

Discussion Problems

Step 4: Add Two 4-Digit Numbers 3

Teaching note: In this step, 3-digit numbers have been included to ensure that children have a secure understanding of place value and have the opportunity to address any misconceptions that may arise.

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](#)

Mathematics Year 4: (4C3) [Estimate and use inverse operations to check answers to a calculation](#)

Mathematics Year 4: (4C4) [Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why](#)

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 3

1. George is climbing two mountains as part of a mountain challenge. The total height he needs to climb is between 6,250 metres and 7,950 metres. Which two mountains could he combine?

Mountain	Height (m)
Elbrus (Russia)	5,642
Mont Blanc (France)	4,810
Dom (Switzerland)	4,544
Olympos (Greece)	2,359
Etna (Italy)	3,326
Torreccilla (Spain)	1,918
Polinki (Austria)	1,580
Ben Nevis (Scotland)	1,345
Snowdon (Wales)	1,085
Scafell Pike (England)	978



DP

2. Every day Victoria visits two places. During the week, she visits each place at least once.



School	967 steps
Zoo	1,573 steps
Cinema	3,099 steps
Grocers	2,986 steps
Toy shop	3,148 steps
Pizza parlour	3,029 steps
Park	2,777 steps

Which places could she have visited each day?

- On Monday, she walks less than 3,000 steps.
- On Tuesday, she walks more than 5,000 steps but less than 6,000.
- On Wednesday, she walks a multiple of 5 steps.
- On Thursday, she walks an even number of steps in total.
- On Friday, she walks an odd number of steps in total.

DP

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1. George is climbing two mountains as part of a mountain challenge. The total height he needs to climb is between 6,250 metres and 7,950 metres. Which two mountains could he combine?

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Various answers, for example:

Elbrus and Scafell Pike = 6,620m; Dom and Olympos = 6,903m

DP

2. Every day Victoria visits two places. During the week, she visits each place at least once.



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Zoo	1,573 steps
Cinema	3,099 steps
Grocers	2,986 steps
Toy shop	3,148 steps
Pizza parlour	3,029 steps
Park	2,777 steps

Which places could she have visited each day?

Various answers, for example:

Monday: School & Zoo = 2,540 steps

Tuesday: Toy shop & Park = 5,925 steps

Wednesday: Cinema & Grocers = 6,085 steps

Thursday: School & Park = 3,744 steps

Friday: School & Toy shop = 4,115 steps

- On Monday, she walks less than 3,000 steps.
- On Tuesday, she walks more than 5,000 steps but less than 6,000.
- On Wednesday, she walks a multiple of 5 steps.
- On Thursday, she walks an even number of steps in total.
- On Friday, she walks an odd number of steps in total.

DP