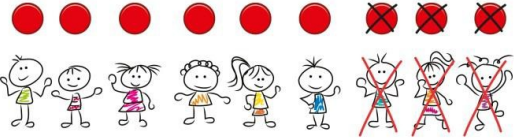
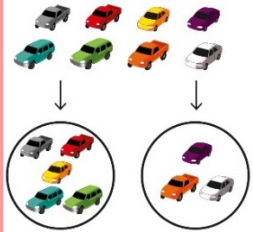
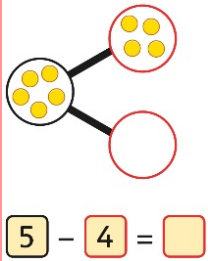
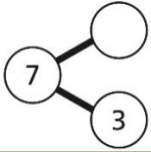
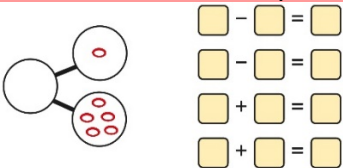
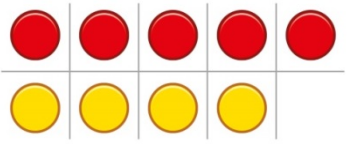
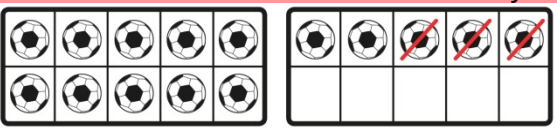
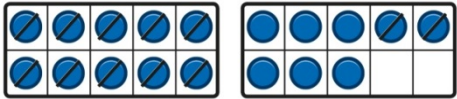
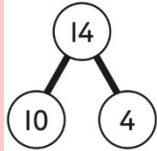
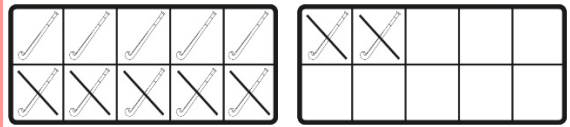
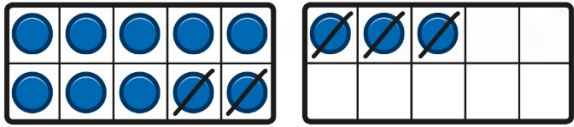
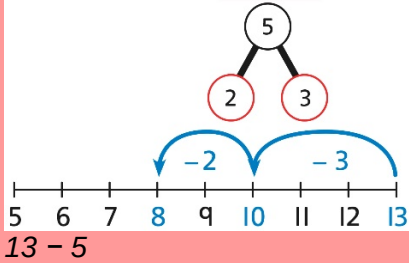
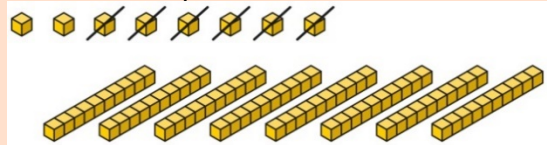
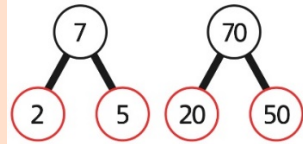
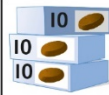
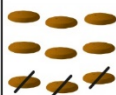
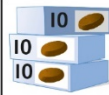
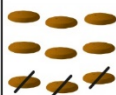
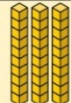
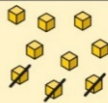
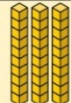
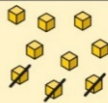
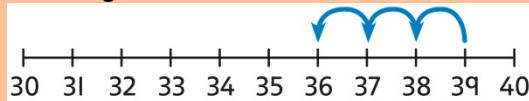
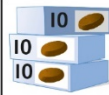
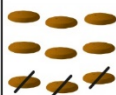
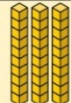
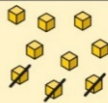


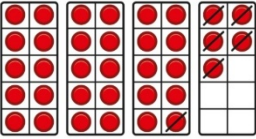
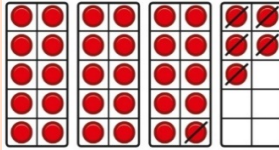
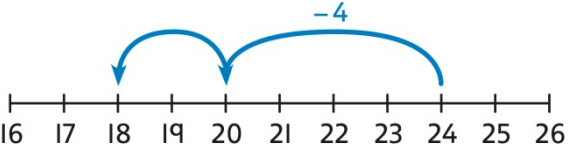
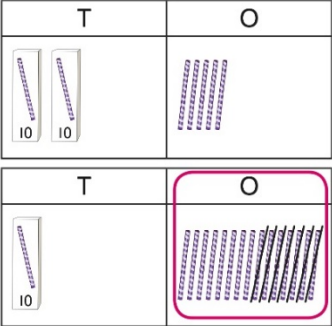
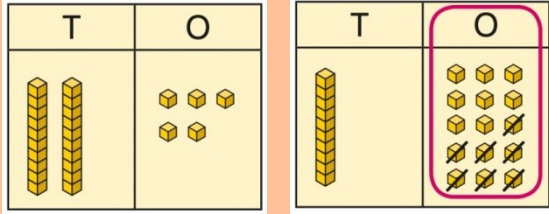
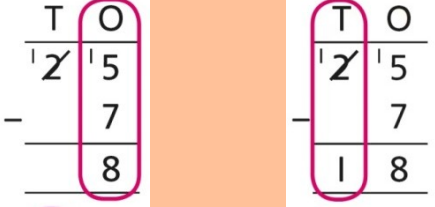
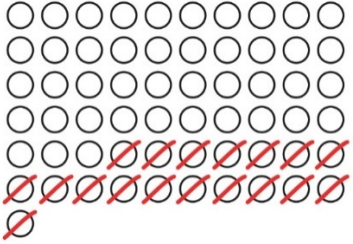
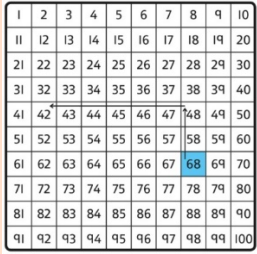
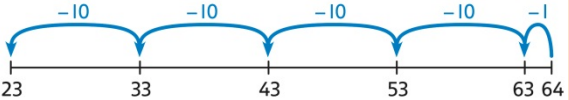
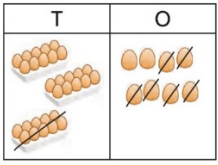
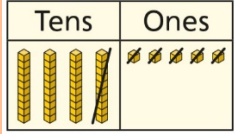
Year 1

	Concrete	Pictorial	Abstract
Counting back and taking away	Children arrange objects and remove to find how many are left.  1 less than 6 is 5. 6 subtract 1 is 5.	Children draw and cross out or use counters to represent objects from a problem.  $9 - \square = \square$ There are children left.	Children count back to take away and use a number line or number track to support the method.  $9 - 3 = 6$
Finding a missing part, given a whole and a part	Children separate a whole into parts and understand how one part can be found by subtraction.  $8 - 5 = ?$	Children represent a whole and a part and understand how to find the missing part by subtraction.  $5 - 4 = \square$	Children use a part-whole model to support the subtraction to find a missing part.  $7 - 3 = ?$ Children develop an understanding of the relationship between addition and subtraction facts in a part-whole model. 
Finding the difference	Arrange two groups so that the difference between the groups can be worked out.  8 is 2 more than 6. 6 is 2 less than 8. The difference between 8 and 6 is 2.	Represent objects using sketches or counters to support finding the difference.  $5 - 4 = 1$ The difference between 5 and 4 is 1.	Children understand 'find the difference' as subtraction.  $10 - 4 = 6$ The difference between 10 and 6 is 4.
Subtraction within 20	Use a bead string to subtract 1s efficiently.  $5 - 3 = 2$ $15 - 3 = 12$	Use tens frames to subtract 1s efficiently. 	Understand how to use knowledge of bonds within 10 to subtract efficiently. $5 - 3 = 2$

		$5 - 3 = 2$ $15 - 3 = 12$	$15 - 3 = 12$
Subtracting 10s and 1s	First subtracting the ones, then the remaining ten.  $18 - 12$ First subtract the 2, then take away 10.	Use ten frames to represent the efficient method of subtracting 12.  $18 - 12$ First subtract the 2, then take away 10.	Use a part-whole model to support the calculation.  $19 - 14$ $19 - 4 = 15$ $15 - 10 = 5$
Subtraction bridging 10 using number bonds	Arrange objects into a 10 and some 1s, then decide on how to split the 7 into parts.  7 is 2 and 5, so I take away the 2 and then the 5.	Represent the use of bonds using ten frames.  For $13 - 5$, I take away 3 to make 10, then take away 2 to make 8.	Use a number line and a part-whole model to support the method.  $13 - 5$

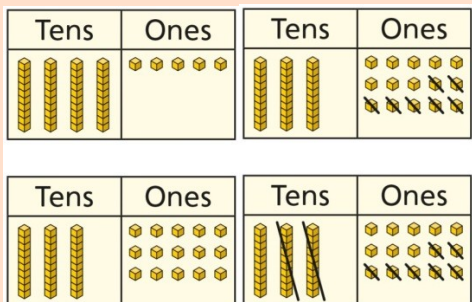
Year 2

	Concrete	Pictorial	Abstract																
Subtracting multiples of 10	Use known number bonds and unitising to subtract multiples of 10.  8 subtract 6 is 2. So, 8 tens subtract 6 tens is 2 tens.	Use known number bonds and unitising to subtract multiples of 10. <table border="1" data-bbox="981 925 1332 1021"><tr><td colspan="2">100</td></tr><tr><td></td><td>30</td></tr></table> $10 - 3 = 7$ So, 10 tens subtract 3 tens is 7 tens.	100			30	Use known number bonds and unitising to subtract multiples of 10.  7 tens subtract 5 tens is 2 tens. $70 - 50 = 20$												
100																			
	30																		
Subtracting a single-digit number	Subtract the 1s. This may be done in or out of a place value grid. <table border="1" data-bbox="367 1208 624 1361"><tr><th>T</th><th>O</th></tr><tr><td></td><td></td></tr></table>	T	O			Subtract the 1s. This may be done in or out of a place value grid. <table border="1" data-bbox="981 1208 1245 1367"><tr><th>T</th><th>O</th></tr><tr><td></td><td></td></tr></table>	T	O			Subtract the 1s. Understand the link between counting back and subtracting the 1s using known bonds.  <table border="1" data-bbox="1585 1372 1720 1532"><tr><th>T</th><th>O</th></tr><tr><td>3</td><td>9</td></tr><tr><td>-</td><td>3</td></tr><tr><td>3</td><td>6</td></tr></table> $9 - 3 = 6$ $39 - 3 = 36$	T	O	3	9	-	3	3	6
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T	O																		
																			
T	O																		
3	9																		
-	3																		
3	6																		

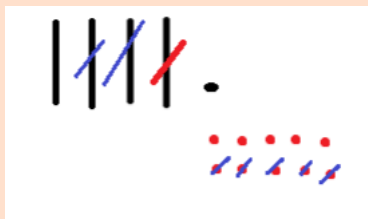
Subtracting a single-digit number bridging 10	Bridge 10 by using known bonds.  $35 - 6$ I took away 5 counters, then 1 more.	Bridge 10 by using known bonds.  $35 - 6$ First, I will subtract 5, then 1.	Bridge 10 by using known bonds.  $24 - 6 = ?$ $24 - 4 - 2 = ?$
Subtracting a single-digit number using exchange	Exchange 1 ten for 10 ones. This may be done in or out of a place value grid. 	Exchange 1 ten for 10 ones. 	Exchange 1 ten for 10 ones.  $25 - 7 = 18$
Subtracting a 2-digit number	Subtract by taking away.  $61 - 18$ I took away 1 ten and 8 ones.	Subtract the 10s and the 1s. This can be represented on a 100 square. 	Subtract the 10s and the 1s. This can be represented on a number line.  $64 - 41 = ?$ $64 - 1 = 63$ $63 - 40 = 23$ $64 - 41 = 23$
Subtracting a 2-digit number using place value and columns	Subtract the 1s. Then subtract the 10s. This may be done in or out of a place value grid.  $38 - 16 = 22$	Subtract the 1s. Then subtract the 10s. 	Using column subtraction, subtract the 1s. Then subtract the 10s. 

Subtracting a 2-digit number with exchange

Exchange 1 ten for 10 ones. Then subtract the 1s. Then subtract the 10s.



Exchange 1 ten for 10 ones. Then subtract the 1s. Then subtract the 10s.



Using column subtraction, exchange 1 ten for 10 ones. Then subtract the 1s. Then subtract the 10s.

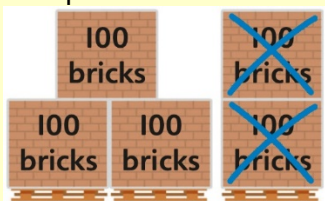
T	O
4	5
-	27

T	O
³ 4	¹⁵ 5
-	27
	8

Year 3

Subtracting 100s

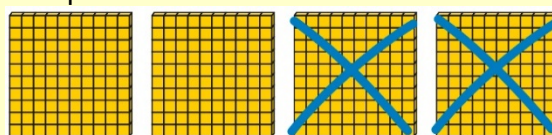
Use known facts and unitising to subtract multiples of 100.



$$5 - 2 = 3$$

$$500 - 200 = 300$$

Use known facts and unitising to subtract multiples of 100.

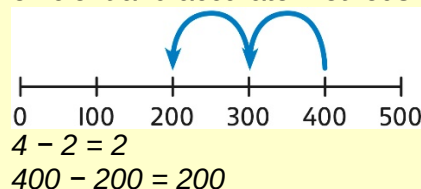


$$4 - 2 = 2$$

$$400 - 200 = 200$$

Abstract

Understand the link with counting back in 100s. Use known facts and unitising as efficient and accurate methods.



3-digit number - 1s, no exchange

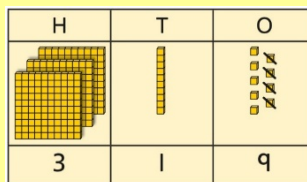
Use number bonds to subtract the 1s.



$$4 - 3 = 1$$

$$214 - 3 = 211$$

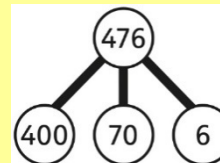
Use number bonds to subtract the 1s.



$$9 - 4 = 5$$

$$319 - 4 = 315$$

Understand the link with counting back. Use known number bonds to calculate mentally.



$$6 - 4 = 2$$

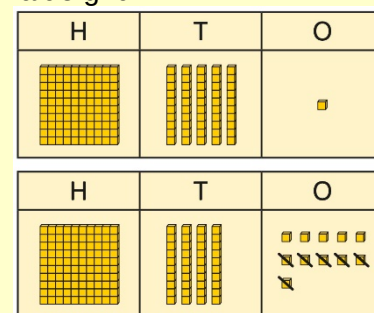
$$476 - 4 = 472$$

3-digit number - 1s, exchange or bridging required

Understand why an exchange is necessary by exploring why 1 ten must be exchanged.

Use place value equipment.

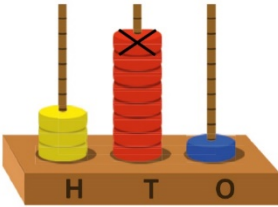
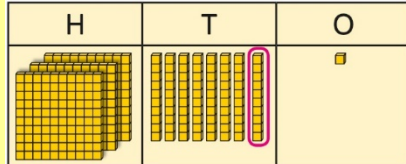
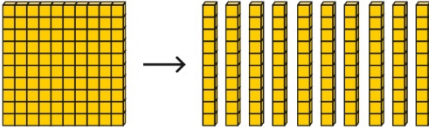
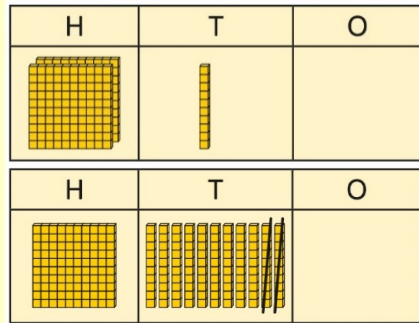
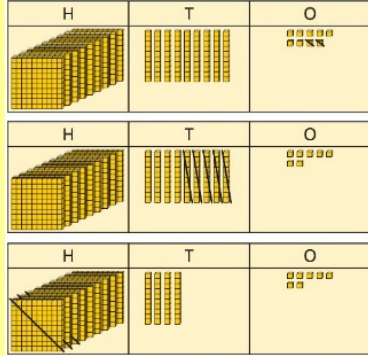
Represent the required exchange on a place value grid.

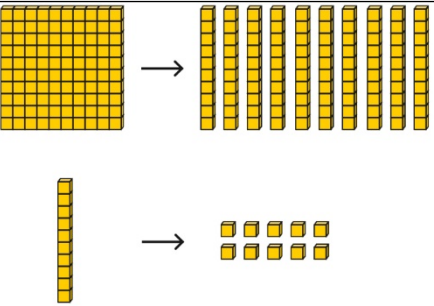
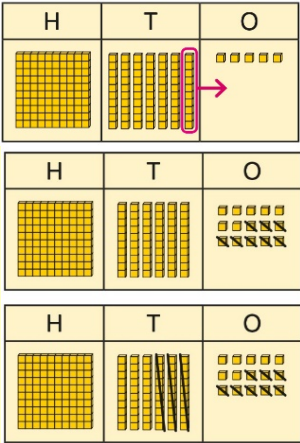
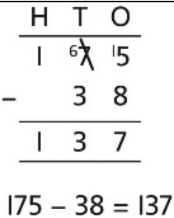
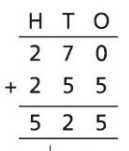


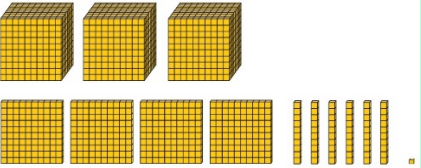
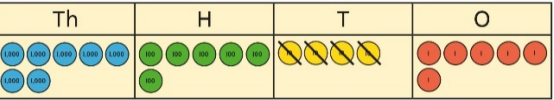
Calculate mentally by using known bonds.

$$151 - 6 = ?$$

$$151 - 1 - 5 = 145$$

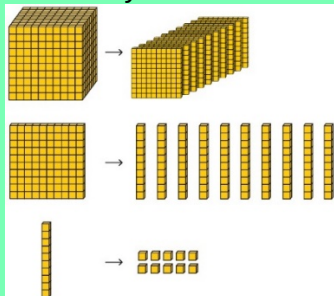
3-digit number – 10s, no exchange	Subtract the 10s using known bonds.  $381 - 10 = ?$ $8 \text{ tens} - 1 \text{ ten} = 7 \text{ tens}.$ $381 - 10 = 371$	$151 - 6 = 145$ Subtract the 10s using known bonds.  $8 \text{ tens} - 1 \text{ ten} = 7 \text{ tens}$ $381 - 10 = 371$	Use known bonds to subtract the 10s mentally. $372 - 50 = ?$ $70 - 50 = 20$ So, $372 - 50 = 322$																																													
3-digit number – 10s, exchange or bridging required	Use equipment to understand the exchange of 1 hundred for 10 tens. 	Represent the exchange on a place value grid using equipment.  $210 - 20 = ?$ <i>I need to exchange 1 hundred for 10 tens, to help subtract 2 tens.</i>	Understand the link with counting back on a number line. $235 - 60 = ?$ <i>I can count back in 10s ... 225... 215...</i>																																													
3-digit number – up to 3-digit number	Use place value equipment to represent the larger number. Physically remove equipment to solve. Understand the link with ‘take away.’	Represent the calculation on a place value grid. 	Use column subtraction to calculate accurately and efficiently. <table data-bbox="1590 994 1709 1133"><tr><th>H</th><th>T</th><th>O</th></tr><tr><td>9</td><td>9</td><td>9</td></tr><tr><td>-</td><td>3</td><td>5</td></tr><tr><td colspan="2"></td><td>2</td></tr><tr><td colspan="2"></td><td>7</td></tr></table> <table data-bbox="1778 994 1897 1133"><tr><th>H</th><th>T</th><th>O</th></tr><tr><td>9</td><td>9</td><td>9</td></tr><tr><td>-</td><td>3</td><td>5</td></tr><tr><td colspan="2"></td><td>2</td></tr><tr><td colspan="2"></td><td>7</td></tr></table> <table data-bbox="1971 994 2089 1133"><tr><th>H</th><th>T</th><th>O</th></tr><tr><td>9</td><td>9</td><td>9</td></tr><tr><td>-</td><td>3</td><td>5</td></tr><tr><td colspan="2"></td><td>2</td></tr><tr><td>6</td><td>4</td><td>7</td></tr></table>	H	T	O	9	9	9	-	3	5			2			7	H	T	O	9	9	9	-	3	5			2			7	H	T	O	9	9	9	-	3	5			2	6	4	7
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3-digit number – up to 3-digit number, exchange required	Use equipment to enact the exchange of 1 hundred for 10 tens, and 1 ten for 10 ones.	Model the required exchange on a place value grid.	Use column subtraction to work accurately and efficiently. Children should also understand how to exchange in calculations where there is a zero in the 10s column.																																													

		 $175 - 38 = ?$ <i>I need to subtract 8 ones, so I will exchange a ten for 10 ones.</i>	
Representing subtraction problems		Use bar models to represent subtractions. 'Find the difference' is represented as two bars for comparison. Bar models can also be used to show that a part must be taken away from the whole. Team A 454 Team B 128 $\longleftrightarrow$?	Children use alternative representations to check calculations and choose efficient methods. Children use inverse operations to check additions and subtractions. The part-whole model supports understanding.  <i>I have completed this subtraction. $525 - 270 = 255$ I will check using addition.</i>

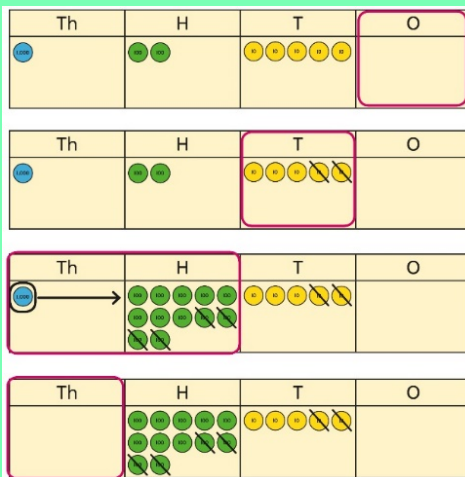
Year 4			
	Concrete	Pictorial	Abstract
Choosing mental methods where appropriate	Use place value equipment to justify mental methods.  <i>What number will be left if we take away 300?</i>	Use place value grids to support mental methods where appropriate.  $7,646 - 40 = 7,606$	Use knowledge of place value and unitising to subtract mentally where appropriate. $3,501 - 2,000$ <i>3 thousands - 2 thousands = 1 thousand</i> $3,501 - 2,000 = 1,501$

Column subtraction with exchange

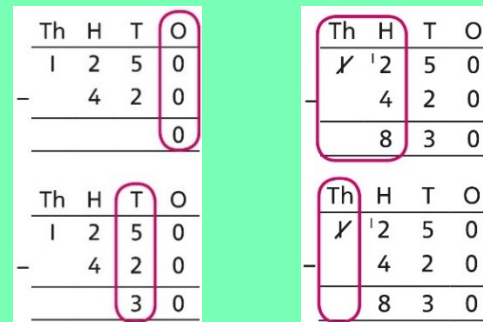
Understand why exchange of a 1,000 for 100s, a 100 for 10s, or a 10 for 1s may be necessary.



Represent place value equipment on a place value grid to subtract, including exchanges where needed.

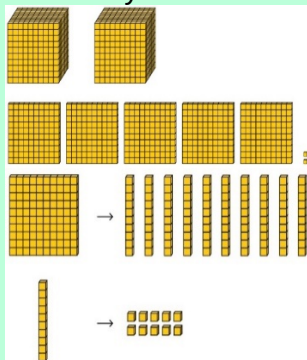


Use column subtraction, with understanding of the place value of any exchange required.



Column subtraction with exchange across more than one column

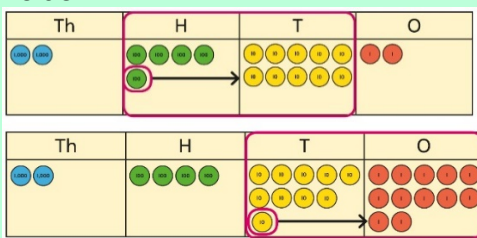
Understand why two exchanges may be necessary.



$$2,502 - 243 = ?$$

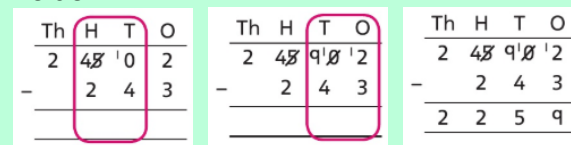
I need to exchange a 10 for some 1s, but there are not any 10s here.

Make exchanges across more than one column where there is a zero as a place holder.



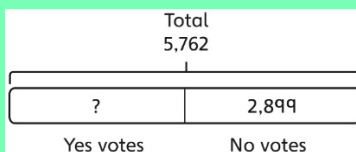
$$2,502 - 243 = ?$$

Make exchanges across more than one column where there is a zero as a place holder.



Representing subtractions and checking strategies

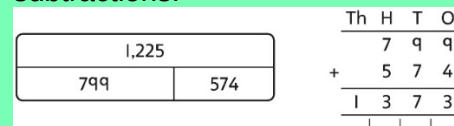
Use bar models to represent subtractions where a part needs to be calculated.



I can work out the total number of Yes votes using $5,762 - 2,899$.

Bar models can also represent 'find the difference' as a subtraction problem.

Use inverse operations to check subtractions.



*I calculated $1,225 - 799 = 574$.
I will check by adding the parts.
The parts do not add to make 1,225.
I must have made a mistake.*

Danny	899	← ? →
Luis	1,005	

Year 5

	Concrete	Pictorial	Abstract
Column subtraction with whole numbers	Use place value equipment to understand where exchanges are required. <		

Subtracting decimals

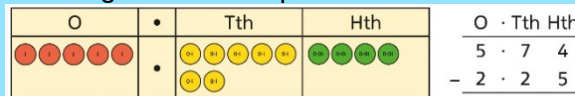
Explore complements to a whole number by working in the context of length.



$$1 \text{ m} - \boxed{} \text{ m} = \boxed{} \text{ m}$$

$$1 - 0.49 = ?$$

Use a place value grid to represent the stages of column subtraction, including exchanges where required.



Exchange 1 tenth for 10 hundredths.



Now subtract the 5 hundredths.



Now subtract the 2 tenths, then the 2 ones.



$$5.74 - 2.25 = ?$$

Use column subtraction, with an understanding of place value, including subtracting numbers with different numbers of decimal places.

$$\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 5 \cdot 7 \text{ } 4 \\ - 2 \cdot 2 \text{ } 5 \\ \hline \end{array}$$

Year 6

Comparing and selecting efficient methods

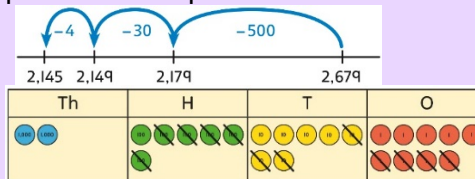
Concrete

Use counters on a place value grid to represent subtractions of larger numbers.



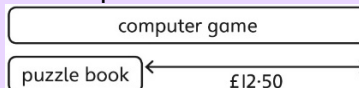
Pictorial

Compare subtraction methods alongside place value representations.



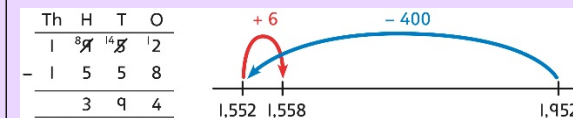
$$\begin{array}{r} \text{Th} \text{ H} \text{ T} \text{ O} \\ 2 \text{ } 1 \text{ } 4 \text{ } 5 \\ - \text{ } 5 \text{ } 3 \text{ } 4 \\ \hline 2 \text{ } 1 \text{ } 4 \text{ } 5 \end{array}$$

Use a bar model to represent calculations, including 'find the difference' with two bars as comparison.



Abstract

Compare and select methods. Use column subtraction when mental methods are not efficient. Use two different methods for one calculation as a checking strategy.

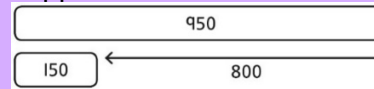


Use column subtraction for decimal problems, including in the context of measure.

$$\begin{array}{r} \text{H} \text{ T} \text{ O} \cdot \text{Tth} \text{ Hth} \\ 3 \text{ } 0 \text{ } 9 \cdot 6 \text{ } 0 \\ - 2 \text{ } 0 \text{ } 6 \cdot 4 \text{ } 0 \\ \hline 1 \text{ } 0 \text{ } 3 \cdot 2 \text{ } 0 \end{array}$$

**Subtracting
mentally with
larger numbers**

Use a bar model to show how unitising can support mental calculations.



$$950,000 - 150,000$$

That is 950 thousands – 150 thousands

So, the difference is 800 thousands.

$$950,000 - 150,000 = 800,000$$

Subtract efficiently from powers of 10.

$$10,000 - 500 = ?$$