Discussion Problems
Step 11: Add 2-Digit and 3-Digit Numbers

National Curriculum Objectives:

Mathematics Year 3: (3N3) Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
Mathematics Year 3: (3C1) Add and subtract numbers mentally, including three-digit number and tens
Mathematics Year 3: (3C2) Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
Mathematics Year 3: (3C4) Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

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 3 Addition and Subtraction resources.

Did you like this resource? Don't forget to review it on our website.

Add 2-Digit and 3-Digit Numbers

1. Tara is going to the fun fair. Her mum says she can only go on one ride and visit one stall and she only has 500 tokens. Investigate the different combinations of rides and stalls Tara could visit.

Rides

Big Wheel
206 tokens

Rollercoaster
457 tokens

Carousel
265 tokens

Stalls

Hook-a-Duck
95 tokens

Win a Teddy
26 tokens

Candy Floss
52 tokens

DP

2. Max is playing a game. He is matching calculations with their correct answers, but he has lost one of his cards. Which card does not make matching pair?

679 + 84	671 + 56	426 + 47	432	727
343 + 89	714	473	763	

Use the rules below to investigate what the calculation on the missing card could be.

Rules for the first number
It is a 3-digit number.
The ones digit and tens digit are the same.

Rules for the second number
It is a 2-digit number.
The number is greater than 50.

DP

Add 2-Digit and 3-Digit Numbers

1. Tara is going to the fun fair. Her mum says she can only go on one ride and visit one stall and she only has 500 tokens. Investigate the different combinations of rides and stalls Tara could visit.

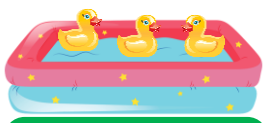
Rides

Big Wheel
206 tokens

Rollercoaster
457 tokens

Carousel
265 tokens

Stalls



Hook-a-Duck
95 tokens

Win a Teddy
26 tokens

Candy Floss
52 tokens

Various answers, for example: The Big Wheel and Hook-a-Duck is 301 tokens; The Rollercoaster and Win a Teddy is 483 tokens.

DP

2. Max is playing a game. He is matching calculations with their correct answers, but he has lost one of his cards. Which card does not make matching pair?

679 + 84	671 + 56	426 + 47	432	727
343 + 89	714	473	763	

714 does not have a matching calculation card.

Use the rules below to investigate what the calculation on the missing card could be.

Rules for the first number
It is a 3-digit number.
The ones digit and tens digit are the same.

Rules for the second number
It is a 2-digit number.
The number is greater than 30.

Various answers, for example: 622 + 92; 633 + 81

DP