1) Use the place value grids to solve the calculations involving 4-digit numbers.
Draw counters in each box to help you, as shown in question a).

a)

2346 + 1213			
Thousands	Hundreds	Tens	Ones
◯ ◯	◯ ◯ ◯	◯ ◯ ◯ ◯	◯ ◯ ◯ ◯ ◯ ◯
◯	◯ ◯	◯	◯ ◯ ◯

2346 + 1213 =

b)

5183 + 3704			
Thousands	Hundreds	Tens	Ones

5183 + 3704 =

c)

1003 + 7263			
Thousands	Hundreds	Tens	Ones

1003 + 7263 =

d)

419 + 2570			
Thousands	Hundreds	Tens	Ones

419 + 2570 =

2) Match the calculations to their answers.

3406 + 211 =		5299
2033 + 3265 =		5298
4157 + 1142 =		3657
546 + 3111 =		3617

1) Polly and Graham are working on a calculation together. They both get different answers. Are either of them correct? Explain your reasoning.

6216 + 3672			
Thousands	**Hundreds**	**Tens**	**Ones**
⚪⚪⚪ ⚪⚪⚪	⚪⚪	⚪	⚪⚪⚪ ⚪⚪⚪
⚪⚪⚪	⚪⚪⚪ ⚪⚪⚪	⚪⚪⚪ ⚪⚪⚪ ⚪	⚪⚪

Polly

I think the answer is 8888.

Graham

I think the answer is 9898.

_____
_____
_____

2) Malak works on this calculation with missing numbers. Has she found the missing digits correctly? Explain your reasoning.

The missing ones digit is 4, the missing hundreds digit is 6 and the missing thousands digit is 7.

$$
\begin{array}{cccc}
 & 5 & 1 & 8 & \square \\
+ & 2 & \square & 1 & 0 \\
\hline
\square & & 7 & 9 & 4 \\
\hline
\end{array}
$$

_____
_____
_____

3) Ola has set her calculation out on the place value chart below. Can you check her work and give her some top tips to explain how she could improve?

_____
_____
_____
_____
_____
_____

823 + 1164 = 9394			

Thousands	**Hundreds**	**Tens**	**Ones**
⚪⚪⚪ ⚪⚪⚪ ⚪⚪	⚪⚪	⚪⚪⚪	
⚪	⚪	⚪⚪⚪ ⚪⚪⚪	⚪⚪⚪ ⚪

1) Alice is thinking of two numbers. They add up to 7654. Each of the numbers in the question has two odd digits and two even digits. What could the numbers be? How many possibilities can you find?

2) At least three of the missing numbers in this calculation are odd.

Can you find three different possibilities for the missing numbers in this calculation?

$$
\begin{array}{r}
1 \ \square \ 2 \ \square \\
+ \ 3 \ \square \ 5 \ \square \\
\hline
4 \ 9 \ 7 \ 6 \\
\hline
\end{array}
$$