## Reasoning and Problem Solving Step 14: Subtract with 2-Digits 2

## National Curriculum Objectives:

Mathematics Year 2: (2C2b) Add and subtract numbers using concrete objects and pictorial representations, including: two two-digit numbers
Mathematics Year 2: (2C4) Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods

## Differentiation:

## Questions 1, 4 and 7 (Reasoning)

Developing Identify the mistake in a subtraction with two 2-digit numbers that involves one exchange. All 2-digit numbers are presented using Base 10 within a place value chart.
Expected Identify the mistake in a subtraction with two 2-digit numbers that involves one exchange. Includes place value counters within a place value chart.
Greater Depth Identify the mistake in a subtraction with two 2-digit numbers that involves one exchange. Includes questions presented in column format. Numerals and words used.

Questions 2, 5 and 8 (Problem Solving)
Developing Arrange the given digit cards to create a 2 -digit subtraction that includes one exchange. All digit cards are presented using Base 10. Calculation presented in a place value chart.
Expected Arrange the given digit cards to create a 2 -digit subtraction that includes one exchange. Calculation presented in column format.
Greater Depth Arrange the given digit cards to create a 2-digit subtraction that includes one exchange. Calculation presented in a linear format.

Questions 3, 6 and 9 (Reasoning)
Developing Explain which answer to a subtraction with two 2-digit numbers is correct. Each calculation involves one exchange. All numbers are presented using Base 10 within a place value chart.
Expected Explain which answer to a subtraction with two 2-digit numbers is correct. Each calculation involves one exchange. Includes place value counters within a place value chart. Greater Depth Explain which answer to a subtraction with two 2-digit numbers is correct. Each calculation involves one exchange. Questions presented in a linear format. Numerals and words used.

## More Year 2 Addition and Subtraction resources.

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

1a．Adam has calculated 85－28．His calculation is below．

| $T$ | 0 |
| :---: | :---: |
| \｜\｜\｜｜\｜\｜ |  |
| \｜ | －－－－ |

## 55

What mistake has he made？

2a．Using the digit cards below，create a 2－digit subtraction that includes an exchange．


3a．Phil and Jess are solving 95－27．



Who is correct？Explain how you know．
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1b．Liz has calculated 73－47．Her calculation is below．


What mistake has she made？ 안

2b．Using the digit cards below，create a 2－digit subtraction that includes an exchange．


3b．Amy and Tom are solving 53－36．


Who is correct？Explain how you know．园

4a. Aaron has calculated $65-19$. His calculation is below.


47
What mistake has he made?

5a. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


6a. Gary and Molly are solving 75-28.
 E

4b. Jill has calculated 42-26. Her calculation is below.


What mistake has she made?

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5b. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


6b. Sara and Fred are solving 61-39.


Who is correct? Explain how you know. K

| 7a. John has calculated fifty-th |
| :--- |
| subtract twenty-five. His calcul |
| below. |
| $\qquad$ 4 1 <br>   2 |

What mistake has he made?

8a. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


9a. Matt and Pip are solving:
ninety-six $\boldsymbol{-}$ thirty-nine $=$


Matt


The answer is 67.
Who is correct? Explain how you know.

7b. Sam has calculated seventy subtract forty-eight. Her calculation is below.

|  | 7 | 0 |
| :---: | :---: | :---: |
| - | 4 | 8 |
|  | 3 | 2 |

What mistake has she made?

8b. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


9b. Ted and Aisha are solving:
eighty-three - fifty-seven $=$


The answer is 25.

The answer is 26 .
Aisha Who is correct? Explain how you know. Wer

## Reasoning and Problem Solving

 Subtract with 2-Digits 2
## Developing

1a. Adam has correctly exchanged 1 ten for 10 ones but he hasn't included the remaining ones left over from the exchange in his answer. The answer should be 57 , not 55 .
2a. 43 - $25=18$
3a. Jess is correct because she has accurately counted the remaining tens and ones. Phil has miscounted the tens.

## Expected

4a. Aaron has correctly exchanged one ten for ten ones but he has incorrectly counted the remaining ones. The answer should be 46, not 47.
$5 a$. Various answers, for example:
$82-35=47,35-28=7$ and $52-38=14$
6a. Gary is correct because he accurately exchanged 1 ten for ten ones, unlike Molly.

## Greater Depth

7a. John has incorrectly subtracted 5 from 13 in the ones column. The answer should be 28, not 27.
8a. Various possible answers, for example: $93-27=66,92-37=55$ and $72-39=33$
9a. Matt is correct because he has correctly exchanged 1 ten for 10 ones whereas Pip has not so she too many tens in her answer.

Reasoning and Problem Solving Subtract with 2-Digits 2

## Developing

1b. Liz has incorrectly exchanged 1 ten for 11 ones so her answer is inaccurate. The answer should be 26 , not 27 .
2b. $66-39=27$
3b. Tom is correct because he has accurately exchanged 1 ten for tens ones to subtract 53 from 36 whereas Amy has incorrectly swapped the ones around and subtracted 33 from 56.

## Expected

4b. Jill has incorrectly exchanged 1 ten for 9 ones so she is 1 one short. Her answer should be 16, not 15 .
5b. Various answers, for example:
$94-76=18,94-67=27$ and $74-69=5$
6b. Sara is correct because she has accurately counted the remaining ones whereas Fred has miscounted.

## Greater Depth

7b. Sam has incorrectly subtracted 8 from 0 in the ones column. Sam should have exchanged 1 ten for 10 ones as 8 cannot be subtracted from 0 . The answer should be 22, not 32.
8b. Various possible answers, for example: $81-65=16,85-16=69$ and $56-18=38$
9b. Aisha is correct as she has correctly exchanged 1 ten for 10 ones so she has correctly subtracted 7 ones from 13 ones to leave her with 2 tens and 6 ones -26 .

