

# Discussion Problems

## Step 2: Add Two 4-Digit Numbers 1

### National Curriculum Objectives:

Mathematics Year 4: (4C2) [Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate](#)

### About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 4 Addition and Subtraction](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Add Two 4-Digit Numbers 1

1. Charles is saving his money for a new TV. The one he wants costs £4,999.



Charles says,



I have saved an amount which is a multiple of 100 and has 4-digits, but I need to borrow the rest from the bank.



Investigate how much he would need to borrow from the bank to afford the TV in addition to his savings. Give five possible answers.

DP

2. Investigate different ways of completing the calculation below, using the place value grid to help you. Each column should not total more than 9 counters and you must use all of the counters provided.

$$4,252 + \underline{\hspace{2cm}} = ?$$

| 1,000s | 100s | 10s | 1s |
|--------|------|-----|----|
|        |      |     |    |
|        |      |     |    |



DP

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Investigate how much he would need to borrow from the bank to afford the TV in addition to his savings. Give five possible answers.

Various answers, for example:  $\pounds 1,000 + \pounds 3,999 = \pounds 4,999$ ;  $\pounds 1,500 + \pounds 3,499 = \pounds 4,999$ ;  $\pounds 2,300 + \pounds 2,699 = \pounds 4,999$ ;  $\pounds 1,600 + \pounds 3,399 = \pounds 4,999$ ;  $\pounds 3,900 + \pounds 1,099 = \pounds 4,999$

DP

2. Investigate different ways of completing the calculation below, using the place value grid to help you. Each column should not total more than 9 counters and you must use all of the counters provided.

Various answers, for example:

$$4,252 + 2,316 = 6,568$$

| 1,000s | 100s | 10s | 1s |
|--------|------|-----|----|
|        |      |     |    |
|        |      |     |    |

Accept any answer with a correct calculation, where each column totals 9 or less. All 12 counters must be used across the place value chart.

DP