

KS2
7-8
Years



MATHS 
NO PROBLEM!

Master Maths at Home

Addition and Subtraction



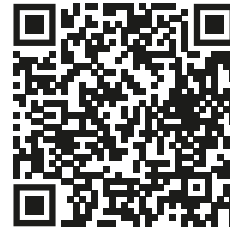


KS2
7-8
Years

Master Maths at Home

Addition and Subtraction

Scan the QR code to help
your child's learning at home.



MATHS 
NO PROBLEM!

How to use this book

Maths — No Problem! created **Master Maths at Home** to help children develop fluency in the subject and a rich understanding of core concepts.

Key features of the Master Maths at Home books include:

- Carefully designed lessons that provide structure, but also allow flexibility in how they're used.
- Exercises that allow a flexible approach and can be adapted to suit any child's cognitive or functional ability.
- Speech bubbles containing content designed to spark diverse conversations, with many discussion points that don't have obvious 'right' or 'wrong' answers.
- Clearly laid-out pages that encourage children to practise a range of higher-order skills.
- Rich illustrations that will guide children to a discussion of shapes and units of measurement, allowing them to make connections to the wider world around them.
- A community of friendly and relatable characters who introduce each lesson and come along as your child progresses through the series.

You can see more guidance on how to use these books at mastermathsathome.com.

We're excited to share all the ways you can learn maths!

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First published in Great Britain in 2022 by

Dorling Kindersley Limited

One Embassy Gardens, 8 Viaduct Gardens, London SW11 7BW

A Penguin Random House Company

The authorised representative in the EEA is Dorling Kindersley

Verlag GmbH. Amulfstr. 124, 80636 Munich, Germany

10 9 8 7 6 5 4 3 2 1

001-327080-Jan/22

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A CIP catalogue record for this book is available from the British Library.

ISBN: 978-0-24153-922-4

Printed and bound in the UK

For the curious

www.dk.com

Acknowledgements

The publisher would like to thank the authors and consultants Andy Psarianos, Judy Hornigold, Adam Gifford and Dr Anne Hermanson.

The Castledown typeface has been used with permission from the Colophon Foundry.



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Contents

	Page
Hundreds	4
Place value	8
Comparing numbers	10
Number patterns	12
Adding without renaming	16
Adding with renaming (part 1)	18
Adding with renaming (part 2)	20
Adding with renaming (part 3)	24
Subtracting without renaming	28
Subtracting with renaming (part 1)	30
Subtracting with renaming (part 2)	34
Subtracting with renaming (part 3)	38
Review and challenge	42
Answers	46



Ruby



Elliott



Amira



Charles



Lulu



Sam



Oak



Holly



Ravi



Emma



Jacob



Hannah

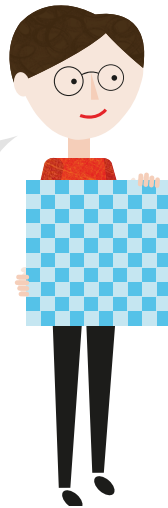
Hundreds

Lesson 1

Starter

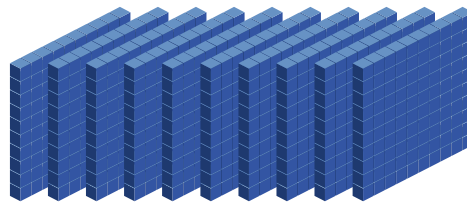
Charles is helping his dad put sheets of tiles on the bathroom wall. How many tiles are there in total?

Each of these sheets has 100 tiles on it.



Example

We can use these to help us count. Each of these is equal to 100.



There are 10 sheets in total.



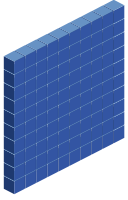
We can count in hundreds. 100, 200, 300, 400, ...



...500, 600, 700, 800, 900, 1000
We say one thousand.

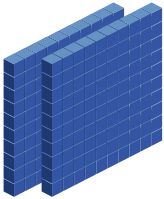


There are 1000 tiles in total.



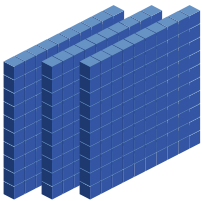
100

one hundred



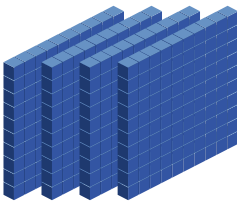
200

two hundred



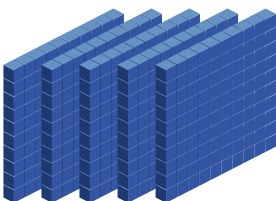
300

three hundred



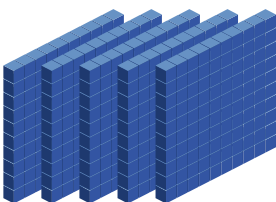
400

four hundred



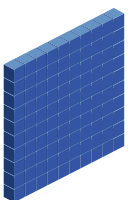
500

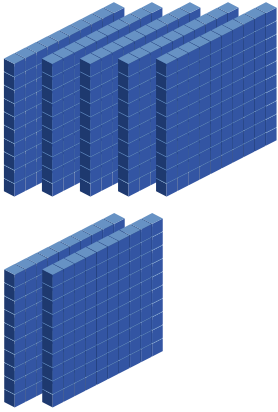
five hundred



600

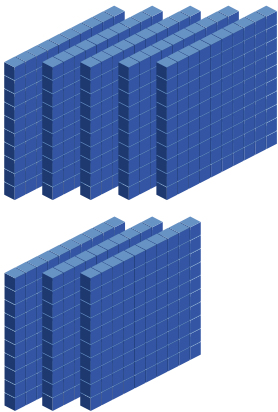
six hundred





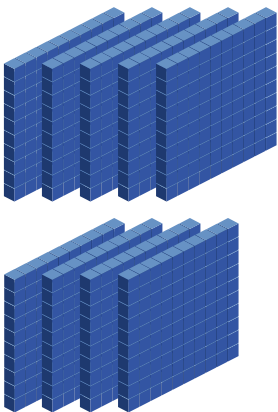
700

seven hundred



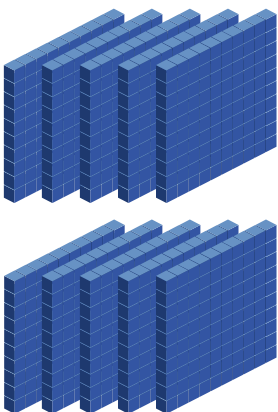
800

eight hundred



900

nine hundred



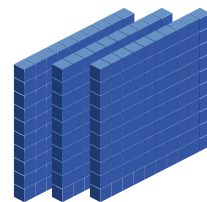
1000

one thousand

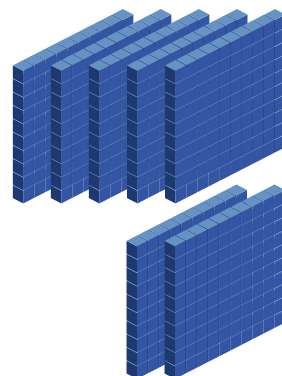
Practice

Draw lines to match.

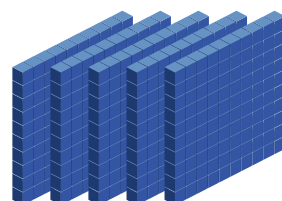
500
five hundred



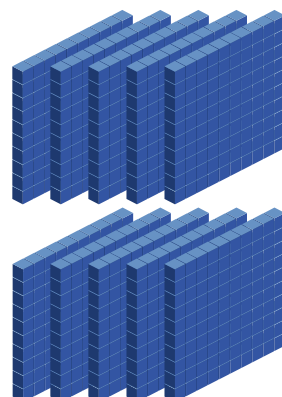
1000
one thousand



700
seven hundred



300
three hundred

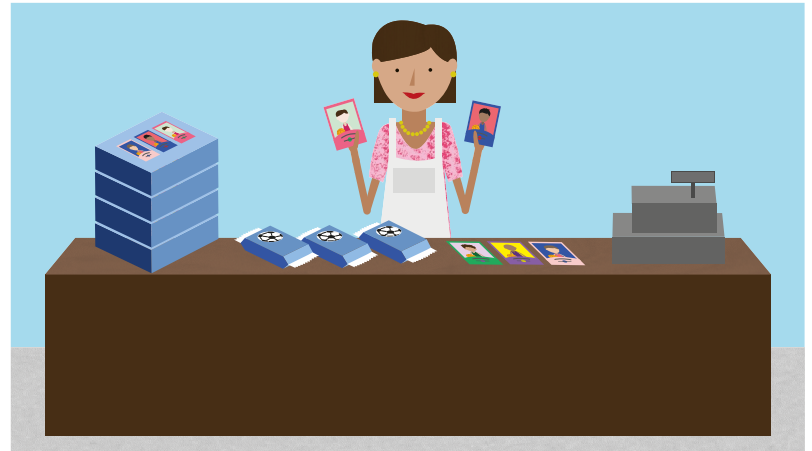


Place value

Lesson 2

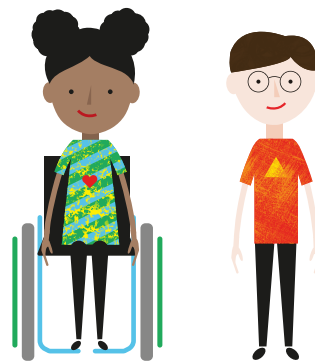
Starter

How many cards does the shopkeeper have altogether?

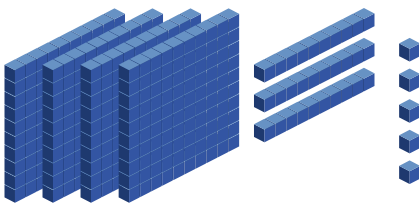


Example

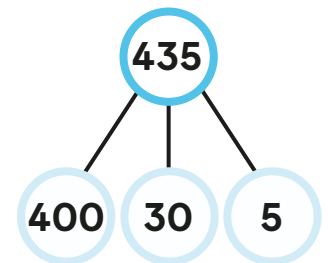
There are 4 boxes of cards. Each box has 100 cards in it.



There are also 3 packs of 10 cards and 5 loose cards.



h	t	o
4	3	5



$$435 = 4 \text{ hundreds} + 3 \text{ tens} + 5 \text{ ones}$$

$$435 = 400 + 30 + 5$$

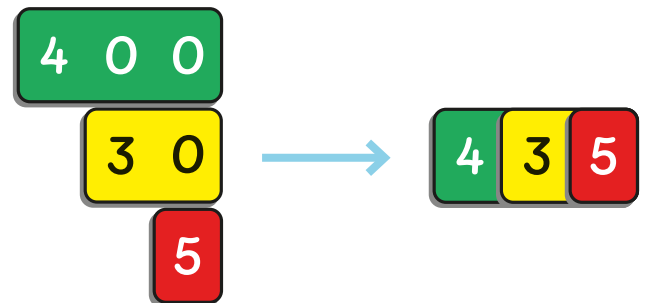
The digit 4 stands for 4 **hundreds** or 400.

The digit 3 stands for 3 **tens** or 30.

The digit 5 stands for 5 **ones** or 5.

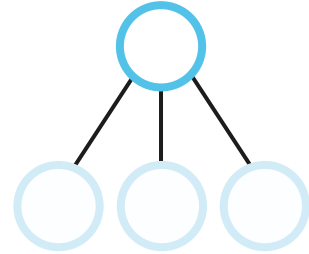
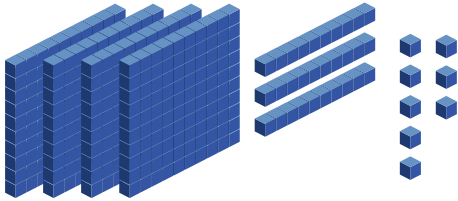
The shopkeeper has 435 cards.

435 is written as **four hundred and thirty-five**.



Practice

- 1 Count in hundreds, tens and ones.
Fill in the blanks.



h	t	o
<input type="text"/>	<input type="text"/>	<input type="text"/>

$$\boxed{} = \boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones}$$

$$\boxed{} = \boxed{} + \boxed{} + \boxed{}$$

The value of the digit 4 is .

The digit 8 stands for .

The digit is in the tens place.

- 2 Write the words in numerals.

(a) seven hundred and sixty-eight

(b) two hundred and ninety-one

- 3 Write the numbers in words.

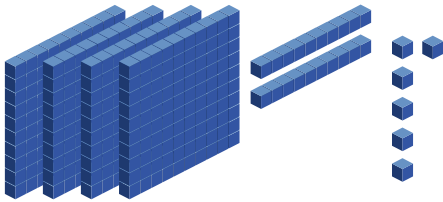
(a) 593

(b) 359

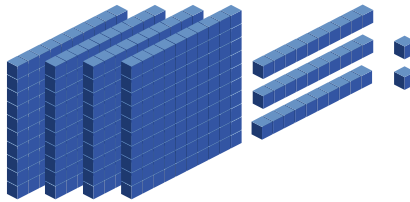
Comparing numbers

Lesson 3

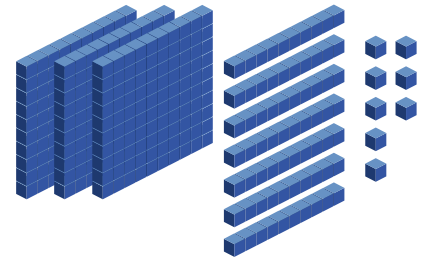
Starter



426



432



378

Which number is the greatest and which is the smallest?

Example

h	t	o
4	2	6

h	t	o
4	3	2

h	t	o
3	7	8



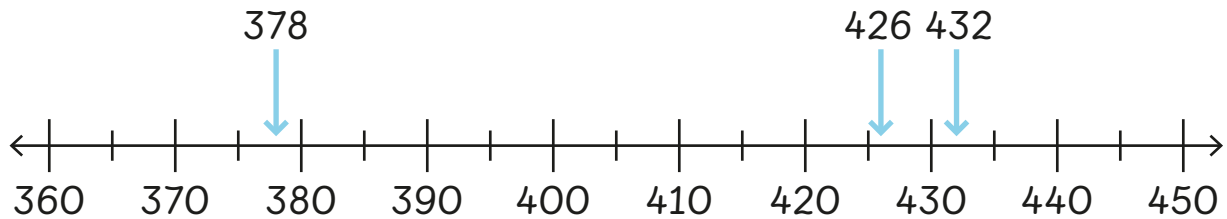
First, we should look at the hundreds. 426 and 432 both have 4 hundreds. 378 has 3 hundreds.



Next, we need to look at the tens. 426 has 2 tens and 432 has 3 tens. 432 has more tens. It is the greatest number.

378 is the smallest number.





We can use a number line to check.



432 is the greatest number and 378 is the smallest number.

Practice

1 Put the numbers in order from greatest to smallest.

(a) 765, 675, 756

, ,

(b) 869, 870, 868

, ,

2 Put the numbers in order from smallest to greatest.

(a) 391, 412, 389

, ,

(b) 897, 789, 879

, ,

3 Use the digits below to make the greatest and the smallest 3-digit numbers.

3

2

7

9

6

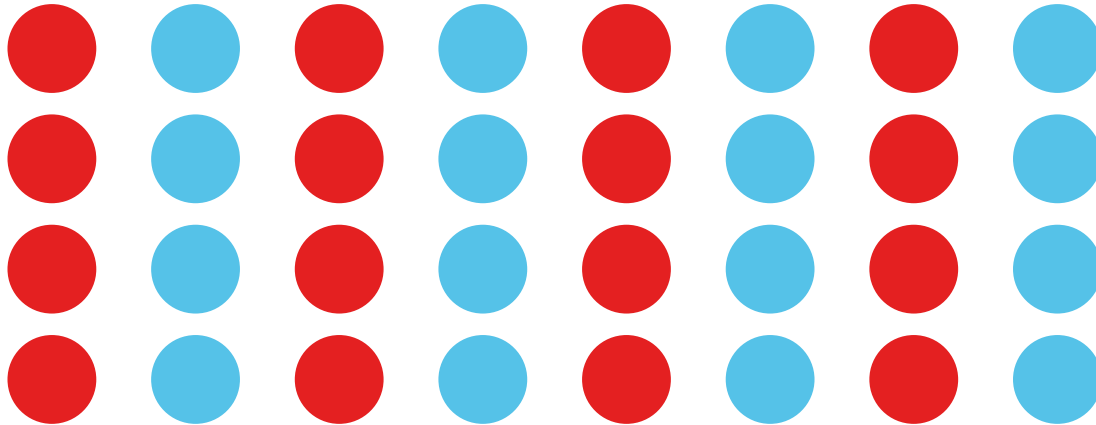
greatest

smallest

Number patterns

Lesson 4

Starter



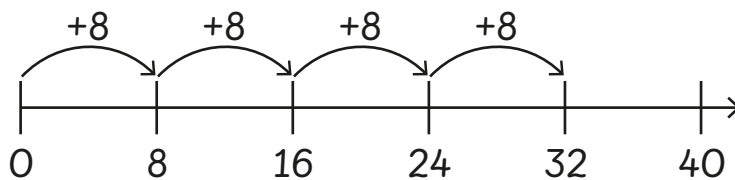
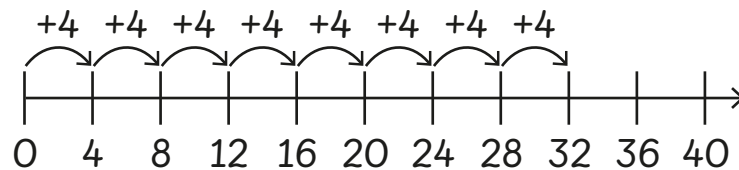
How many dots are there?

Example

1



There are 8 columns of 4 dots. I can count in fours using a number line.



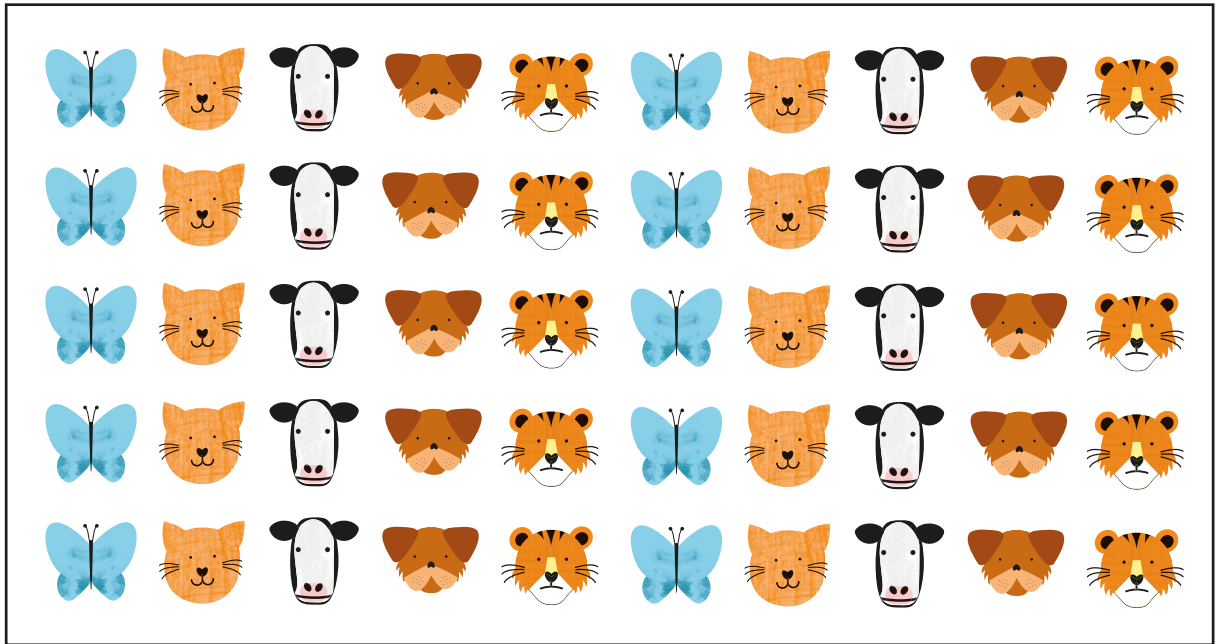
There are 4 rows of 8 dots. I can count in eights using a number line.



2



I have 7 sticker sheets.
How many stickers do
I have in total?



There are
50 stickers on each of
Hannah's sheets. She
has 7 sheets.

We can count in
fifties: 50, 100, 150, 200,
250, 300, 350.



Practice

- 1 Count in fours and shade the numbers in yellow.
Count in eights and shade the numbers in blue.
The first row is done for you.

1	2	3	4	5	6	7	8	9	10
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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Which numbers are shaded in both yellow and blue?

2

Fill in the blanks.

(a) 8 more than 16 is . (b) 4 less than 28 is .(c) 50 more than 450 is . (d) more than 68 is 72.**3**

Fill in the blanks.

(a) 100 more than 572 is . (b) 10 more than 310 is .(c) 100 less than 685 is . (d) 10 less than 679 is .**4**

Fill in the blanks to complete the number patterns.

(a) 312, 316, , 324, , (b) 200, , , 350, , (c) 648, 644, , , 632, (d) 728, 720, , 704, , 688

Adding without renaming

Lesson 5

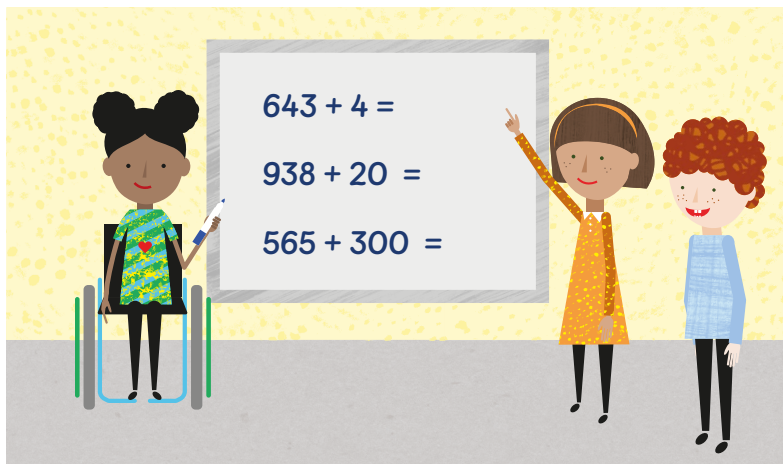
Starter

$643 + 4 = \square$

$938 + 20 = \square$

$565 + 300 = \square$

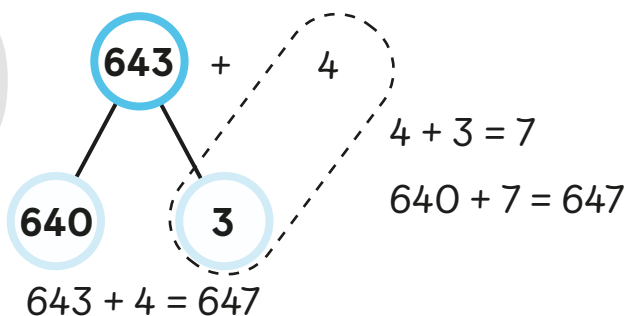
In what ways can these numbers be added?



Example



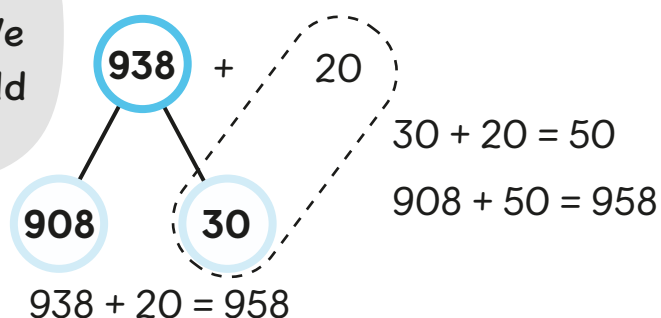
For $643 + 4$ we only need to add the ones.



h	t	o
6	4	3
		4
<hr/>		
6	4	7

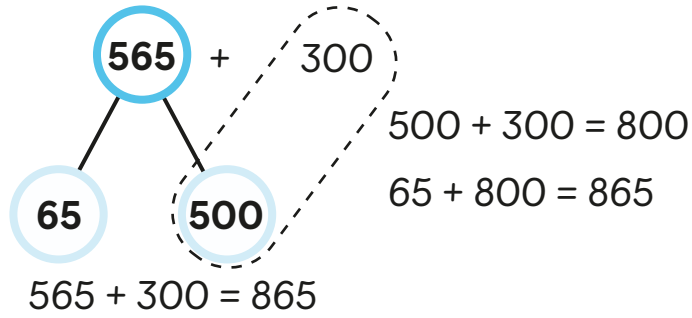


I can use a similar method for $938 + 20$. We only need to add the tens.



h	t	o
9	3	8
	2	0
<hr/>		
9	5	8

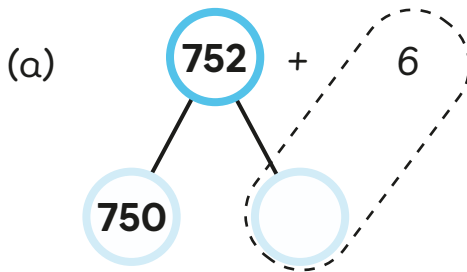
For $565 + 300$
we only need to add
the hundreds.



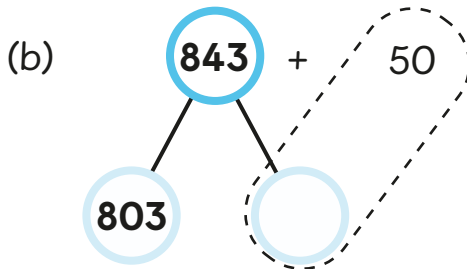
	h	t	o
	5	6	5
+	3	0	0
<hr/>			
	8	6	5
<hr/>			

Practice

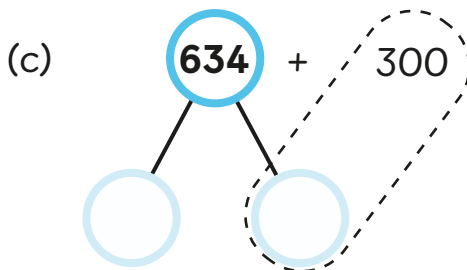
1 Complete the number bonds and add.



$752 + 6 = \square$



$843 + 50 = \square$



$634 + 300 = \square$

2 Add and fill in the blanks.

(a) $314 + 5 = \square$

(b) $453 + 500 = \square$

(c) $221 + 50 = \square$

Adding with renaming (part 1)

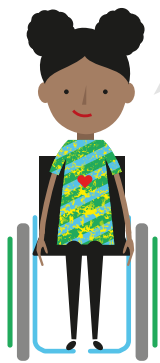
Lesson
6

Starter

Elliott read 237 pages of his novel last week and 218 pages this week. How many pages has Elliott read in total?



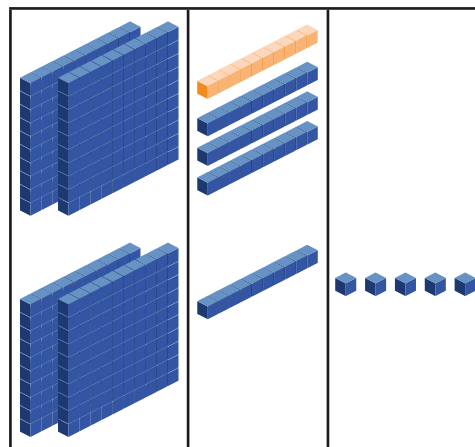
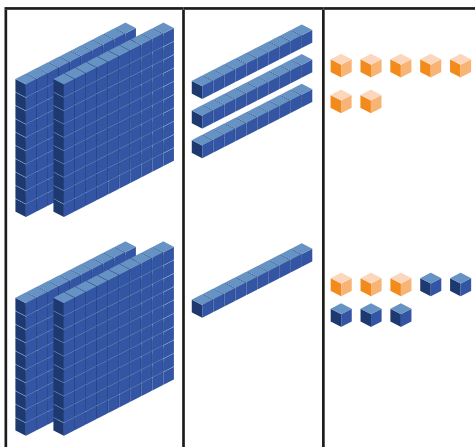
Example



We need to add 237 and 218.

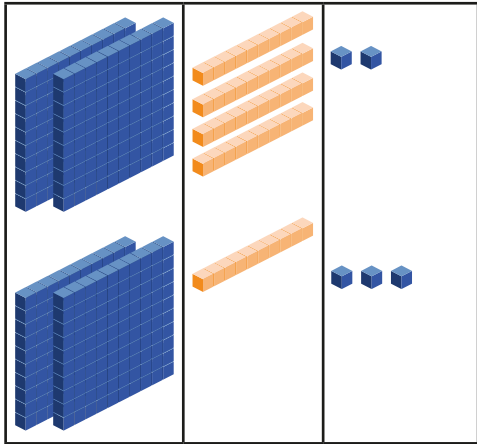
Step 1 Add the ones.
Rename the ones.

7 ones + 8 ones = 15 ones
15 ones = 1 ten and 5 ones



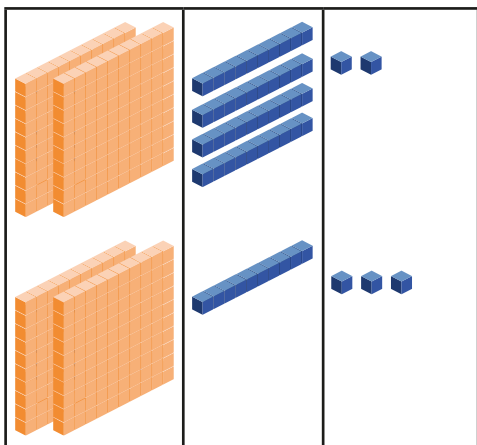
	h	t	o
	2	¹ 3	7
+	2	1	8
<hr/>			5
<hr/>			

Step 2 Add the tens. $1 \text{ ten} + 3 \text{ tens} + 1 \text{ ten} = 5 \text{ tens}$



	h	t	o
	2	¹ 3	7
+	2	1	8
	5	5	

Step 3 Add the hundreds. $2 \text{ hundreds} + 2 \text{ hundreds} = 4 \text{ hundreds}$



	h	t	o
	2	¹ 3	7
+	2	1	8
	4	5	5

$237 + 218 = 455$

Elliott has read 455 pages in total.

Practice

Add.

1 426 and 349

	h	t	o
	4	2	6
+	3	4	9
	□	□	□

2 208 and 463

	h	t	o
	2	0	8
+	4	6	3
	□	□	□

3 569 and 319

	h	t	o
	5	6	9
+	3	1	9
	□	□	□

Adding with renaming (part 2)

Lesson 7

Starter

There are 382 people waiting in the queue for the amusement park to open.
A bus drops off another 35 people who also join the queue.

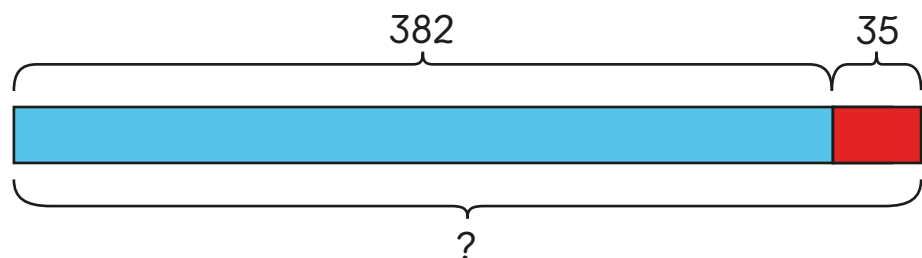
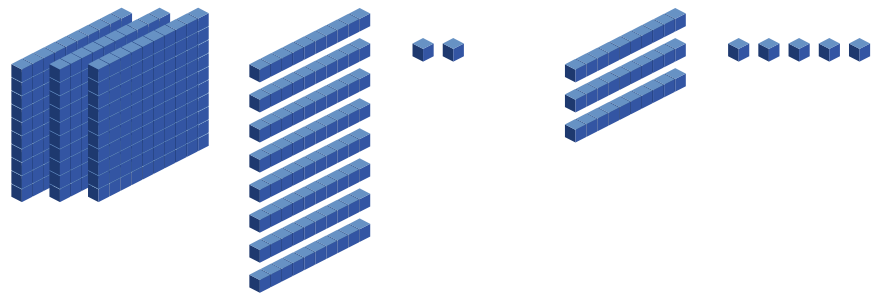


How many people are now in the queue for the amusement park?

Example

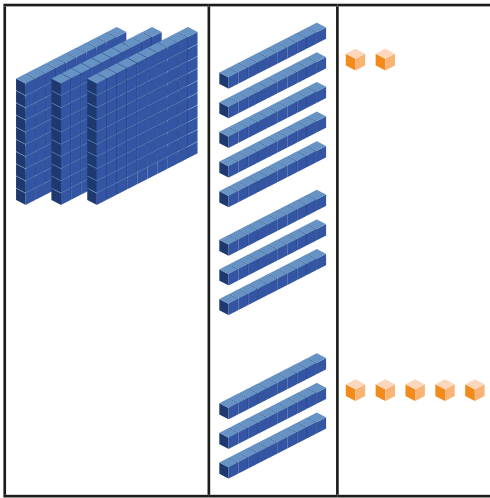


We need to
add 382 and 35.



Add 382 and 35.

Step 1 Add the ones.



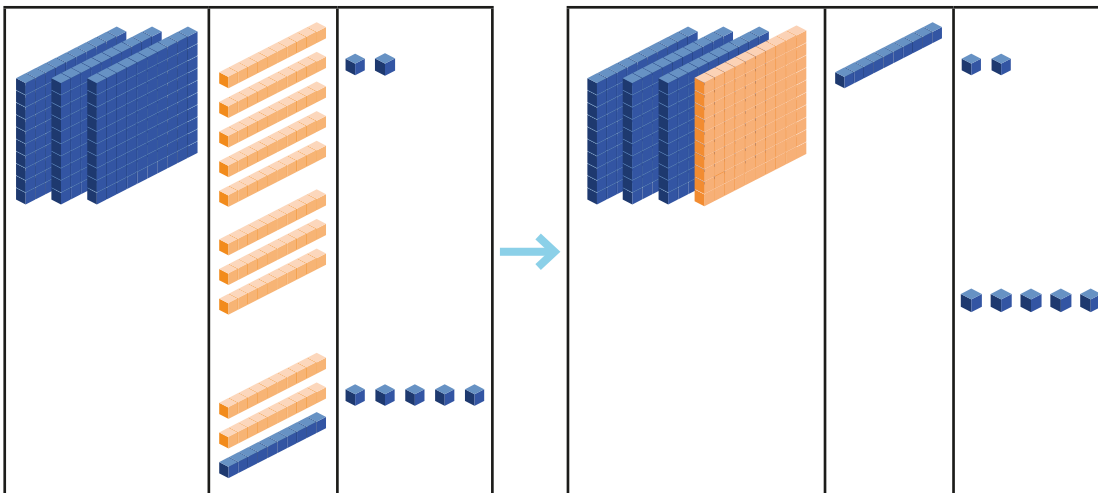
	h	t	o
	3	8	2
+		3	5
<hr/>			
			7
<hr/>			

Step 2 Add the tens.

8 tens + 3 tens = 11 tens

Rename the tens.

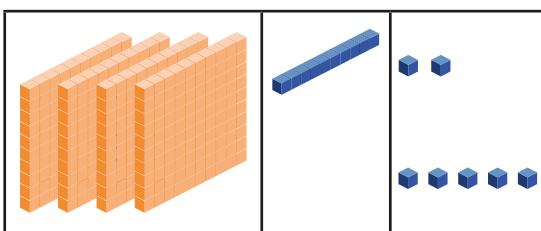
11 tens = 1 hundred + 1 ten



	h	t	o
	¹ 3	8	2
+		3	5
<hr/>			
		1	7
<hr/>			

Step 3 Add the hundreds.

1 hundred + 3 hundreds = 4 hundreds



	h	t	o
	¹ 3	8	2
+		3	5
<hr/>			
	4	1	7
<hr/>			

$$382 + 35 = 417$$

There are now 417 people in the queue for the amusement park.

Practice

1 Add.

$$\begin{array}{r} \text{(a)} \quad \begin{array}{r} \text{h} \quad \text{t} \quad \text{o} \\ 4 \quad 5 \quad 6 \\ + \quad \quad 2 \quad 2 \\ \hline \end{array} \\ \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} \text{(b)} \quad \begin{array}{r} \text{h} \quad \text{t} \quad \text{o} \\ 5 \quad 5 \quad 2 \\ + \quad \quad 8 \quad 6 \\ \hline \end{array} \\ \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \begin{array}{r} \text{h} \quad \text{t} \quad \text{o} \\ \quad \quad 8 \quad 0 \\ + \quad 7 \quad 2 \quad 0 \\ \hline \end{array} \\ \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \begin{array}{r} \text{h} \quad \text{t} \quad \text{o} \\ 2 \quad 6 \quad 5 \\ + \quad \quad 4 \quad 3 \\ \hline \end{array} \\ \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline \\ \hline \end{array} \\ \hline \end{array}$$

2 Complete the equations by filling in the blanks.

(a) $281 + 41 = \square$

(b) $74 + 635 = \square$

(c) $125 + 92 = \square$

(d) $470 + 50 = \square$

(e) $64 + 275 = \square$

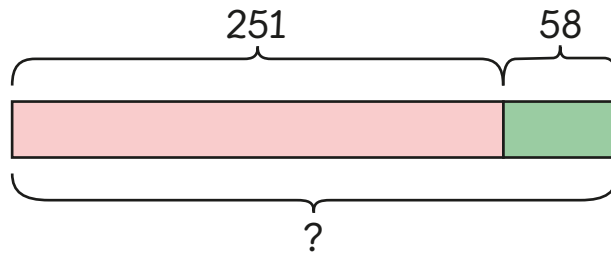
(f) $795 + 93 = \square$

(g) $\square + 20 = 600$

(h) $99 + \square = 738$

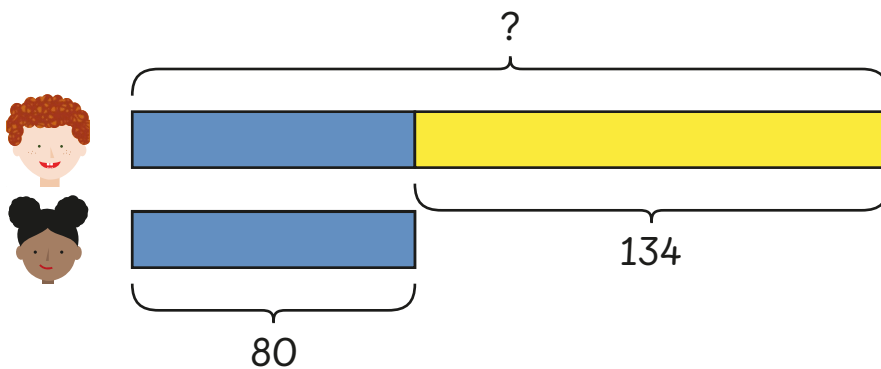
3

There are 251 children already sitting down for the school assembly. 58 Year 6 children then arrive and take their seats. How many children are now sitting down?



children are now sitting down.

Elliott and Oak like to make necklaces with beads. Elliott has 134 more beads than Oak. Oak has 80 beads. How many beads does Elliott have?



Elliott has beads.

Adding with renaming (part 3)

Lesson 8

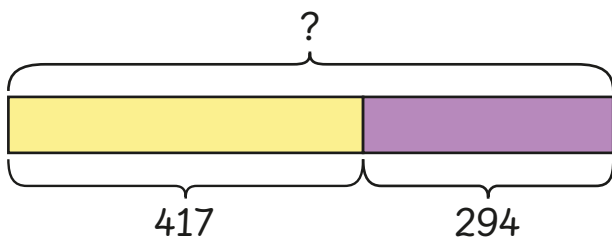
Starter

417 people bought tickets for the amusement park in the first hour. During the next hour, 294 people bought tickets for the amusement park.



How many tickets did the amusement park sell in the first 2 hours?

Example



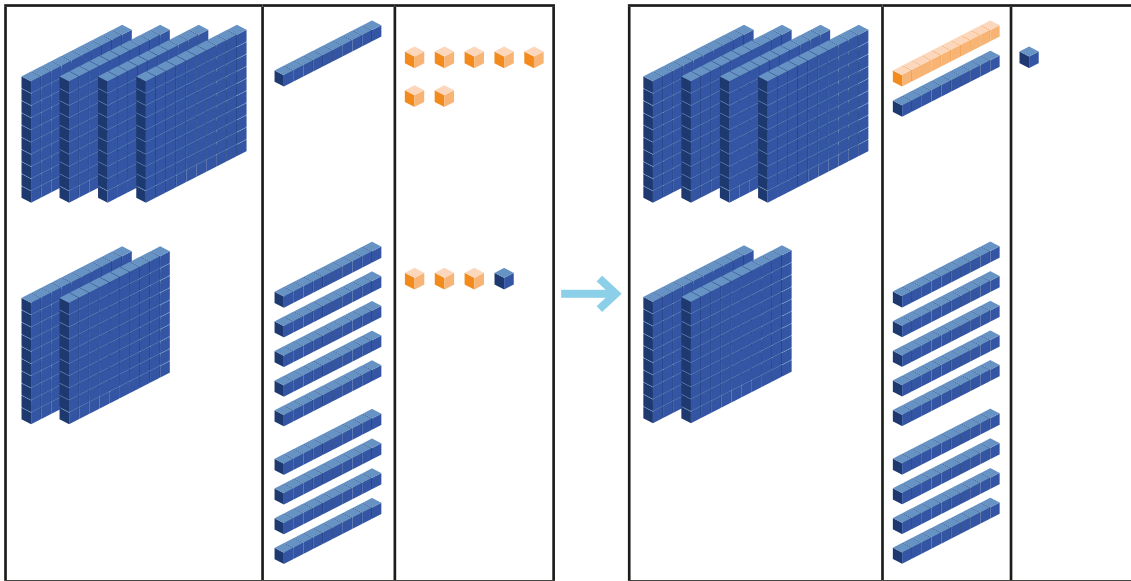
We need to add
the two numbers to
find the total.



Add 417 and 294.

Step 1 Add the ones.
Rename the ones.

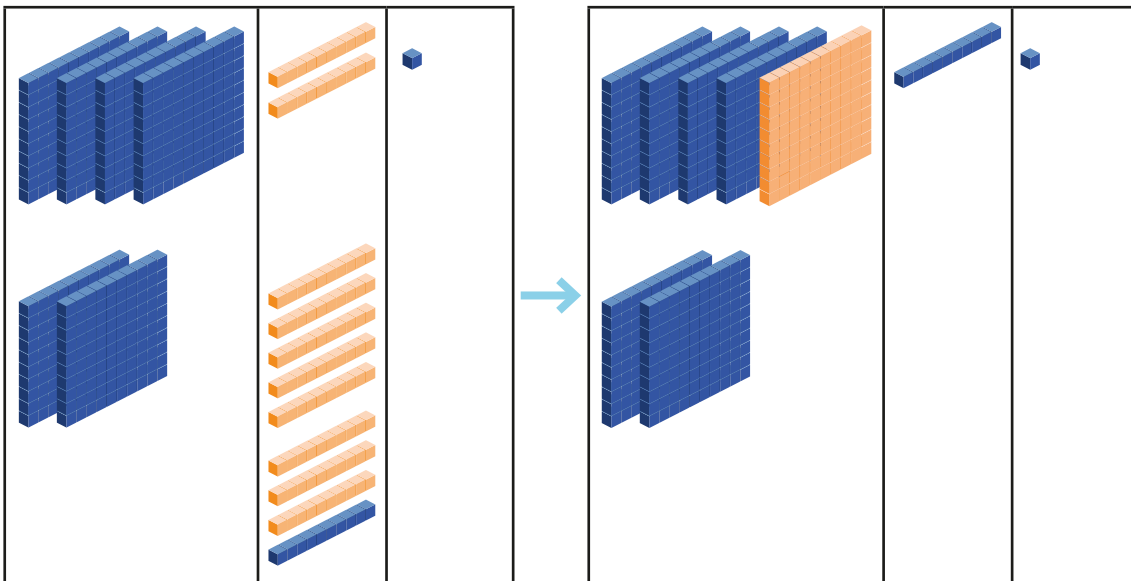
7 ones + 4 ones = 11 ones
11 ones = 1 ten + 1 one



	h	t	o
	4	¹ 1	7
+	2	9	4
		1	1

Step 2 Add the tens.
Rename the tens.

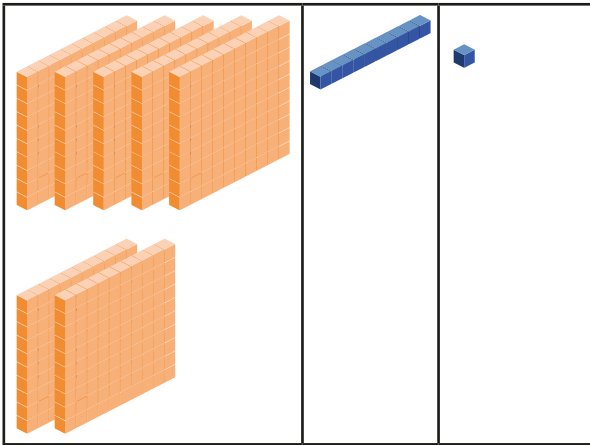
1 ten + 10 tens = 11 tens
11 tens = 1 hundred + 1 ten



	h	t	o
	¹ 4	¹ 1	7
+	2	9	4
	1	1	

Step 3 Add the hundreds.

1 hundred + 4 hundreds + 2 hundreds = 7 hundreds



	h	t	o
	¹ 4	¹ 1	7
+	2	9	4
	7	1	1

$$417 + 294 = 711$$

The amusement park sold 711 tickets in the first 2 hours.

Practice

1 Add.

(a)

	h	t	o
	2	6	5
+	3	7	8
	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>

(b)

	h	t	o
	4	7	2
+	1	9	9
	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>

(c)

	h	t	o
	2	7	8
+	2	2	2
	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>

(d)

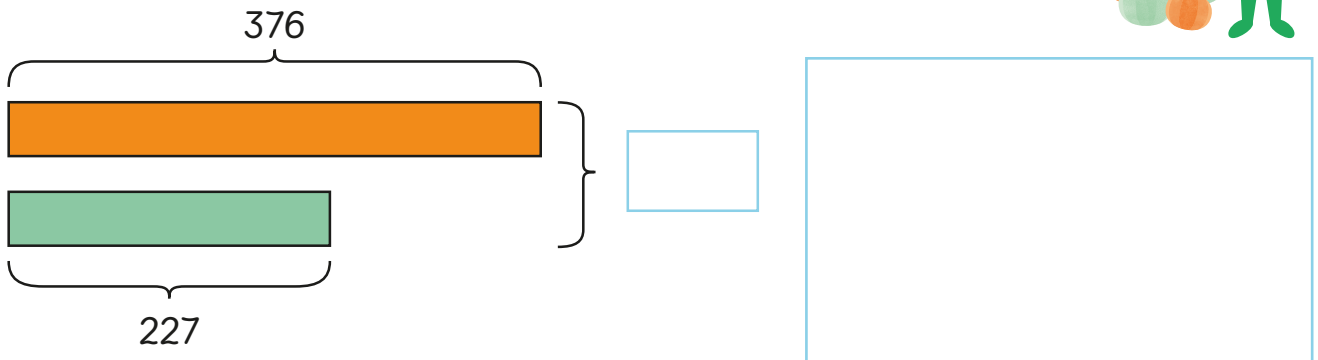
	h	t	o
	3	3	6
+	1	6	4
	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>

(e)	h	t	o
	6	9	9
+	1	8	9
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> </div>			

(f)	h	t	o
	2	8	9
+	5	9	9
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 80px; height: 40px; margin: 0 auto;"></div> </div>			

2

A farmer is growing pumpkins for Halloween. She has 376 pumpkins growing on one patch of land. She has 227 pumpkins growing on another patch. How many pumpkins does the farmer have on her 2 patches of land?



The farmer has pumpkins growing on her 2 patches of land.

3

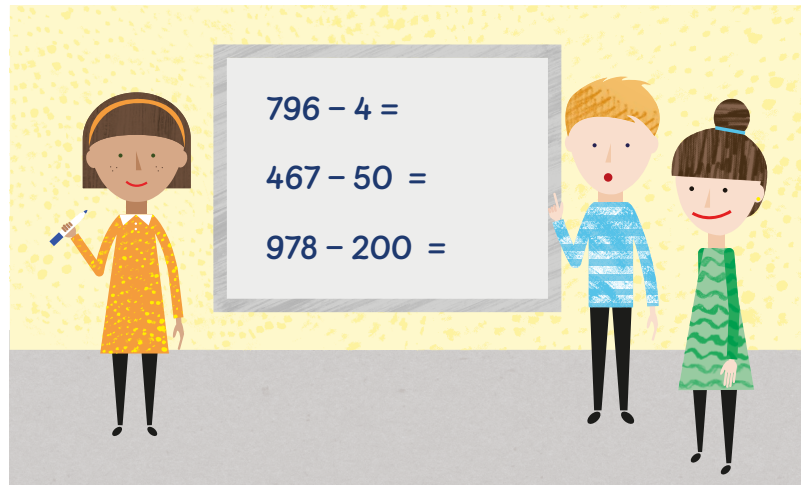
One football player scored 177 league goals in his career. Another football player scored 187 league goals in his career. How many goals did the two players score in their careers altogether?



The two players scored goals in their careers altogether.

Subtracting without renaming

Starter

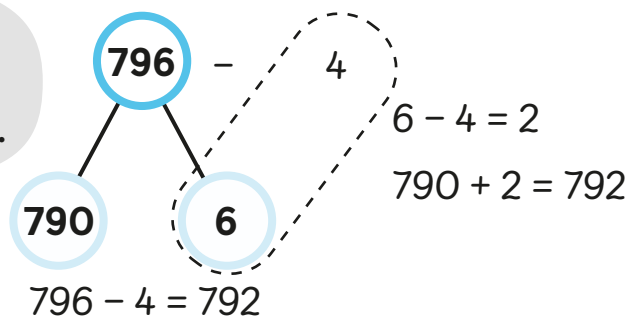


In what ways can these numbers be subtracted?

Example



For $796 - 4$ you only need to subtract the ones.

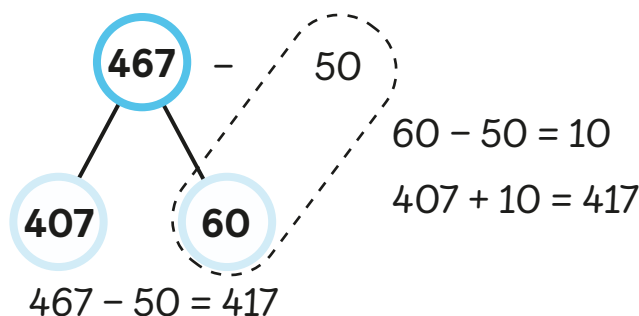


h	t	o
7	9	6
-		
		4

7	9	2



For $467 - 50$ we can subtract just the tens.

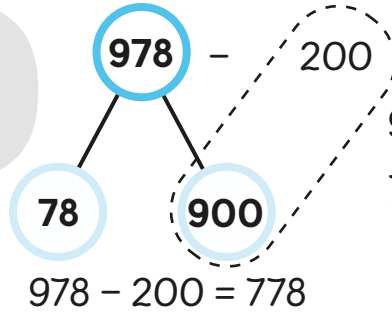


h	t	o
4	6	7
-		
		50

4	1	7



For $978 - 200$ we can subtract only the hundreds.



$$900 - 200 = 700$$

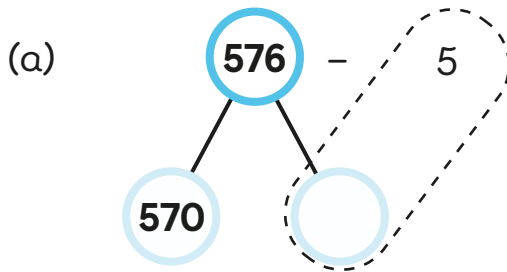
$$700 + 78 = 778$$

$$978 - 200 = 778$$

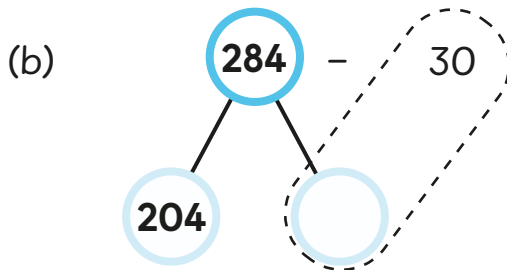
	h	t	o
	9	7	8
-	2	0	0
<hr/>			
	7	7	8

Practice

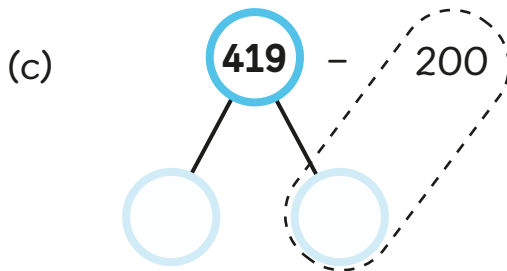
1 Complete the number bonds and subtract.



$$576 - 5 = \square$$



$$284 - 30 = \square$$



$$419 - 200 = \square$$

2 Subtract and fill in the blanks.

(a) $297 - 6 = \square$

(b) $483 - 50 = \square$

(c) $949 - 700 = \square$

Subtracting with renaming (part 1)

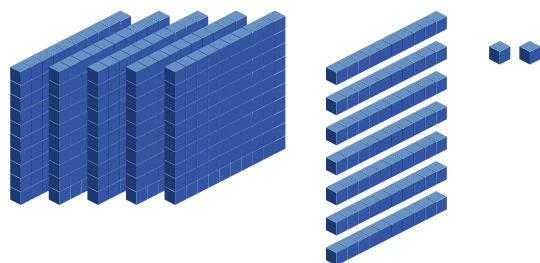
Lesson
10

Starter

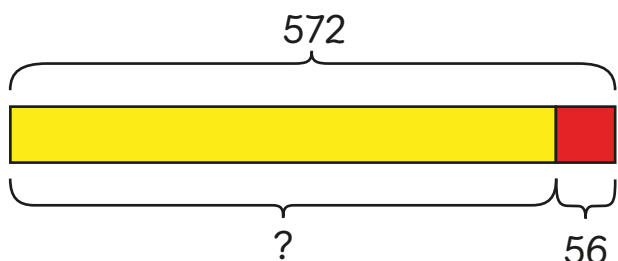
What does Oak need to do to find the answer?



Example



Oak needs to subtract to find the answer but there are not enough ones in 572.

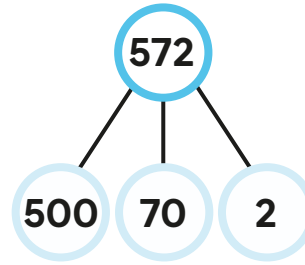


We can rename 1 ten to 10 ones. We will then have 12 ones in total to subtract from.

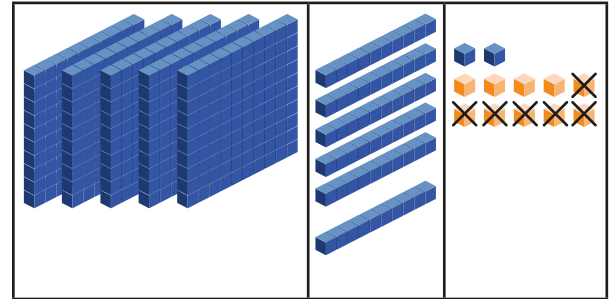
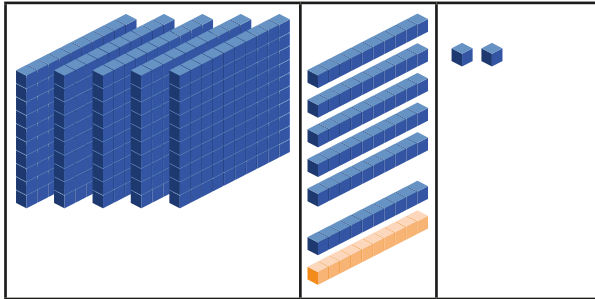
Subtract 56 from 572.

Step 1 Rename 1 ten into 10 ones.
Subtract the ones.

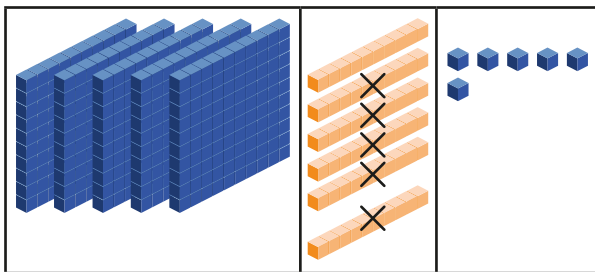
$$12 \text{ ones} - 6 \text{ ones} = 6 \text{ ones}$$



h	t	o
5	⁶ 7	¹² 2
-	5	6
	6	

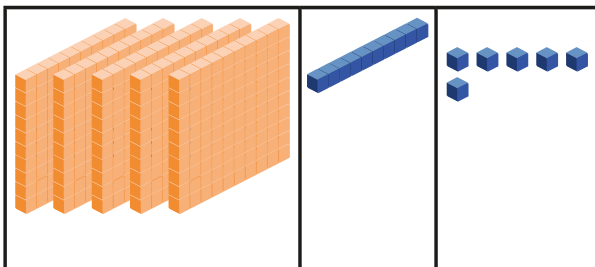


Step 2 Subtract the tens.
6 tens - 5 tens = 1 ten



h	t	o
5	⁶ 7	¹² 2
-	5	6
	1	6

Step 3 Subtract the hundreds.
5 hundreds - 0 hundreds = 5 hundreds



h	t	o
⁵ 5	⁶ 7	¹² 2
-	5	6
5	1	6

$$572 - 56 = 516$$

Practice

1 Subtract.

$$\begin{array}{r} \text{(a)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 2 & 7 & 6 \\ - & 5 & 9 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{(b)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 7 & 9 & 3 \\ - & 2 & 7 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 5 & 3 & 6 \\ - & 1 & 2 & 8 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 9 & 5 & 4 \\ - & 5 & 4 & 6 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{(e)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 8 & 7 & 6 \\ - & 3 & 0 & 9 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{(f)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 6 & 9 & 5 \\ - & 1 & 2 & 8 \\ \hline \end{array} \\ \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \end{array}$$

2 Holly's high score in a video game is 160 points more than Ravi's high score. Holly's high score is 930 points.

(a) What is Ravi's high score in the video game?

Ravi's high score in the video game is .

- (b) Charles's high score is 680 points.
What is the difference between Charles's high score
and Holly's high score?

The difference between Charles's high score and
Holly's high score is .

- (c) Who has more points, Ravi or Charles?

has more points.

- (d) How many more points does he have?

He has more points.

Subtracting with renaming (part 2)

Lesson
11

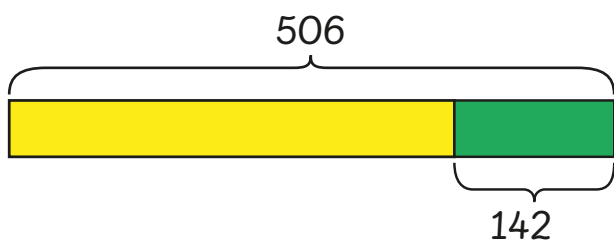
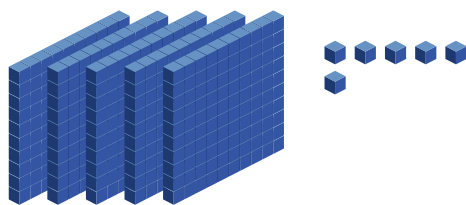
Starter

There are 506 students at Evergreen Primary School.
142 of the children wear glasses.



How many of the children do not wear glasses?

Example



We need to subtract 142 from 506 but there are not enough tens.



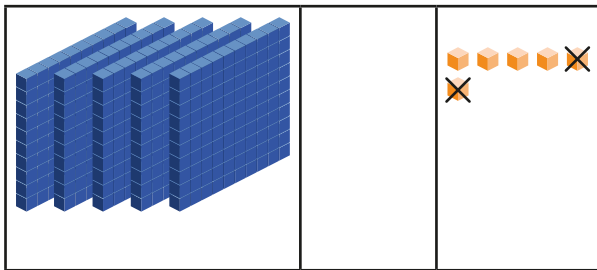
We can rename 1 hundred into 10 tens.



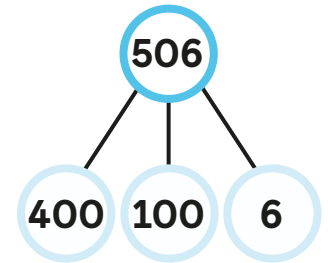
Subtract 142 from 506.

Step 1 Subtract the ones.

$$6 \text{ ones} - 2 \text{ ones} = 4 \text{ ones}$$



h	t	o
5	0	6
-	1	4
		4

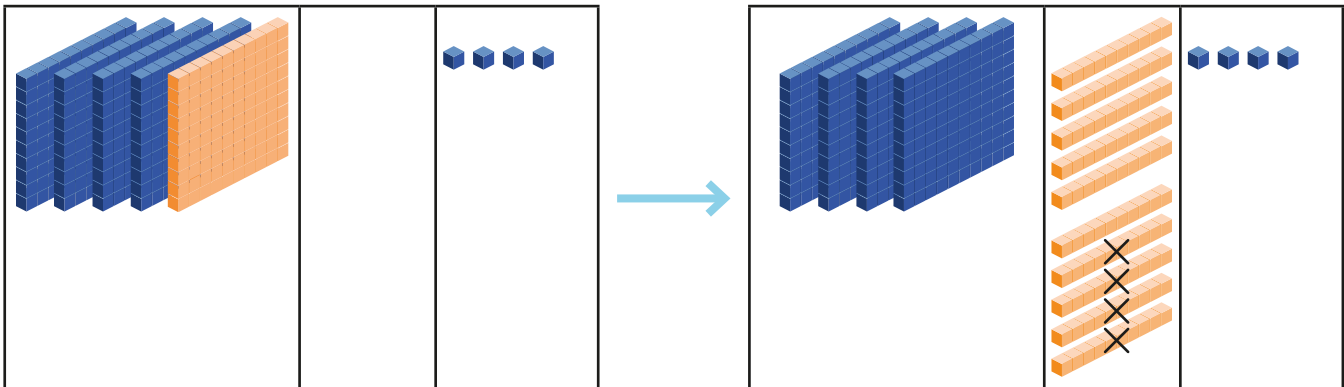


Step 2 Rename 1 hundred into 10 tens.

Subtract the tens.

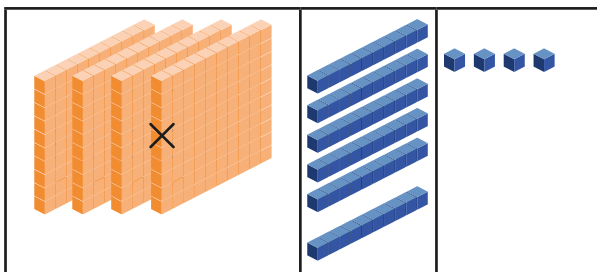
$$10 \text{ tens} - 4 \text{ tens} = 6 \text{ tens}$$

h	t	o
⁴ 5	¹⁰ 0	6
-	1	4
	6	4



Step 3 Subtract the hundreds.

$$4 \text{ hundreds} - 1 \text{ hundred} = 3 \text{ hundreds}$$



h	t	o
⁴ 5	¹⁰ 0	6
-	1	4
3	6	4

$$506 - 142 = 364$$

364 children do not wear glasses.

Practice

1 Subtract.

(a)

h	t	o
2	5	8
-		6 3
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

(b)

h	t	o
7	1	9
-		4 5
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

(c)

h	t	o
9	1	5
-	7	5 3
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

(d)

h	t	o
9	1	5
-	1	6 2
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

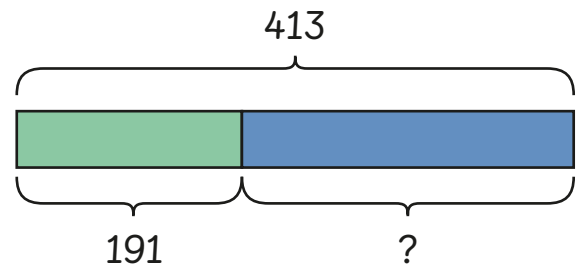
(e)

h	t	o
4	4	4
-	1	7 3
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

(f)

h	t	o
5	5	5
-	2	8 4
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 2px;"></div> </div>		

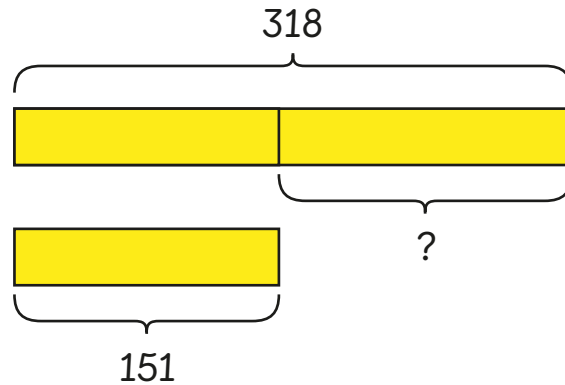
2 A car park has 413 parking spots. 191 of the parking spots have cars in them. How many parking spots are empty?



There are empty parking spots in the car park.

3

- (a) A snack bar sold 318 burgers in one week.
The week after, it sold 151 burgers.
How many more burgers did it sell in the first week than in the second week?



The snack bar sold more burgers in the first week than in the second week.

- (b) There is a cafe on the same road as the snack bar.
The cafe sold 202 burgers in the first week.
How many more burgers did the snack bar sell than the cafe in the first week?

The snack bar sold more burgers than the cafe in the first week.

Subtracting with renaming (part 3)

Lesson
12

Starter

In the late evening, 830 black crows settle down in the woods to roost for the night.
In the early morning, 367 crows fly away.

When crows or other birds settle for the night we call it roosting.

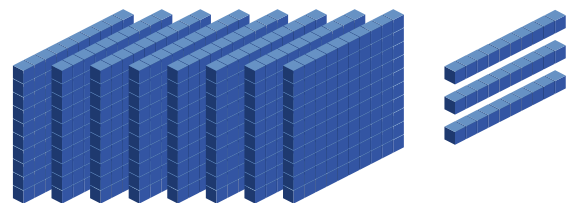


How many crows are still roosting in the woods?

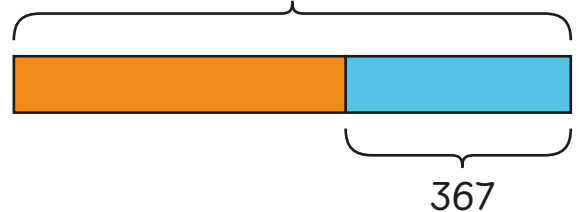
Example



We need to subtract 367 from 830.

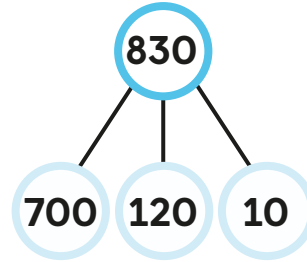
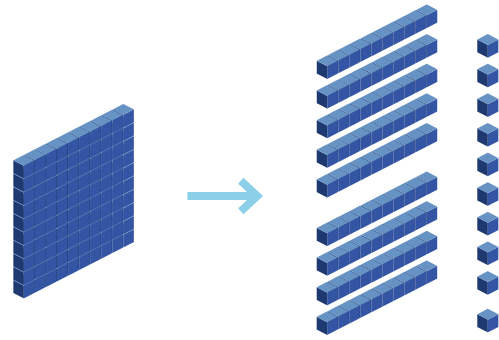


830



There are not enough ones or tens to subtract with.

We can take 1 hundred from the 8 hundreds and rename it. We will then have enough ones and tens to subtract 367.

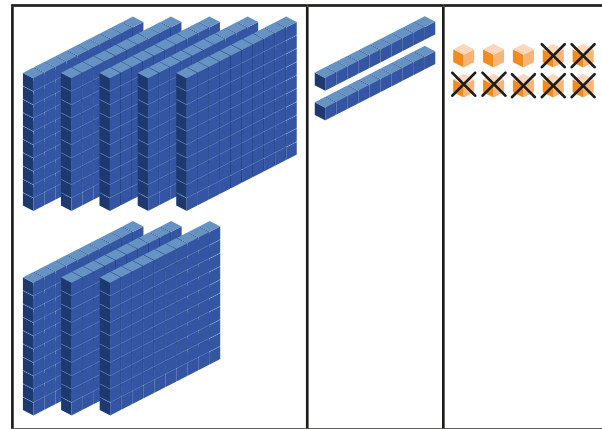
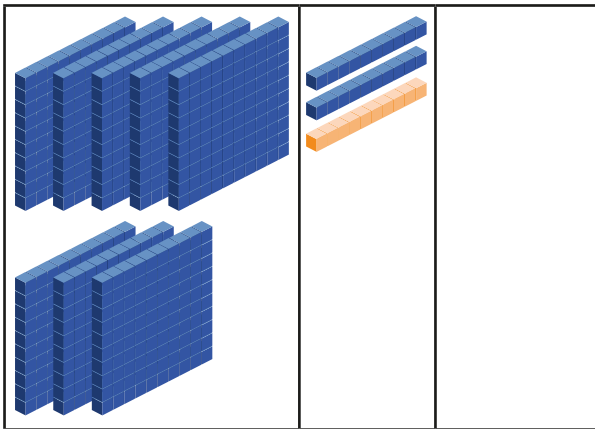


h	t	o
8	² 3	¹⁰ 0
- 3	6	7
	3	

Subtract 367 from 830.

Step 1 Rename 1 ten into 10 ones.

10 ones - 7 ones = 3 ones

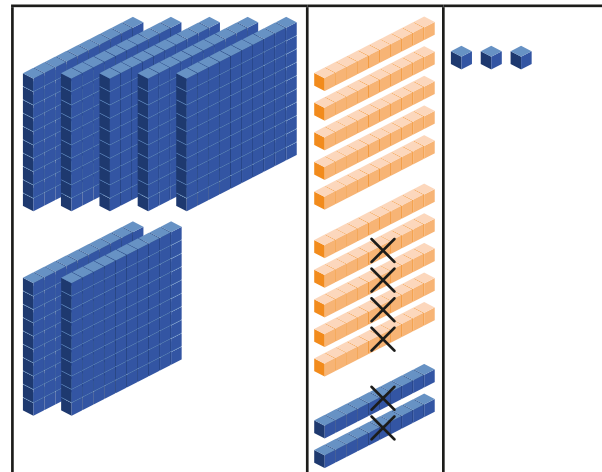
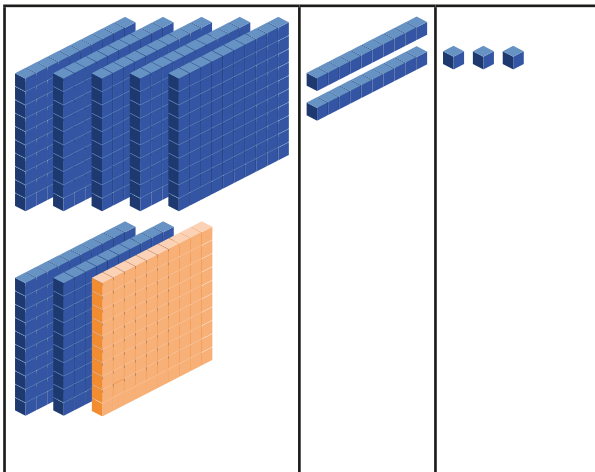


Step 2 Rename 1 hundred into 10 tens.

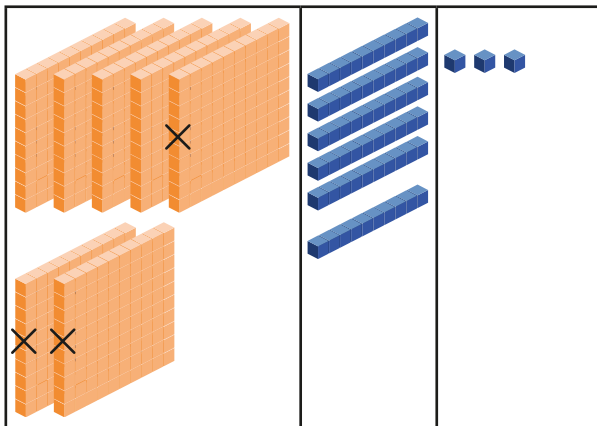
Subtract the tens.

12 tens - 6 tens = 6 tens

h	t	o
⁷ 8	¹² 3	¹⁰ 0
- 3	6	7
	6	3



Step 3 Subtract the hundreds.
 7 hundreds – 3 hundreds = 4 hundreds



h	t	o
7	12	0
-	3	6 7
4	6	3

$$830 - 367 = 463$$

There are 463 crows still roosting in the woods.

Practice

1 Subtract.

(a)

h	t	o
7	0	6
-	3	8

(b)

h	t	o
8	0	2
-	2	7

(c)

h	t	o
4	0	3
-	3	4 5

(d)

h	t	o
2	0	4
-	1	1 6

$$\begin{array}{r}
 \text{(e)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 3 & 0 & 3 \\ - 2 & 0 & 4 \\ \hline \square & \square & \square \end{array}
 \end{array}$$

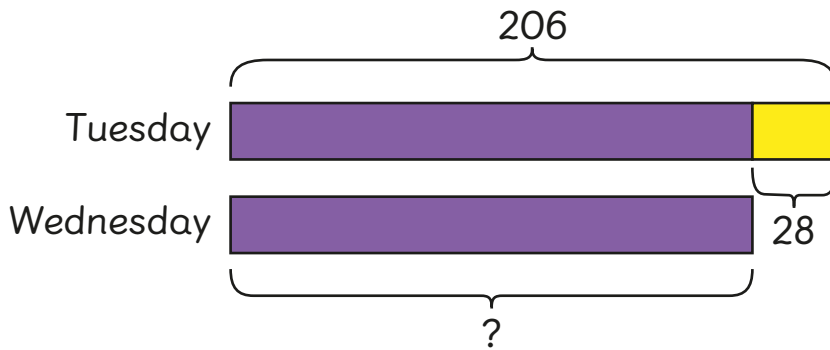
$$\begin{array}{r}
 \text{(f)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 7 & 0 & 5 \\ - 6 & 0 & 6 \\ \hline \square & \square & \square \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(g)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 8 & 0 & 7 \\ - 5 & 4 & 9 \\ \hline \square & \square & \square \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(h)} \quad \begin{array}{ccc} \text{h} & \text{t} & \text{o} \\ 8 & 0 & 1 \\ - 5 & 4 & 9 \\ \hline \square & \square & \square \end{array}
 \end{array}$$

2

Emma scored 206 points in her video game on Tuesday. On Wednesday, she scored 28 points less than she scored on Tuesday. How many points did Emma score on Wednesday?

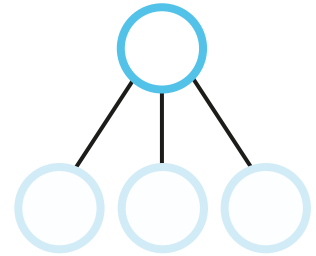
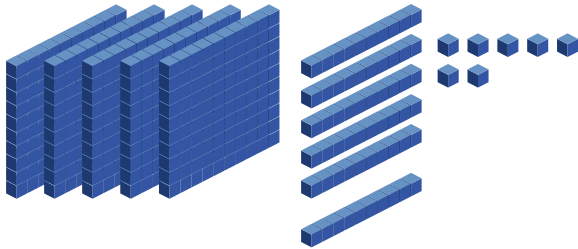


Emma scored points on Wednesday.

Review and challenge

1 Count in hundreds, tens and ones.

Fill in the blanks.



h	t	o
<input type="text"/>	<input type="text"/>	<input type="text"/>

$$\boxed{} = \boxed{} \text{ hundreds} + \boxed{} \text{ tens} + \boxed{} \text{ ones}$$

$$\boxed{} = \boxed{} + \boxed{} + \boxed{}$$

The value of the digit 5 is .

The digit 7 stands for .

The digit is in the tens place.

2 (a) Write the words in numerals.

eight hundred and sixty-four

(b) Write the number in words.

723

3 Put the numbers in order from greatest to smallest.

(a) 579, 521, 920

, ,

(b) 559, 641, 425

, ,

4 Put the numbers in order from smallest to greatest.

(a) 373, 725, 223

, ,

(b) 747, 338, 350

, ,

5 Fill in the blanks.

(a) 8 more than 32 is .

(b) 4 less than 36 is .

(c) 50 more than 300 is .

(d) more than 28 is 32.

(e) 10 more than 310 is .

(f) 100 more than 628 is .

(g) 100 less than 515 is .

(h) 10 less than 867 is .

6 Fill in the blanks to complete the number patterns.

(a) 592, 596, , 604

(b) 400, , , 550

(c) 648, 644, ,

(d) 672, 664, , 648

7

Add.

(a)	h	t	o
	6	5	3
+	1	2	8

(b)	h	t	o
	2	9	0
+	6	2	7

(c)	h	t	o
	2	6	7
+	6	3	6

(d)	h	t	o
	4	5	5
+	2	5	7

8

Subtract.

(a)	h	t	o
	9	3	5
-	7	2	3

(b)	h	t	o
	2	8	6
-	1	6	7

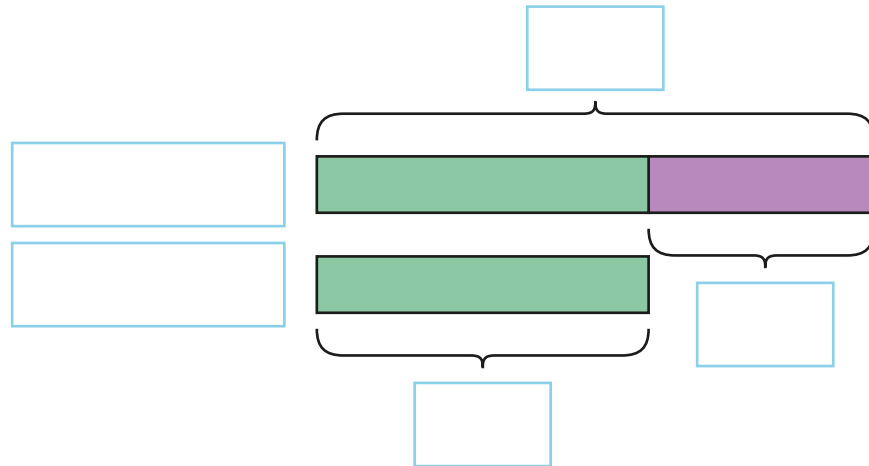
(c)	h	t	o
	8	5	3
-	5	7	2

(d)	h	t	o
	7	0	0
-	3	8	2

9

Solve and fill in the blanks.

Emma and Jacob both sold raffle tickets at the school fete. Jacob sold 376 raffle tickets. He sold 187 fewer raffle tickets than Emma sold.



How many raffle tickets did Emma sell?

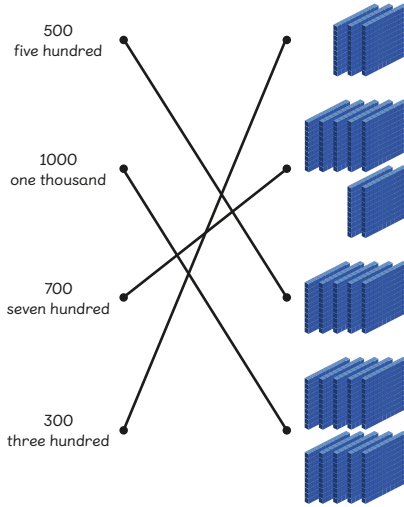
Emma sold raffle tickets.

How many raffle tickets did the children sell altogether?

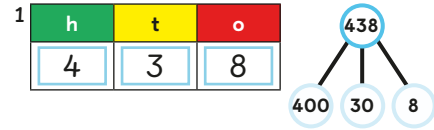
Altogether, the children sold raffle tickets.

Answers

Page 7



Page 9



$438 = 4 \text{ hundreds} + 3 \text{ tens} + 8 \text{ ones}$; $438 = 400 + 30 + 8$.
The value of the digit 4 is 400. The digit 8 stands for 8 ones. The digit 3 is in the tens place. 2 (a) 768 (b) 291
3 (a) five hundred and ninety-three (b) three hundred and fifty-nine

Page 11

1 (a) 765, 756, 675 (b) 870, 869, 868 2 (a) 389, 391, 412 (b) 789, 879, 897 3 greatest: 976; smallest: 236

Page 14

1

1	2	3	4	5	6	7	8	9	10
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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96

Page 15

2 (a) 8 more than 16 is 24. (b) 4 less than 28 is 24.
(c) 50 more than 450 is 500. (d) 4 more than 68 is 72.
3 (a) 100 more than 572 is 672. (b) 10 more than 310 is 320.
(c) 100 less than 685 is 585. (d) 10 less than 679 is 669.
4 (a) 312, 316, 320, 324, 328, 332 (b) 200, 250, 300, 350, 400, 450 (c) 648, 644, 640, 636, 632, 628 (d) 728, 720, 712, 704, 696, 688

Page 17

1 (a) 752 $752 + 6 = 758$



(b) 843 $843 + 50 = 893$



(c) 634 $634 + 300 = 934$



2 (a) $314 + 5 = 319$ (b) $453 + 500 = 953$ (c) $221 + 50 = 271$

Page 19

1	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>4</td><td>¹2</td><td>6</td></tr> <tr><td>+</td><td>3</td><td>4</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>7</td><td>7</td><td>5</td></tr> </table>	h	t	o	4	¹ 2	6	+	3	4	<hr/>			7	7	5	2	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>2</td><td>¹0</td><td>8</td></tr> <tr><td>+</td><td>4</td><td>6</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>6</td><td>7</td><td>1</td></tr> </table>	h	t	o	2	¹ 0	8	+	4	6	<hr/>			6	7	1	3	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>5</td><td>¹6</td><td>9</td></tr> <tr><td>+</td><td>3</td><td>1</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>8</td><td>8</td><td>8</td></tr> </table>	h	t	o	5	¹ 6	9	+	3	1	<hr/>			8	8	8
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Page 22

1 (a)	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>4</td><td>5</td><td>6</td></tr> <tr><td>+</td><td>2</td><td>2</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>4</td><td>7</td><td>8</td></tr> </table>	h	t	o	4	5	6	+	2	2	<hr/>			4	7	8	(b)	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>¹5</td><td>5</td><td>2</td></tr> <tr><td>+</td><td>8</td><td>6</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>6</td><td>3</td><td>8</td></tr> </table>	h	t	o	¹ 5	5	2	+	8	6	<hr/>			6	3	8	(c)	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>¹</td><td>8</td><td>0</td></tr> <tr><td>+</td><td>7</td><td>2</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>8</td><td>0</td><td>0</td></tr> </table>	h	t	o	¹	8	0	+	7	2	<hr/>			8	0	0	(d)	<table border="1"> <tr><td>h</td><td>t</td><td>o</td></tr> <tr><td>¹2</td><td>6</td><td>5</td></tr> <tr><td>+</td><td>4</td><td>3</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td>3</td><td>0</td><td>8</td></tr> </table>	h	t	o	¹ 2	6	5	+	4	3	<hr/>			3	0	8
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2 (a) $281 + 41 = 322$ (b) $74 + 635 = 709$ (c) $125 + 92 = 217$ (d) $470 + 50 = 520$ (e) $64 + 275 = 339$ (f) $795 + 93 = 888$ (g) $580 + 20 = 600$ (h) $99 + 639 = 738$

Page 23

3 309 children are now sitting down. 4 Elliott has 214 beads.

1 (a)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 12 & 16 & 5 \\ + & 3 & 7 & 8 \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 14 & 17 & 2 \\ + & 1 & 9 & 9 \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 12 & 17 & 8 \\ + & 2 & 2 & 2 \\ \hline \end{array}$$
 (d)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 13 & 13 & 6 \\ + & 1 & 6 & 4 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 16 & 19 & 9 \\ + & 1 & 8 & 9 \\ \hline \end{array}$$
 (f)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 12 & 18 & 9 \\ + & 5 & 9 & 9 \\ \hline \end{array}$$

2 The farmer has 603 pumpkins growing on her 2 patches of land. 3 The two players scored 364 goals in their careers altogether.

1 (a) $576 - 5 = 571$ (b) $284 - 30 = 254$ (c) $419 - 200 = 219$

2 (a) $297 - 6 = 291$ (b) $483 - 50 = 433$ (c) $949 - 700 = 249$

1 (a)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 2 & 67 & 16 \\ - & 5 & 9 \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 7 & 89 & 13 \\ - & 2 & 7 \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 5 & 23 & 16 \\ - & 1 & 2 & 8 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 9 & 45 & 14 \\ - & 5 & 4 & 6 \\ \hline \end{array}$$
 (e)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 8 & 67 & 16 \\ - & 3 & 0 & 9 \\ \hline \end{array}$$
 (f)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 6 & 89 & 15 \\ - & 1 & 2 & 8 \\ \hline \end{array}$$

2 (a) Ravi's high score in the video game is 770.

(b) The difference between Charles's high score and Holly's high score is 250. (c) Ravi has more points. (d) He has 90 more points.

1 (a)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 12 & 15 & 8 \\ - & 6 & 3 \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 67 & 11 & 9 \\ - & 4 & 5 \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 89 & 11 & 5 \\ - & 7 & 5 & 3 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 89 & 11 & 5 \\ - & 1 & 6 & 2 \\ \hline \end{array}$$
 (e)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 34 & 14 & 4 \\ - & 1 & 7 & 3 \\ \hline \end{array}$$
 (f)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 45 & 15 & 5 \\ - & 2 & 8 & 4 \\ \hline \end{array}$$

2 There are 222 empty parking spots in the car park.

3 (a) The snack bar sold 167 more burgers in the first week than in the second week. (b) The snack bar sold 116 more burgers than the cafe in the first week.

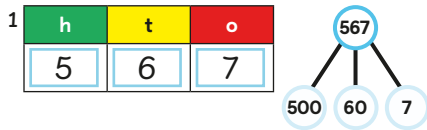
1 (a)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 67 & 910 & 16 \\ - & 3 & 8 \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 78 & 910 & 12 \\ - & 2 & 7 \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 34 & 910 & 13 \\ - & 3 & 4 & 5 \\ \hline \end{array}$$
 (d)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 12 & 910 & 14 \\ - & 1 & 1 & 6 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 23 & 910 & 13 \\ - & 2 & 0 & 4 \\ \hline \end{array}$$
 (f)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 67 & 910 & 15 \\ - & 6 & 0 & 6 \\ \hline \end{array}$$
 (g)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 78 & 910 & 17 \\ - & 5 & 4 & 9 \\ \hline \end{array}$$
 (h)
$$\begin{array}{r} \text{h} & \text{t} & \text{o} \\ 78 & 910 & 11 \\ - & 5 & 4 & 9 \\ \hline \end{array}$$

2 Emma scored 178 points on Wednesday.

Answers continued

Page 42



$567 = 5 \text{ hundreds} + 6 \text{ tens} + 7 \text{ ones}; \quad 567 = 500 + 60 + 7$. The value of the digit 5 is 500. The digit 7 stands for 7 ones. The digit 6 is in the tens place.

2 (a) 864 (b) seven hundred and twenty-three

Page 43

3 (a) 920, 579, 521 (b) 641, 559, 425 4 (a) 223, 373, 725 (b) 338, 350, 747 5 (a) 8 more than 32 is 40. (b) 4 less than 36 is 32. (c) 50 more than 300 is 350. (d) 4 more than 28 is 32. (e) 10 more than 310 is 320. (f) 100 more than 628 is 728. (g) 100 less than 515 is 415. (h) 10 less than 867 is 857. 6 (a) 592, 596, 600, 604 (b) 400, 450, 500, 550 (c) 648, 644, 640, 636 (d) 672, 664, 656, 648

Page 44

7 (a)

h	t	o
6	15	3
<hr/>		
+	1	2
<hr/>		
7	8	1

(b)

h	t	o
2	9	0
<hr/>		
+	6	2
<hr/>		
9	1	7

(c)

h	t	o
2	6	7
<hr/>		
+	6	3
<hr/>		
9	0	3

(d)

h	t	o
4	15	5
<hr/>		
+	2	5
<hr/>		
7	1	2

8 (a)

h	t	o
9	3	5
<hr/>		
-	7	2
<hr/>		
2	1	2

(b)

h	t	o
2	8	6
<hr/>		
-	1	6
<hr/>		
1	1	9

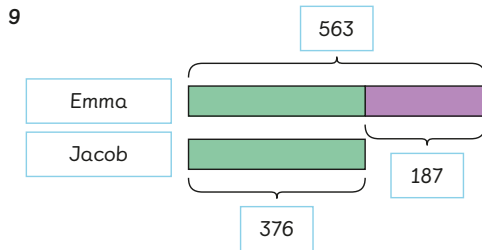
(c)

h	t	o
8	5	3
<hr/>		
-	5	7
<hr/>		
2	8	1

(d)

h	t	o
7	0	0
<hr/>		
-	3	8
<hr/>		
3	1	8

Page 45



Emma sold 563 raffle tickets. Altogether, the children sold 939 raffle tickets.

