



## Lesson 4

LI - Subtracting using column method.

Using problem solving and reasoning.

Feb 19-13:05

### Practice question:

Use column method to work out the question below.

$$\begin{array}{r} \text{HTO} \\ 839 \\ - \\ \hline 565 \\ \hline \hline \end{array}$$

Sep 25-17:33

How did you do?

Did you remember to exchange?

$$\begin{array}{r} \text{HTO} \\ \underline{7839} \\ 565 \\ \hline 274 \end{array}$$

Jan 6-20:08

How many mistakes can you spot in this calculation?

What are the mistakes?

What is the correct answer?

$$\begin{array}{r} \text{T O H} \\ 3456 \\ + \\ \underline{149} \\ 2113 \end{array}$$

Jan 6-20:12

Check the mistakes your answers here, did you find all of the mistakes? There were lots!

$$\begin{array}{r}
 \text{T O H} \\
 3456 \\
 + \\
 149 \\
 \hline
 2113
 \end{array}$$

What is the correct answer?

$$\begin{array}{r}
 \text{H T O} \\
 4456 \\
 - \\
 149 \\
 \hline
 307
 \end{array}$$

Jan 6-20:12

Use your place value knowledge and knowledge of column method subtraction to help you solve these calculations.

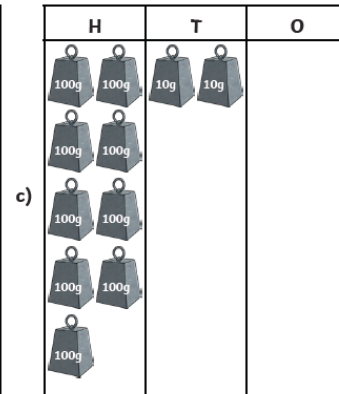
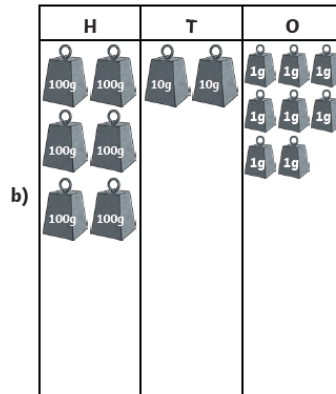
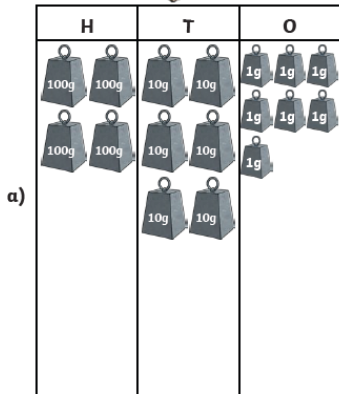
364		<input type="radio"/>
723		<input type="radio"/>
417		<input type="radio"/>
657		<input type="radio"/>
348		<input type="radio"/>
321		<input type="radio"/>
638		<input type="radio"/>
524		<input type="radio"/>
938		<input type="radio"/>

Jan 6-20:25

Use your place value knowledge and column method to solve these problems.

### Question 1

1) The mass of each parcel is shown in the place value grid. Alisha took some things out of each parcel. Find the new mass of each parcel. Cross out and draw in the place value grid to show when you exchange.



219g is removed from the parcel.

174g is removed from the parcel.

156g is removed from the parcel.

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_g

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_g

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_g

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### Question 2

Arlo has three digit cards. He is trying to find all the different possible numbers that he could make with these cards. He wants to subtract each number from 926.



How many different calculations can you find? Decide whether each calculation has no exchange, one exchange or two exchanges. One has been done for you.

Check your ideas using column method to help you see if you needed to exchange or not.

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### Question 3

Shanelle made this number using place value counters:

Hundreds	Tens	Ones
	10 10 10	1 1 1 1 1 1

Shanelle's number take away 4 is


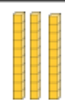

20 less than Shanelle's number is

Shanelle's number subtract 12 is

Jan 6-20:35

### Question 4

Use column subtraction to find the difference in value between the place value charts.

Hundreds	Tens	Ones
		
-		
Hundreds	Tens	Ones
100 100	10 10	1 1 1 1 1 1 1

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### Question 5

Solve these missing-digit column subtraction problems.

	<input type="text"/>	6	4		5	<input type="text"/>	7
-	3	5	1	-	<input type="text"/>	2	1
	5	1	<input type="text"/>		1	7	6

Solve these missing-digit column subtraction problems.

	8	5	3		5	6	4
-	6	1	1	-	1	<input type="text"/>	3
	<input type="text"/>	<input type="text"/>	2		4	6	<input type="text"/>

Jan 6-21:04

### Question 6

Read these calculations carefully as I may have tried to trick you.

Use column addition or subtraction to solve these calculations.

1)  $456 + 362 = \square$       2)  $376 + 476 = \square$

	4	5	6
+	3	6	2

	3	7	6
+	4	7	6

3)  $672 - 259 = \square$       4)  $877 - 386 = \square$

	6	7	2
-	2	5	9

	8	7	7
-	3	8	6

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Questions 1 answers

- a)  $467 - 219 = 2489$
- b)  $628 - 174 = 4549$
- c)  $920 - 156 = 7649$

Questions 2 answers

No exchanges	One exchange	Two exchanges
$926 - 815 = 111$	$926 - 185 = 741$ $926 - 518 = 408$ $926 - 581 = 345$ $926 - 851 = 75$	$926 - 158 = 768$

Questions 3 answers

- Shanelle's number take away 4 is **32**
- 20 less than Shanelle's number is **16**
- Shanelle's number subtract 12 is **24**

Questions 4 answers

$$\begin{array}{r}
 \text{H T O} \\
 5213 \\
 - \quad \quad \quad \\
 \hline
 227 \\
 \hline
 306
 \end{array}$$

Questions 5 answers

<b>8</b> 6 4	5 <b>9</b> 7
- 3 5 1	- <b>4</b> 2 1
5 1 <b>3</b>	1 7 6
8 5 3	5 6 4
- 6 1 1	- 1 <b>0</b> 3
<b>2</b> <b>4</b> 2	4 6 <b>1</b>

Questions 6 answers

1) $456 + 362 =$ <b>818</b>	2) $376 + 476 =$ <b>852</b>
$  \begin{array}{r}  456 \\  + 362 \\  \hline  818  \end{array}  $	$  \begin{array}{r}  376 \\  + 476 \\  \hline  852  \end{array}  $
3) $672 - 259 =$ <b>413</b>	4) $877 - 386 =$ <b>491</b>
$  \begin{array}{r}  672 \\  - 259 \\  \hline  413  \end{array}  $	$  \begin{array}{r}  877 \\  - 386 \\  \hline  491  \end{array}  $