

# Add Two 4-Digit Numbers (2)

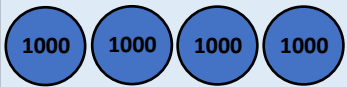
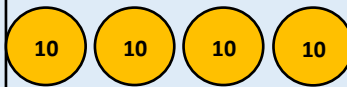
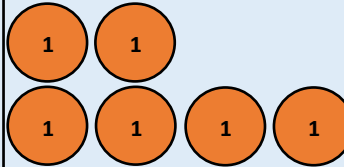
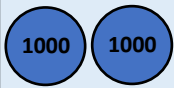
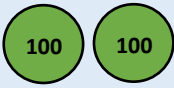

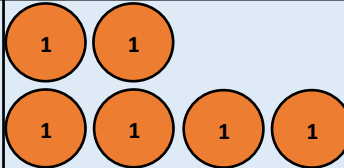
4



# Activity 1

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			

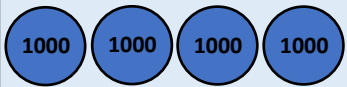
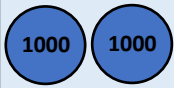
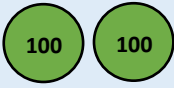
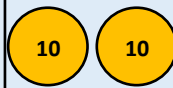
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Look at the result for each column; what do you notice?

## Activity 1

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			
6,000	200	60	12

Look at the result for each column; what do you notice?

There are too many ones in the ones column.

# Activity 1

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

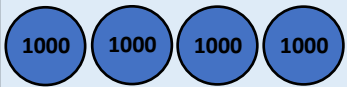
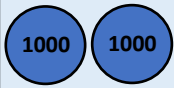


Exchange ten ones for a 10 counter and move it to the tens column.  
What is the final result?

## Activity 1

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			
6,000	200	70	2

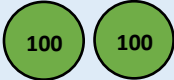
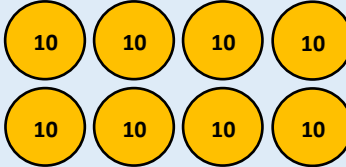
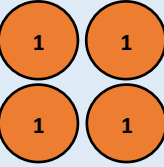

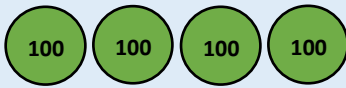

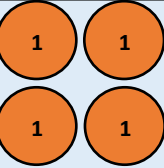
We can show this in the column addition as a ten under the tens column.

$$\begin{array}{r}
 4046 \\
 + 2226 \\
 \hline
 6272 \\
 \hline
 1
 \end{array}$$

## Activity 2

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			

\_\_\_\_\_

Look at the result for each column; what do you notice?

## Activity 2

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			
3000	600	120	8

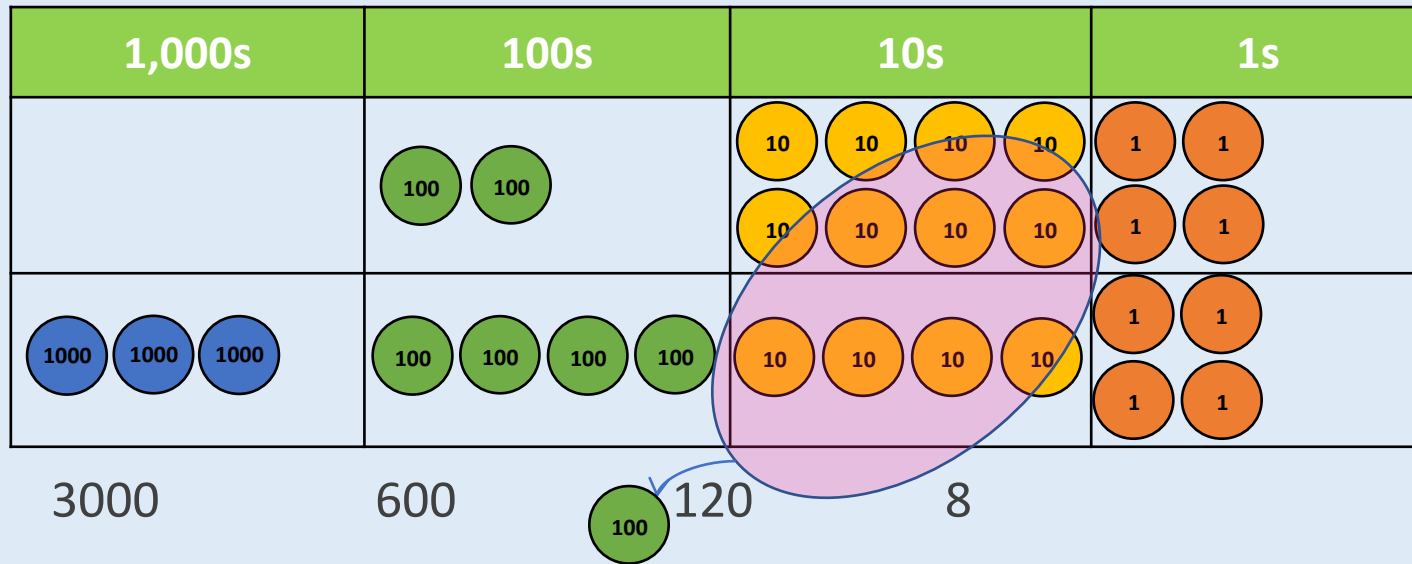
Look at the result for each column; what do you notice?

There are too many tens in the tens column.

## Activity 2

## Add Two 4-Digit Numbers (2)

Add the place value counters together.



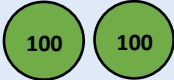
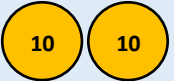

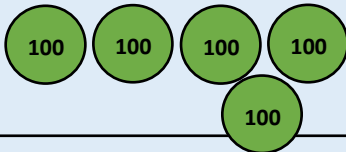
Exchange ten tens for a 100 counter and move it to the hundreds column.  
What is the final result?



## Activity 2

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			
3000	700	2	8


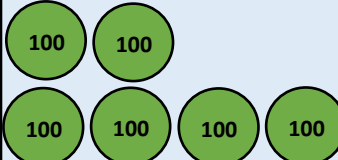
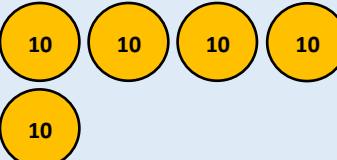

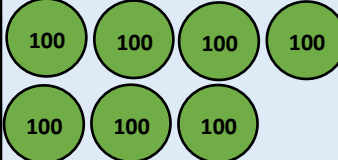
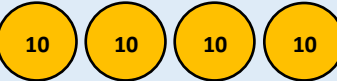

We can show this as a column addition with the tens under the hundreds column.

$$\begin{array}{r}
 3444 \\
 + 284 \\
 \hline
 3728 \\
 \hline
 1
 \end{array}$$

## Activity 3

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			


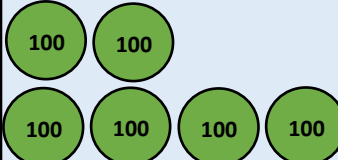
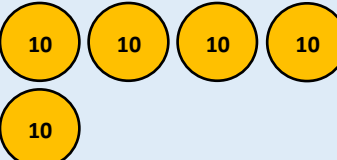

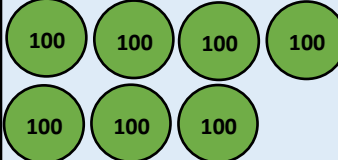
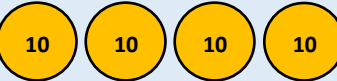

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Look at the result for each column; what do you notice?

## Activity 3

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			

6000

1300

90

3


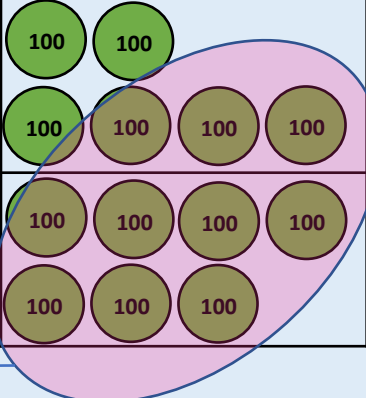
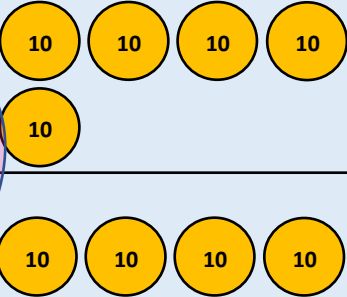

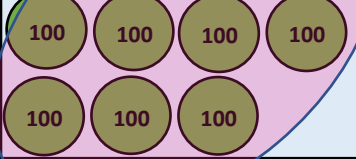
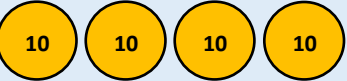

Look at the result for each column; what do you notice?

There are too many hundreds in the hundred column.

## Activity 3

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			


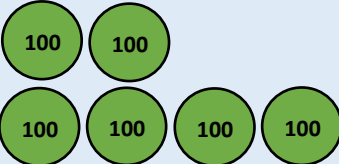
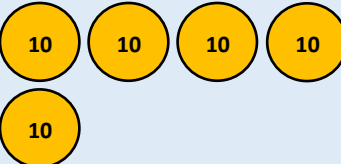

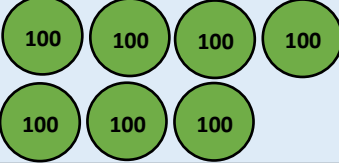


Exchange ten hundreds for a 1,000 counter and move it to the thousands column.  
What is the final result?

Now write the same calculation in numbers, showing the exchanged 1,000 underneath the thousands column.

## Activity 3

## Add Two 4-Digit Numbers (2)

Add the place value counters together.

1,000s	100s	10s	1s
			
			

What is the final result?

The final result is still the same. 7,393

Now we can write the same calculation in column addition showing the exchanged 1,000 underneath the thousands column.

$$\begin{array}{r}
 3650 \\
 + 3743 \\
 \hline
 7393 \\
 \hline
 1
 \end{array}$$

## Activity 4

## Add Two 4-Digit Numbers (2)

Calculate.

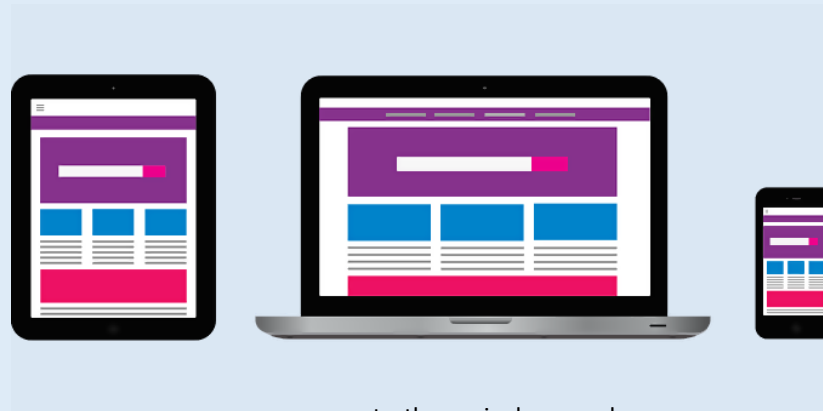
Tia buys a phone costing £592.

She also buys a new laptop for £1,375.

What is the cost?

Her friend, Esin, then buys a tablet for £1,039.

How much have they spent altogether?



## Activity 4

## Add Two 4-Digit Numbers (2)

Calculate.

Tia buys a phone costing £592.  
She also buys a new laptop for £1,375.  
What is the cost?

$$£592 + £1,375 = £1,967$$

Her friend, Esin, then buys a tablet for  
£1,039.

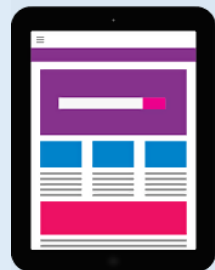
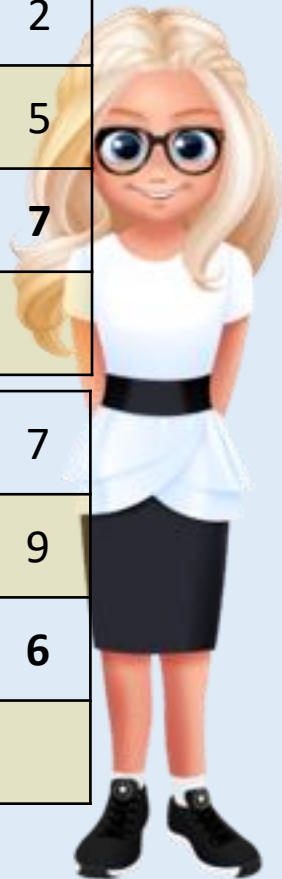
How much have they spent altogether?

$$£1,967 + £1,039 = £3,006$$

		5	9	2
+	1	3	7	5
	1	9	6	7
		1		

	1	9	6	7
+	1	0	3	9
	3	0	0	6
	1	1	1	



## Activity 5

## Add Two 4-Digit Numbers (2)

Calculate.

Malachi buys a watch costing £367.

He also buys a new laptop for £2,217.

What is the cost?

His friend, Rosie, then also buys a watch for £458.

How much have they spent altogether?





## Activity 5

## Add Two 4-Digit Numbers (2)

Calculate.

Malachi buys a watch costing £367.  
He also buys a new laptop for £2,217.

What is the cost?

$$£367 + £2,217 = £2,584$$

His friend, Rosie, then also buys a watch for  
£458.

How much have they spent altogether?

$$£2,584 + £458 = £3,042$$

		3	6	7
+	2	2	1	7
	2	5	8	4
			1	

		4	5	8
+	2	5	8	4
	3	0	4	2
	1	1	1	



Tia, Rosie and Leanna are working out the solution to the calculation  $7,485 + 3,934$ .

Tia's Strategy

	7	4	8	5
+	3	9	3	4
1	0	3	1	9

Rosie's Strategy

$$\begin{aligned}
 7,000 + 3,000 &= 10,000 \\
 400 + 900 &= 1300 \\
 80 + 30 &= 110 \\
 5 + 4 &= 9 \\
 10,000 + 1300 + 110 + 9 &= 10,449
 \end{aligned}$$

Leanna's Strategy

	7	4	8	5
+	3	9	3	4
				9
		1	1	0
	1	3	0	0
1	0	0	0	0
1	1	4	1	9

Who is correct?

Tia, Rosie and Leanna are working out the solution to the calculation  $7,485 + 3,934$ .

Tia's Strategy

	7	4	8	5
+	3	9	3	4
1	0	3	1	9

Rosie's Strategy

$$\begin{aligned}
 7,000 + 3,000 &= 10,000 \\
 400 + 900 &= 130 \\
 80 + 30 &= 110 \\
 5 + 4 &= 9 \\
 10,000 + 130 + 110 + 9 &= 10,249
 \end{aligned}$$

Leanna's Strategy

	7	4	8	5
+	3	9	3	4
				9
		1	1	0
	1	3	0	0
1	0	0	0	0
1	1	4	1	9

Who is correct?

- Leanna is correct with 11,419.
- Tia has forgotten to show and add on the exchanged hundred and thousand.
- Rosie has miscalculated  $400 + 900$ , forgetting to exchange a ten hundreds to make a thousand (showing 13 tens instead of 13 hundreds).