Reasoning and Problem Solving
Step 9: Add 2-Digit and 1-Digit Numbers

National Curriculum Objectives:

Mathematics Year 2: (2C1) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Mathematics Year 2: (2C2a) Add and subtract numbers mentally, including: a two-digit number and ones
Mathematics Year 2: (2C2b) Add and subtract numbers using concrete objects and pictorial representations, including: a two-digit number and ones

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Use clues to write different calculations when adding 2-digit numbers to any 1-digit number, with some crossing of the 10s boundary. No column format, where number line has starting number.
Expected Use clues to write different calculations when adding 2-digit numbers to any 1-digit number, crossing the 10s boundary. Using column format.
Greater Depth Use clues to write different calculations when adding 2-digit numbers to any 1-digit number, crossing the 10s boundary. Using mostly column format with numbers represented as numerals and words.

Questions 2, 5 and 8 (Reasoning)
Developing Explain if a calculation is correct when adding 2-digit numbers to any 1-digit number, with some crossing of the 10s boundary. No column format, where pictorials are made in Base 10.
Expected Explain if a calculation is correct when adding 2-digit numbers to any 1-digit number, crossing of the 10s boundary. Using column format, where pictorials are made with counters.
Greater Depth Explain if a calculation is correct when adding 2-digit numbers to any 1-digit number, crossing of the 10s boundary. Using column format with numbers represented as numerals and words.

Questions 3, 6 and 9 (Problem Solving)
Developing Check and correct calculations when adding 2-digit numbers to any 1-digit number, with some crossing of the 10s boundary. No column format. Number lines are fully labelled.
Expected Check and correct calculations when adding 2-digit numbers to any 1-digit number, crossing the 10s boundary. No column format. Number lines are not labelled.
Greater Depth Check and correct calculations when adding 2-digit numbers to any 1-digit number, crossing the 10s boundary. Using column format and no number lines.

More Year 2 Addition and Subtraction resources.

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

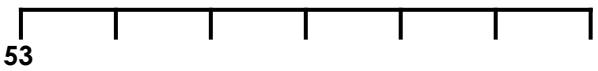
Add 2-Digit and 1-Digit Numbers

Add 2-Digit and 1-Digit Numbers

1a. Use the clues to solve the calculation. How many calculations can you create?

I am adding a 1-digit number. It is greater than 5 but less than 8.

53 + ☐ = ☐

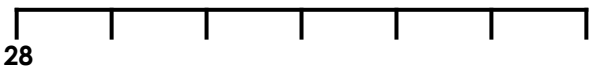


D PS

1b. Use the clues to solve the calculation. How many calculations can you create?

I am adding a 1-digit number. It is greater than 6 but less than 9.

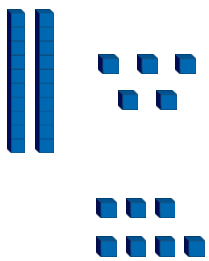
28 + ☐ = ☐



D PS

2a. Steve completes a calculation using Base 10.

25 + 7 = 32

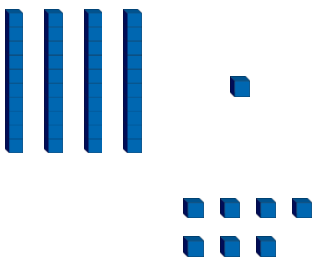


Is he correct? Explain how you know.

D R

2b. Kobi completes a calculation using Base 10.

41 + 8 = 48

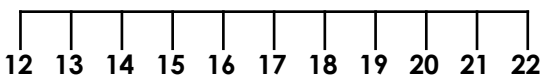


Is he correct? Explain how you know.

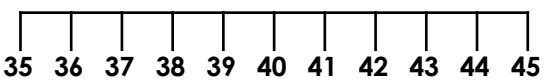
D R

3a. Check the calculations using the number lines. Find and correct any errors.

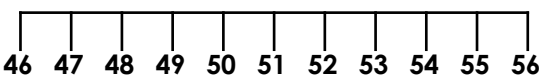
A. 5 + 12 = 17



B. 8 + 35 = 43



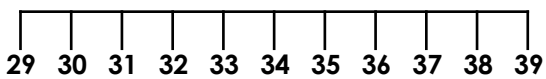
C. 46 + 3 = 48



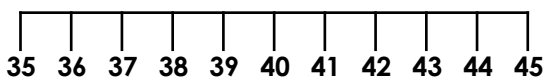
D PS

3b. Check the calculations using the number lines. Find and correct any errors.

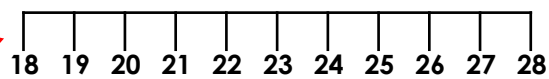
A. 29 + 5 = 35



B. 4 + 35 = 39



C. 18 + 1 = 19



D PS

Add 2-Digit and 1-Digit Numbers

Add 2-Digit and 1-Digit Numbers

4a. Use the clues to solve the calculation. How many calculations can you create?

I am adding a 1-digit number. It is greater than 3 but less than 9.

	5	5
+		

E PS

4b. Use the clues to solve the calculation. How many calculations can you create?

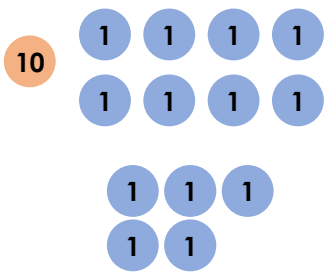
I am adding a 1-digit number. It is greater than 1 but less than 5.

	6	9
+		

E PS

5a. Pat completes a calculation using place value counters.

18 + 6 = 23

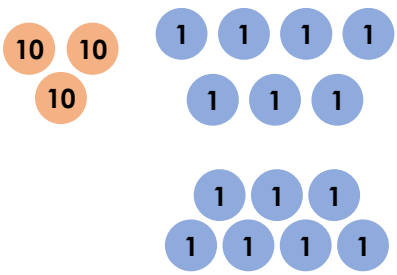


Is he correct? Explain how you know.

E R

5b. Kyle completes a calculation using place value counters.

37 + 7 = 44



Is he correct? Explain how you know.

E R

6a. Check the calculations using the number lines. Find and correct any errors.

A. 26 + 7 = 33

B. 6 + 41 = 45

C. 35 + 8 = 44

E PS

6b. Check the calculations using the number lines. Find and correct any errors.

A. 39 + 6 = 44

B. 9 + 17 = 26

C. 5 + 59 = 54

E PS

Add 2-Digit and 1-Digit Numbers

Add 2-Digit and 1-Digit Numbers

7a. Use the clues to solve the calculation. How many calculations can you create?

I am adding a 1-digit number. It is greater than one but less than eight.

	7	9
+		

GD PS

7b. Use the clues to solve the calculation. How many calculations can you create?

I am adding a 1-digit number. It is greater than two but less than nine.

	5	8
+		

GD PS

8a. Riley completes a calculation using the column method.

twenty-nine + five = thirty-four

	2	9
+		5
	3	4
	1	

Is he correct? Explain how you know.

GD R

8b. Sosa completes a calculation using the column method.

seven + fifty-seven = twenty-seven

	7	
+	5	7
	2	7

Is he correct? Explain how you know.

GD R

9a. Check the calculations. Find and correct any errors.

A. 49 + 6 = 55

	4	9
+		6

B. 5 + 87 = 92

	8	7
+		5

C. 67 + 3 = 71

	6	7
+		3

GD PS

9b. Check the calculations. Find and correct any errors.

A. 9 + 23 = 31

	2	3
+		9

B. 56 + 8 = 64

	5	6
+		8

C. 2 + 49 = 50

	4	9
+		2

GD PS

Reasoning and Problem Solving
Add 2-Digit and 1-Digit Numbers

Developing

1a. Various answers, for example:
53 + 6 = 59; 53 + 7 = 60

2a. He is correct because 25 + 7 = 32, as shown by the Base 10.

3a. A. correct; B. correct; C. 46 + 3 = 49

Expected

4a. Various answers, for example:
55 + 4 = 59; 55 + 5 = 60; 55 + 6 = 61; 55 + 7 = 62; 55 + 8 = 63

5a. He is incorrect because he has added 5 ones. 18 + 6 = 24

6a. A. correct; B. 6 + 41 = 47; C. 35 + 8 = 43

Greater Depth

7a. Various answers, for example:
79 + 2 = 81; 79 + 3 = 82; 79 + 4 = 83; 79 + 5 = 84; 79 + 6 = 85; 79 + 7 = 86

8a. He is correct because 29 + 5 = 34, as shown by the column addition.

9a. A. correct; B. correct; C. 67 + 3 = 70

Reasoning and Problem Solving
Add 2-Digit and 1-Digit Numbers

Developing

1b. Various answers, for example:
28 + 7 = 35; 28 + 8 = 36

2b. He is incorrect because he has added 7 ones. 41 + 8 = 49, as shown by the Base 10.

3b. A. 29 + 5 = 34; B. correct; C. correct

Expected

4b. Various answers, for example:
69 + 2 = 71; 69 + 3 = 72; 69 + 4 = 73

5b. He is correct because 37 + 7 = 44, as shown by the place value counters.

6b. A. 39 + 6 = 45; B. correct; C. 5 + 59 = 64

Greater Depth

7b. Various answers, for example:
58 + 3 = 61; 58 + 4 = 62; 58 + 5 = 63; 58 + 6 = 64; 58 + 7 = 65; 58 + 8 = 66

8b. He is incorrect because he has put 7 ones in the tens column. 57 + 7 = 64.

9b. A. 9 + 23 = 32; B. correct; C. 2 + 49 = 51