


L1. IALT adding two 3-digit numbers with regrouping.	U4 L7 and L8										
	Me	Teacher									
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I have added two 3-digit numbers using column addition (regrouping from ones to tens).											
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(Greater Depth) I have identified and explained an error to a calculation.											
SELF EVALUATION: Rate your progress over the past two days we have been doing column addition. <div style="display: flex; align-items: center; justify-content: space-between;"> / 5  </div>											
NEXT STEP: Miss Suarez has used column addition to calculate her answer. <table border="1" style="margin: 10px auto; text-align: center;"> <tr><td>3</td><td>4</td><td>3</td></tr> <tr><td>+</td><td>2</td><td>7</td></tr> <tr><td>5</td><td>1</td><td>5</td></tr> </table> <p>Is she correct? Explain why/why not using your STAR words.</p>	3	4	3	+	2	7	5	1	5	GD NEXT STEP: Create your own two 3 digit number ensuring you regroup in all columns of ones,tens and hundreds.	
3	4	3									
+	2	7									
5	1	5									
Remember your STAR WORDS: addition, plus, sum, total, bar model, number bond, regroup, partition, difference,hundreds, tens, ones and column method.											

Using mental strategies for addition

Try to solve these addition calculations mentally.

$$455 + 123$$

$$175 + 213$$

$$236 + 4$$

$$536 + 233$$

$$336 + 257$$

$$724 + 2$$

Which is the odd one out?

Why is that?

Key learning: To add two 3-digit numbers using column addition

addition

plus

sum

total

bar model

number bond

regroup

partition

column method



Star Words



Adding two 3-digit numbers using column addition, regrouping from ones to tens

Highlight the information with the class

One Sunday, in Edinburgh Castle car park, there were 644 cars and 137 coaches.

How many vehicles were in the car park altogether?

How could a bar model represent the problem?



New Learning



Adding two 3-digit numbers using column addition, regrouping from ones to tens

One Sunday, in Edinburgh Castle car park, there were 644 cars and 137 coaches.

How many vehicles were in the car park altogether?

How could a bar model represent the problem?



How do we write it as a number sentence?



New Learning



Adding two 3-digit numbers using column addition, regrouping from ones to tens

One Sunday, in Edinburgh Castle car park, there were 644 cars and 137 coaches.

How many vehicles were in the car park altogether?

$$644 + 137 = \square$$

What is it about this calculation that might make it tricky to do mentally?



New Learning



Adding two 3-digit numbers using column addition, regrouping from ones to tens

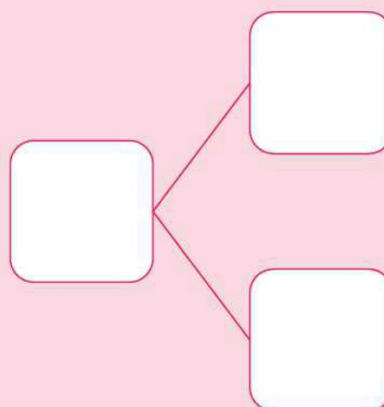


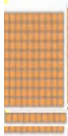
New Learning



What would be a good estimate for this calculation?

$$\boxed{644} + \boxed{137} = \boxed{}$$





Identifying when regrouping happens in more than one column

Model with dienes

$$\boxed{644} + \boxed{137} = \boxed{}$$

Hundreds	Tens	Ones



New Learning






ctice column addition

$$424 + 242$$



New Learning




$$527 + 324$$



New Learning



Practising column addition, regrouping ones to tens

- Partner A should write the column method to solve it.
- Partner B should use Dienes on a place-value chart.
- Take it in turns to add one column at a time.

$$226 + 345$$

$$223 + 351$$

$$346 + 227$$



+

Hundreds	Tens	Ones



Talk Task

Adding two 3-digit numbers using column addition, regrouping from tens to hundreds

Highlight the information with class

A sponsored walk ended at Edinburgh Castle.

153 walkers earned extra sponsorship by finishing in less than six hours.

A further 366 walkers completed the walk.

How many people completed the sponsored walk in total?



What calculation that needs to be done does the bar model show?



Develop Learning



Adding two 3-digit numbers using column addition, regrouping from tens to hundreds


What would be a good estimate for this calculation?

$$\boxed{366} + \boxed{153} = \boxed{}$$



Develop Learning




$$635 + 328$$

1. Estimate the answers (Rounding)
2. Column Addition



Develop Learning




$$437 + 247$$

1. Estimate the answers (Rounding)
2. Column Addition



Develop Learning





Independent Task



Hard

$45 + 12$	$75 + 21$
$26 + 45$	$33 + 29$
$536 + 233$	$724 + 243$

Challenge: $437 + 245$

Harder

$226 + 345 =$	$223 + 457 =$	$346 + 227 =$
$424 + 358 =$	$527 + 324 =$	$635 + 135 =$

Challenge: $\square = 463 + 338$

Hardest

$423 + 369 = \square$	$354 + 272 = \square$	$416 + 375 = \square$
$\square = 563 + 341$	$680 + 252 = \square$	$\square = 463 + 361$

Challenge:

$\begin{array}{r} 245 \\ + 1 \square 3 \\ \hline 4 \square 8 \end{array}$	$\begin{array}{r} 255 \\ + 473 \\ \hline 7 \square 8 \end{array}$	$\begin{array}{r} 255 \\ + 4 \square 1 \\ \hline \square 4 \square \end{array}$
---	---	---

GD Challenge

Identifying and explaining an error




Is this sum correct?
How do you know?

$$\begin{array}{r} 343 \\ + 272 \\ \hline 515 \end{array}$$

0	2	.	1	2	.	2	0	2	0
---	---	---	---	---	---	---	---	---	---

2 day grid

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WUW: On your whiteboard, answer these calculations.

$583 + 262$

$135 + 224$

$435 + 242$

$476 + 353$

Key learning: To add two 3-digit numbers using column addition

difference addition
★ plus ★ ★ sum ★
hundreds tens ★ ones
★ regroup number bond

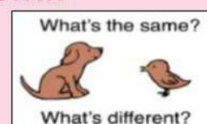


Star Words

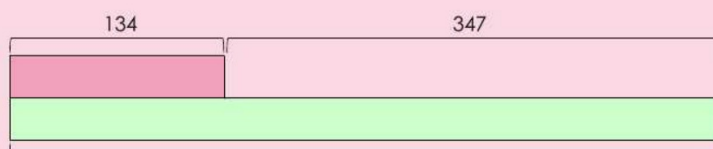


Identifying when regrouping happens in more than one column

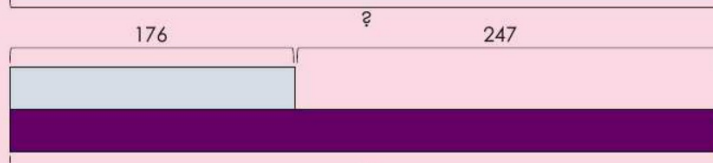
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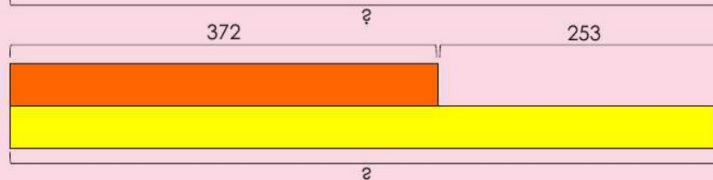
$$134 + 347$$



$$176 + 247$$



$$372 + 253$$



New Learning



Identifying when regrouping happens in more than one column

Model with dienes

$$462 + 356$$

Hundreds	Tens	Ones



New Learning



Identifying when regrouping happens in more than one column

Model with dienes

$$226 + 335$$

Hundreds	Tens	Ones



New Learning



Adding two 3-digit numbers requiring regrouping of ones and tens

$$258 + 186$$

$$343 + 458$$









$$461 + 237$$

258 + 186 will need regrouping of the ones and tens because the ones total more than 10 and the tens total more than 100.



8 ones add 6 ones is 14 ones. I need to regroup 10 ones for 1 ten. I have 4 ones in the ones column and I record the regrouped ten in the tens column.



Hundreds	Tens	Ones
		
		
		

I have regrouped 10 ones blocks as 1 ten rod.












Talk Task

Adding two 3-digit numbers requiring regrouping of ones and tens

What is the number sentence?



+

Hundreds	Tens	Ones
200 	50 	8 
100 	80 	8 
400 	40 	6 

What happened to this calculation? What happened to the ones and tens?

$$\begin{array}{r}
 258 \\
 188 \\
 \hline
 446 \\
 \hline
 11
 \end{array}$$



Develop Learning

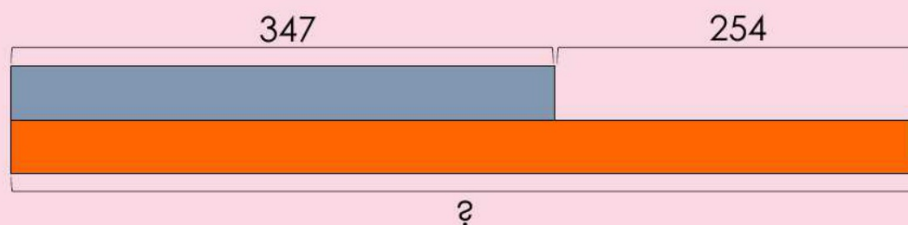
Regrouping of tens caused by regrouping of ones

$$\boxed{347} + \boxed{254} = \boxed{}$$

Estimate the answer before calculating it.

Does this calculation need regrouping?

In which column or columns?



Develop Learning



Regrouping of tens caused by regrouping of ones

$$234 + 137$$

$$\begin{array}{r} 234 \\ + 137 \\ \hline 371 \end{array}$$



Develop Learning



Regrouping of tens caused by regrouping of ones

$$212 + 366$$

$$\begin{array}{r} 212 \\ + 366 \\ \hline 578 \end{array}$$



Develop Learning





Independent Task

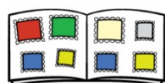


Hard

$35 + 56$	$72 + 19$	$44 + 58$
$223 + 172$	$321 + 268$	$311 + 458$

Challenge: Hard

Fred sells stamps. On Monday he sold 25 stamps and on Tuesday he sold 16 more. How many stamps did he sell altogether?



Harder

$258 + 186$	$343 + 458$	$461 + 273$
$468 + 356$	$226 + 335$	$552 + 263$

Challenge: Harder

Miss Suarez has 313 lemons. She bought 254 more lemons. How many lemons does Miss Suarez have all together to make lemonade?



Hardest

$348 + 254$	$373 + 458$	$456 + 275$
$= 468 + 356$	$= 276 + 335$	$= 554 + 267$

Challenge: Hardest

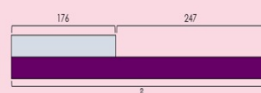
Aisha has 456 marbles. Then Eva gave Aisha 566 marbles. How many marbles does Aisha have?



GD Challenge


Can you make up a word problem that fits this bar model?

Estimate the answer to the calculation needed.



0	2	.	1	2	.	2	0	2	0
---	---	---	---	---	---	---	---	---	---

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