## More Addition and Subtraction Unit 1

### **Problem solving and reasoning: Questions**

## Year 2

What number adds to 63 to make 83? What number is subtracted from 83 to give 73?

Write the missing numbers in the sequences:



Complete this grid:

+	21	
37		49
82		94

Write the missing numbers.

32 +	= 43
57 +	= 78
76 –	= 54
	12 = 47

How many times can 21 be subtracted from 100 before you get a number smaller than 21?

# Year 3

Start with 789. What three numbers could you subtract to get a final answer of 500? How would these calculations change if you wanted a final answer of 499?

Add 80 to 263 then subtract 1. How much bigger is your answer than 263?

Use number cards 9, 1, 5 and 7. How many additions of 2-digit near multiples can you create?

<u>Mystery number</u> What ONE near multiple makes this sentence true? 76 - ? = 18 + ?

How many times will you add 19 to 24 to reach 100? What number will you start with if you add 18 repeatedly and reach 100 exactly?

## More Addition and Subtraction Unit 1

### **Problem solving and reasoning: Answers**

## Year 2

What number adds to 63 to make 83? 20 What number is subtracted from 83 to give 73? 10

Write the missing numbers in the sequences: 13 33 53 73 93 113 133 (add 20).

76 56 36 16 (subtract 20).

42 53 64 75 86 97 (add 11).

Watch for children who simply add or subtract 10s without properly examining the sequence to determine the steps.

Complete this grid:

+	21	12
37	58	49
82	103	94

Write the missing numbers.

32 + 11 = 43 57 + 21 = 78 76 - 22 = 54 59 - 12 = 47

If children are making errors check through on a 100-grid.

How many times can 21 be subtracted from 100 before you get a number smaller than 21? 3 times. The steps are: 79, 58, 37, (16).

# Year 3

Start with 789. What three numbers could you subtract to get a final answer of 500? How would these calculations change if you wanted a final answer of 499? e.g. 789 - 200 - 80 - 9 = 500 or 789 - 200 - 70 - 19 To get a final answer of 499 1 more must be subtracted. This can be achieved by 789 - 200 - 80 - 10 or 789 - 200 - 90.

Add 80 to 263 then subtract 1. How much bigger is your answer than 263? 342. The answer is 79 bigger. Some may answer 81, simply adding the 80 and 1.

Use number cards 9, 1, 5 and 7. How many additions of 2-digit 'near multiples' can you create? 10 possibilities. These occur when either the 1 or the 9 digit (or both) are in the 1s place: 79 + 51, 97 + 51, 59 + 71, 95 + 71, 57 + 91, 75 + 91, 17 + 59, 15 + 79, 57 + 19, 75 + 19. NB Children may include answers with the numbers the other way around, e.g. 51 + 79 rather than 79 + 51 or include both.

#### Mystery number

What ONE near multiple makes this sentence true? 29 76 - 29 = 18 + 29 Probably best found by trial and improvement, although children with good understanding may see that 29 is half the difference between 76 and 18.