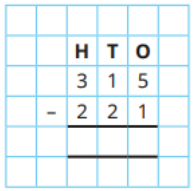
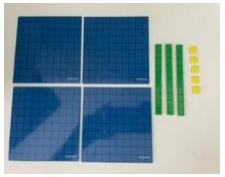
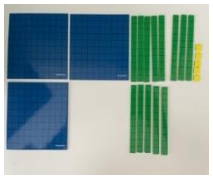
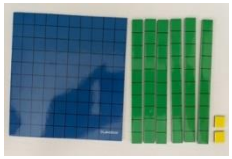
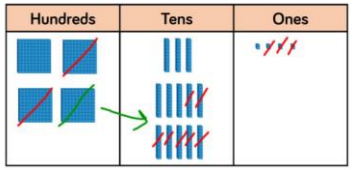
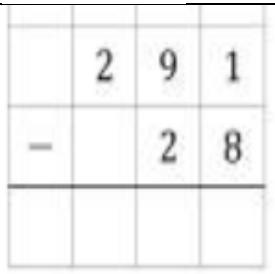
		 How many ones do you need to subtract? How many tens do you need to subtract? What is the difference between 74 and 21?	
Subtract two 2-digit numbers (across a 10)	45 – 29 -  1.Make 49  2.Exchange one ten for ten ones  3.Now subtract 2 tens and 9 ones	45 – 29 =  1.Make 45 2.Exchange one ten for ten ones 3. Now subtract 2 tens and 9 ones	Work out the difference between 75 and 28

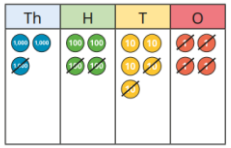
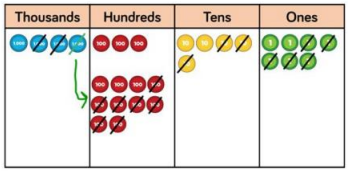
Y3			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between, Tens boundary, hundreds boundary, Cross ten, cross hundred, Exchange	**Manipulatives & scaffolds:**	Double sided counters Ten frames Part-whole model Dienes Bar model Number lines Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Subtract 1s	243 – 2 = 	243 – 2 = 	534 – 2 =
Subtract 10s	461 – 20 =  	461 – 20 = 	561 – 30 =

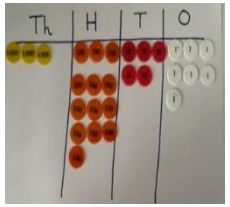
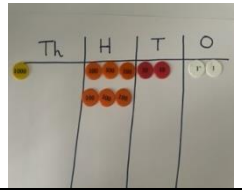
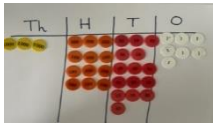
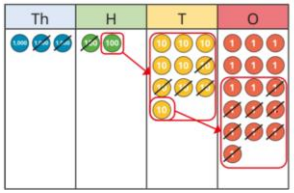
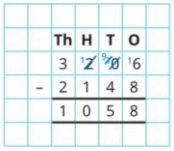
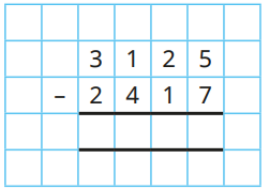
Subtract 100s	461 – 200 =  	 461 – 200 =	461 – 300 =
Subtract 1s across a 10	253 – 8 =  	253 – 8 =  *Explore why one ten is made up on ten ones 244 – 7 =  I need to subtract __ to get to the previous multiple of ten Then I need to subtract __ more	171 – 6 =

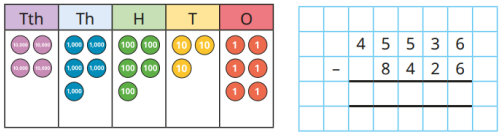
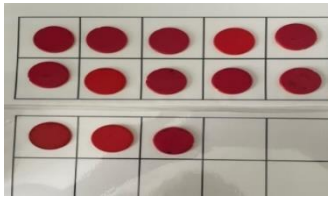
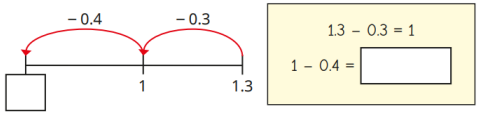
LEARNING AND FLOURISHING TOGETHER | PROUD TO BE PART OF PDET

Subtract 10s across a 100	323 – 40 =   *Explore why one hundred is made up ten tens	323 – 40 =  *Explore why one hundred is made up ten tens 920 – 50 =  I need to subtract __ to get to the previous multiple of hundred Then I need to subtract __ more	322 – 50 =
Subtract two numbers (no exchange)	356 – 133 = 223  	 	
Subtract two numbers (across a ten)	65 – 28 =  Make 65  Exchange 1 10 for 10 1s	 5 1 65 – 28 37	*Moving to the **expanded column method**, then the **formal.** 180 391 = 300 and 90 and 1 1 -276 = 200 and 70 and 6 195 = 100 and 90 and 5

	 Subtract 28		
Subtract two numbers (across a hundred)	435 – 273 =  Make 435  Exchange 1 100 for 10 10s  Subtract 273	 3 1 435 – 273 162	*Moving to the **expanded column method**, then the **formal.** 200 348 = 300 and 140 and 8 -276 = 200 and 70 and 6 78 = 000 and 70 and 4 5 3 5 – 3 6 7
Subtract 2-			

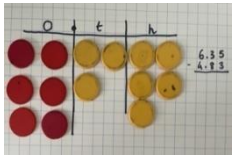
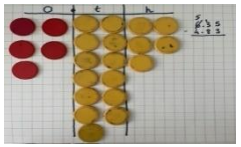
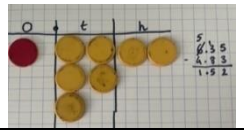
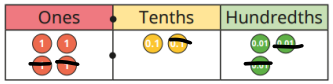
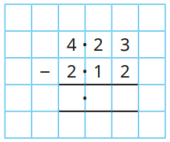
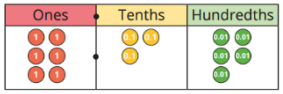
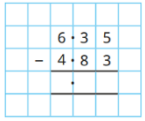
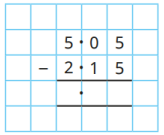
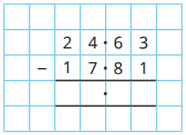
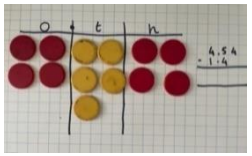
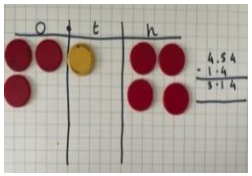
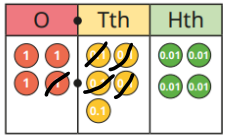
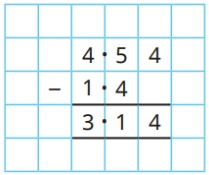
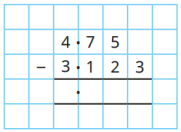
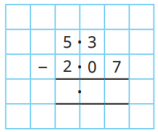
Y4			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between, Tens boundary, hundreds boundary, cross ten, cross hundred, exchange, thousands, decimals, decimal place, tenths	**Manipulatives & scaffolds:**	Double sided counters Ten frames Dienes Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Subtract two 4-digit numbers – no exchange	 4 3 9 2 − 1 1 8 2 	 Th H T O 3 4 5 4 − 1 2 2 4 2 2 3 0	1) 5 5 8 6 - 2 1 7 2
Subtract two 4-digit numbers – one exchange	4357 – 2735 =  Make 4357	 4357 -2735	3 1 4357 − 2735 1622

	 Exchange one thousand for 10 100s  Subtract 2735		
Subtract two 4-digit numbers – more than one exchange	4357 – 3584 =  Make 4257  Exchange 1 1000 for 10 100s And 1 100 for 10 10s  Carry out the subtraction	 	

Y5			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between, Tens boundary, hundreds boundary, cross ten, cross hundred, exchange, thousands, decimals, decimal place, tenths	**Manipulatives & scaffolds:**	Dienes Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Subtract whole numbers with more than 4 digits	When children begin to subtract larger numbers, written methods become more efficient; methods are less effective and take too much time		The population of Hereford is 63,689 The population of Chester is 87,593 Find the difference between the population of Hereford and the population of Chester.
Subtract decimals across 1	When subtracting decimals, encourage children to subtract to get to 1 first, then subtract the remaining decimal. Tens frames may help pupils to see how to do this. 1.3 – 0.7 = I subtract 0.3 to get to one. I can then subtract 0.4 from one. 	1.3 – 0.7 =  I subtract __ to get to one. I can then subtract __ from one.	1.3 – 0.8 =

LEARNING AND FLOURISHING TOGETHER

PROUD TO BE PART OF PDET

<table>
<tr>
<td>Subtract decimals with the same number of decimal places</td>
<td>6.35 – 4.83 =
 
Make 6.35
 
Make any exchanges needed
 
Carry out the subtraction</td>
<td> 
 
Did you need to make any exchanges?
 
  </td>
<td> 
  </td>
</tr>
<tr>
<td>Subtract decimals with a different number of decimal places</td>
<td>4.54 – 1.4 =
 
  </td>
<td> 
  </td>
<td> 
  </td>
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</table>

Y6			
Vocabulary:	First, Then, Now, Take away, Minus, Subtract, Part, Whole, Less, Fewer, Difference between, Tens boundary, hundreds boundary, cross ten, cross hundred, exchange, thousands, decimals, decimal place, tenths, integers	**Manipulatives & scaffolds:**	Dienes Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Subtract integers			3 4 6 0 8 – 1 2 7 2 7 4 7 6 1 3 2 5 – 9 3 8 0 5 2
Subtract decimals