Reasoning and Problem Solving Step 6: Subtract Two 4-Digit Numbers 2

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

Differentiation:

Questions 1, 4 and 7 (Problem Solving)

Developing Complete the calculation by subtracting two 4-digit numbers with one exchange. Calculations presented in place value grid. No use of zero as a place holder. Expected Complete the calculation by subtracting two 4-digit numbers with one exchange. Calculations presented in column format. Some use of zero as a place holder. Greater Depth Complete the calculation by subtracting two 4-digit numbers with one exchange. Calculations presented in a linear format. Use of zero as a place holder.

Questions 2, 5 and 8 (Problem Solving)

Developing Investigate ways to complete a subtraction calculation with one exchange. Calculations presented in place value grid. No use of zero as a place holder. Expected Investigate ways to complete a subtraction calculation with one exchange. Calculations presented in column format. Some use of zero as a place holder. Greater Depth Investigate ways to complete a subtraction calculation with one exchange. Calculations presented as a part whole model. Use of zero as a place holder.

Questions 3, 6 and 9 (Reasoning)

Developing Identify and explain where an exchange must take place when subtracting two 4-digit numbers with one exchange. Calculations presented in a place value grid. No use of zero as a place holder.

Expected Identify and explain where an exchange must take place when subtracting two 4-digit numbers with one exchange. Calculations presented in column format. Some use of zero as a place holder.

Greater Depth Identify and explain where an exchange must take place when subtracting two 4-digit numbers with one exchange. Calculations presented in a linear format. Use of zero as a place holder.

More Year 4 Addition and Subtraction resources.

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



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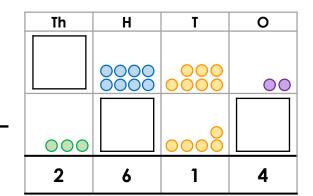
Subtract Two 4-Digit Numbers 2

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1b. Draw counters in the empty boxes to

complete the calculation below.

1a. Draw counters in the empty boxes to complete the calculation below.



Hint: There is one exchange.

Th Н Τ 0 0000 0000 000 000

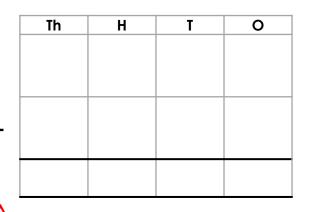
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Hint: There is one exchange.

6



2a. Draw counters in each column of the place value grid to create a subtraction calculation with one exchange.



2b. Draw counters in each column of the place value grid to create a subtraction calculation with one exchange.

3

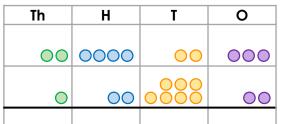
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3a. Class 4 are given the following calculation. Leon says,

> We need to exchange one of the tens for ten ones.

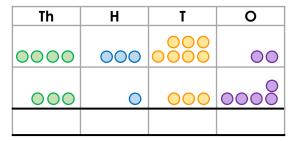


Is he correct? Explain your answer.



3b. Class 4 are given the following calculation. Sara says,

> We need to exchange one of the hundreds for ten tens.



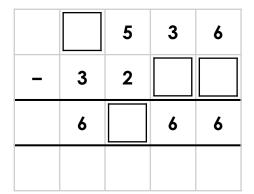
Is she correct? Explain your answer.



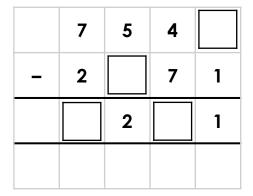


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4a. Complete the calculation below.

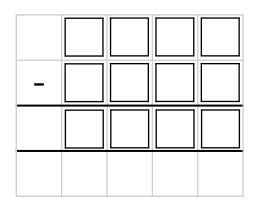


4b. Complete the calculation below.

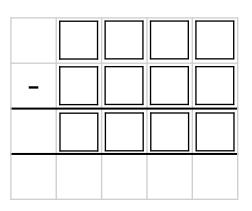




5a. Use digits from 0 - 9 to create a subtraction calculation with two 4-digit numbers and one exchange.



5b. Use digits from 2 - 8 to create a subtraction calculation with two 4-digit numbers and one exchange.



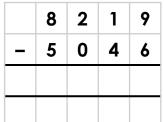
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6a. Class 4 are given the following calculation. Zainab says,

We need to exchange one of the tens for ten

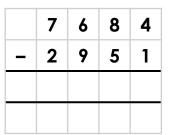




Is she correct? Explain your answer.

6b. Class 4 are given the following calculation. Adam says,

We need to exchange one of the hundreds for ten tens.



Is he correct? Explain your answer.



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7a. Complete the calculations below.

7b. Complete the calculations below.

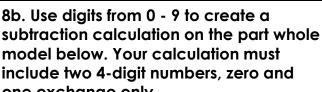
|4| |8 = 5,122 | A. | |3| |7 - 6| |5|

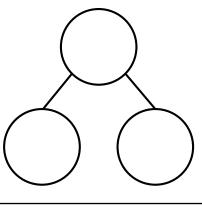
0 - 2 3 = 920

0 9 = 4,035 B. 5 7



8a. Use digits from 0 - 5 to create a subtraction calculation on the part whole model below. Your calculation must include two 4-digit numbers, zero and one exchange only.





one exchange only.



9a. Class 4 are given the following calculation.

7,562 - 6,802

Jason says,

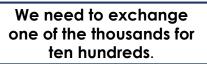
We need to exchange one of the hundreds for ten tens.



9b. Class 4 are given the following calculation.

9,679 - 5,095

Mandy says,





Is he correct? Explain your answer.



Is she correct? Explain your answer.



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Developing

1 ~				
1a.	Th	Н	T	0
	••••	0000	0000	1 0
-	000	••	0000	••••
	2	6	1	4

2a. Various answers, for example: 7,635 – 6,217 = 1,418; 4,763 – 1,481 = 3,282; 5,562 – 3,941 = 1,621 etc.

3a. Leon is incorrect. They need to exchange one of the hundreds for ten tens.

Expected

4a.

	9	45	¹ 3	6
_	3	2	7	0
	6	2	6	6

5a. Various answers, for example: 7,654 – 2,345 = 5,309; 6,523 – 3,602 = 2,921; 8,349 – 5,721 = 2,628 etc.

6a. Zainab is incorrect. They need to exchange one of the hundreds for ten tens.

Greater Depth

7a. A. 7,540 - 2,418 = 5,122

B. 3,850 - 2,930 = 920

8a. Various answers, for example: 4,053 – 3,025 = 1,028; 5,234 – 2,503 = 2,731; 2,543 –

2,450 = 93 etc.

9a. Jason is incorrect. They need to exchange one of the thousands for 10 hundreds.

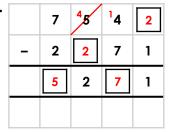
Developing

2b. Various answers, for example: 3,286 – 2,169 = 1,117; 8,934 – 5,672 = 3,262; 9,478 – 7,534 = 1,944 etc.

3b. Sara is incorrect. They need to exchange one of the tens for ten ones.

Expected

4b.



5b. Various answers, for example; 4,836 – 2,654 = 2,182; 8,565 – 3,742 = 4,823; 6,574 – 2,853 = 3,721 etc.

6b. Adam is incorrect. They need to exchange one of the thousands for ten hundreds.

Greater Depth

7b. A. 7,387 – 6,950 = 437

B. 5,074 - 1,039 = 4,035

8b. Various answers, for example: 9,734 –

2,608 = 7,126; 8,490 - 3,287 = 5,203; 9,873 -

9,806 = 67 etc.

9b. Mandy is incorrect. They need to exchange one of the hundreds for tentens.

