

White

**Rose
Maths**

Year 4

Addition & Subtraction

Which questions are easy?

Which questions are hard?

$$8,273 + 4 = \underline{\quad}$$

$$8,273 + 4 \text{ tens} = \underline{\quad}$$

$$8,273 - 500 = \underline{\quad}$$

$$8,273 - 5 \text{ thousands} = \underline{\quad}$$

Why are some easier than others?

Mo says,

When I add hundreds to a number, only the hundreds column will change.



Is Mo correct? Explain your answer.

Rosie adds 2 numbers together that total 4,444



Both numbers have 4 digits.

All the digits in both numbers are even.

What could the numbers be?

Prove it.

How many ways can you find?

Two children completed the following calculation:

$$1,234 + 345$$



Dora

My answer is
1,589

My answer is
4,684



Alex

Both of the children have made a mistake in their calculations.

Calculate the actual answer to the question.

What mistakes did they make?

What is the missing 4-digit number?

	Th	H	T	O
	—	—	—	—
+	6	3	9	5
	8	9	4	9

Annie, Mo and Alex are working out the solution to the calculation $6,374 + 2,823$

Annie's Strategy

$$6,000 + 2,000 = 8,000$$

$$300 + 800 = 1100$$

$$70 + 20 = 90$$

$$4 + 3 = 7$$

$$8,000 + 1100 + 90 + 7 = 9,207$$

Mo's Strategy

	6	3	7	4
+	2	8	2	3
	8	1	9	7

Alex's Strategy

	6	3	7	4
+	2	8	2	3
				7
			9	0
	1	1	0	0
	8	0	0	0
	9	1	9	7

Who is correct?

Jack says,



When I add two numbers together I will only ever make up to one exchange in each column.

Do you agree?

Explain your reasoning.

Complete:

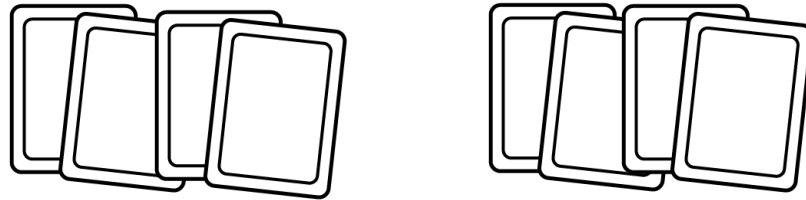
	Th	H	T	O
	6	?	?	8
+	?	?	8	?
	9	3	2	5

Mo says that there is more than one possible answer for the missing numbers in the hundreds column.

Is he correct?

Explain your answer.

Eva is performing a column subtraction with two four digit numbers.



The larger number has a digit total of 35

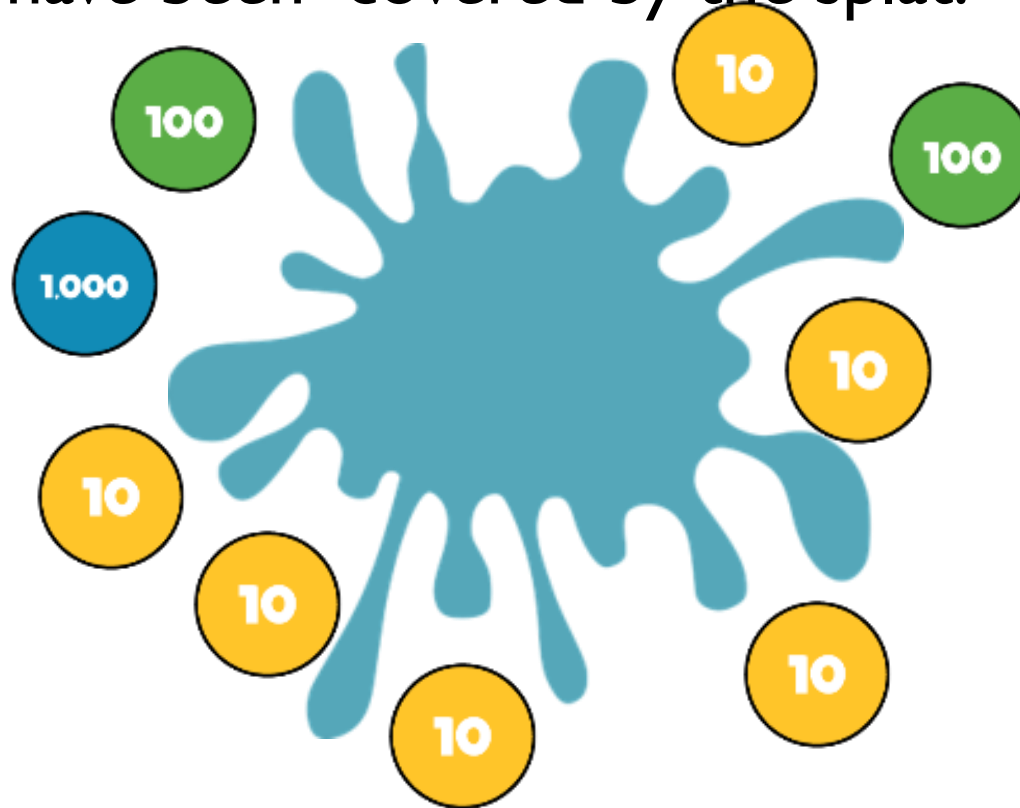
The smaller number has a digit total of 2

Use cards to help you find the numbers.

What could Eva's subtraction be?

How many different options can you find?

There are counters to the value of 3,470 on the table but some have been covered by the splat.



What is the total of the counters covered?
How many different ways can you make the missing total?



1,235 people go on a school trip.

There are 1,179 children and 27 teachers.

The rest are parents.

How many parents are there?

Explain your method to a friend.

Find the missing numbers that could go into the spaces.

Give reasons for your answers.

$$\underline{\hspace{2cm}} - 1,345 = 4\underline{\hspace{1cm}}6$$

What is the greatest number that could go in the first space?

What is the smallest?

How many possible answers could you have?

What is the pattern between the numbers?

What method did you use?

Amir and Tommy solve a problem.

When I subtract 546 from
3,232 my answer is 2,714



Amir



Tommy

When I subtract 546 from
3,232 my answer is 2,686

Who is correct?

Explain your reasoning.

Why is one of the answers wrong?

There were 2,114 visitors to the museum on Saturday.

650 more people visited the museum on Saturday than on Sunday.



Altogether how many people visited the museum over the two days?

What do you need to do first to solve this problem?

Amir has £1,000



He buys a scooter for £345 and a skateboard for £110

How much money does he have left?

Show 3 different methods of finding the answer.

Explain how you completed each one.

Which is the most effective method?

Look at each pair of calculations.

Which one out of each pair has the same difference as $2,450 - 1,830$?

$$2,451 - 1,831 \quad 2,451 - 1,829$$



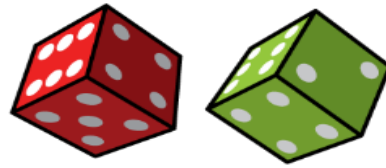
$$2,500 - 1,880 \quad 2,500 - 1,780$$



$$2,449 - 1,829 \quad 2,449 - 1,831$$

When is it useful to use difference to solve subtractions?

Game



The aim of the game is to get a number as close to 5,000 as possible.

Each child rolls a 1-6 die and chooses where to put the number on their grid.

Once they have each filled their grid, they add up their totals to see who is the closest.

	Th	H	T	O
	?	?	?	?
+	?	?	?	?

The estimated answer to a calculation is 3,400

The numbers in the calculation were rounded to the nearest 100 to find an estimate.

What could the numbers be in the original calculation?

Use the number cards and + or – to make three calculations with an estimated answer of 2,500

1,295

1,120

4,002

1,489

3,812

1,449

Here is a number sentence.

$$350 + 278 + 250$$

Add the numbers in different orders to find the answer.

Is one order of adding easier? Why?

Create a rule when adding more than one number of what to look for in a number.

I completed an addition and then used the inverse to check my calculation.

When I checked my calculation, the answer was 3,800

One of the other numbers was 5,200

What could the calculation be?

$$\underline{\quad\quad\quad} + \underline{\quad\quad\quad} = \underline{\quad\quad\quad}$$

$$\underline{\quad\quad\quad} - \underline{\quad\quad\quad} = 3,800$$

In the number square below, each horizontal row and vertical column adds up to 1,200

Find the missing numbers.

Is there more than one option?

897		
		832
	762	

Check the rows and columns using the inverse and adding the numbers in different orders.