


Subtraction Prior Learning Assessment Question 4:

LO: I can subtract mentally by counting on to find the difference.

NC: NAS 1 add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

Assessment Question :

Prior Learning:

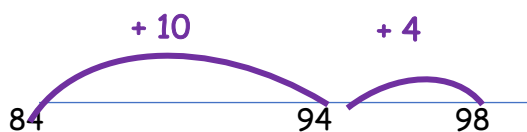
 Addition + Subtraction	Question 4: I can calculate the answer to subtraction sums by counting on to find the difference.	I feel	
Calculate the answer to each sum.			
a) $98 - 84 =$	<input type="text"/>	c) $204 - 187 =$	<input type="text"/>
b) $178 - 156 =$	<input type="text"/>	d) $510 - 405 =$	<input type="text"/>

Teacher Input Ideas: Starter: Counting on and back from any number in ones, tens and hundreds.

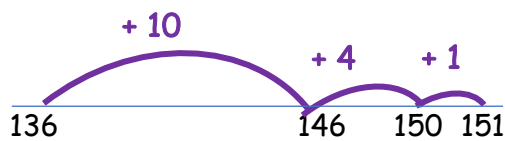
Recap with the children mental subtraction methods such as counting back. For example: $278 - 20$ and $509 - 100$, encouraging the children to apply their knowledge of place value. Ask the children to model how they worked out the answer to question 4 a and b of the prior learning assessment task. Explore the variety of methods used by the children looking at if the children chose to use mental or written methods. Compare the different methods and then introduce the idea that the amounts are close in value therefore finding the difference through counting on is an efficient method to use, rather than counting back for example: $98 - 84$.

Model to the children the jumps taking place in your head when counting on. You may want to model this using a blank number line so that the children can visualise the jumps when counting on and begin to understand how these can be chunked rather than counting on in ones.

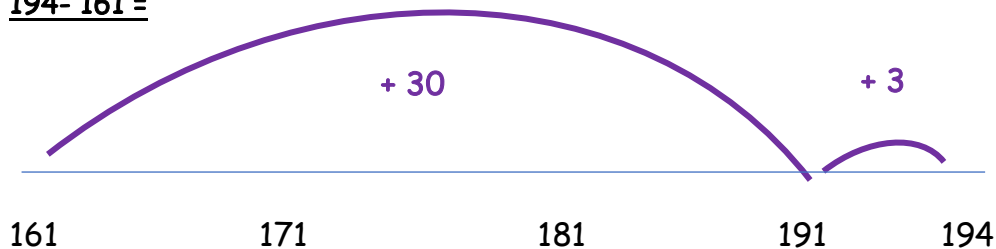
$98 - 84 =$



151- 136 =



194- 161 =



Encourage the more confident children to notice that they can make larger jumps (for example 161 to $191 = 30$). For any children finding this difficult, provide a hundred square so that they can count on from the lower amount to the larger amount to find the difference.

Practice Activities

Purple Practice: Most suited for children who show little understanding of counting on to find the difference in Question 4 of the prior learning assessment.

The purple activity provides pre-drawn number lines to support the children with finding the difference by counting on in chunks. The number lines are there to visually support the children with counting on in chunks and the activity encourages the children to record down their thinking to find the answer. Towards the end of the activity, less support is provided on the task sheet.

Green Practice: Most suited for children who show some understanding of counting on in Question 4 and are ready to count on in larger chunks to find the difference.

The green activity provides pre-drawn number lines to support the children with finding the difference by counting on in chunks. The number lines are there to visually support the children with counting on in chunks and the activity encourages the children to record down their thinking to find the answer. Towards the end of the activity, the children are required to count on in larger chunks and less support is provided on the task sheet.

Yellow Practice : Most suited for children who demonstrate understanding in Question 4 of the prior learning assessment.

The children are presented with subtraction sums and are required to count on to find the difference. The start of the task sheet provides some support with the use of number lines to work out the difference. As the sheet progresses, the children are to draw their own number lines so that they suggest their own jumps for counting on.

Mastery: fluency For this activity the children are provided with a variety of subtraction sums on blocks. The children are to select a block and then decide how they are going to work out the answer. Can they subtract ten, hundred and one mentally by counting back? Which sums should they count on to find the difference? Which sums can be partitioned easily? The children should apply the methods they have been taught over the past 4 sessions and decide which methods are best to use for different sums. Some children may need support in selecting the most efficient methods.

Answers

Purple:

- | | | |
|-------|-------|-------|
| 1) 22 | 2) 25 | 3) 8 |
| 4) 18 | 5) 32 | 6) 17 |

Green:

- | | | |
|-------|-------|-------|
| 1) 28 | 2) 14 | 3) 18 |
| 4) 35 | 5) 18 | |

Yellow:

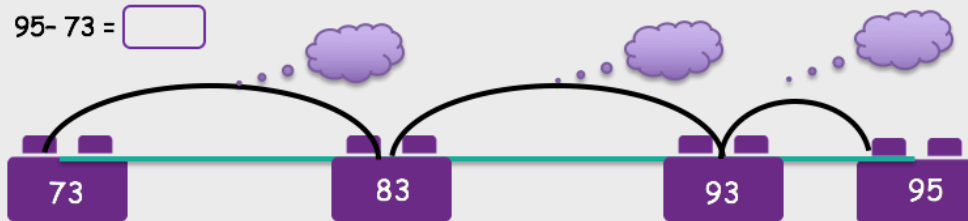
- | | | |
|-------|--------|-------|
| 1) 22 | 2) 7 | 3) 55 |
| 4) 29 | 5) 112 | |

Mastery:

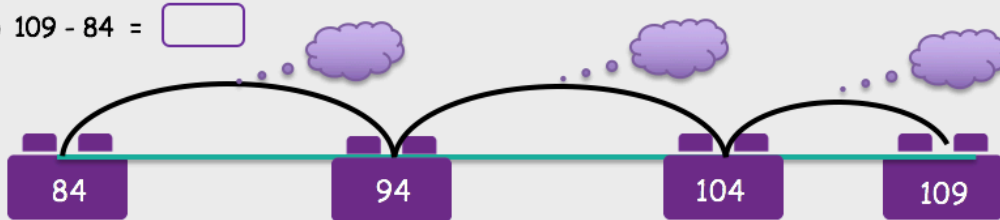
- | | | |
|-----|-----|-----|
| 41 | 5 | 156 |
| 21 | 154 | 4 |
| 152 | 18 | 322 |
| 13 | 234 | 23 |

Work out the answer to each sum. Record your working out in the thought bubbles.

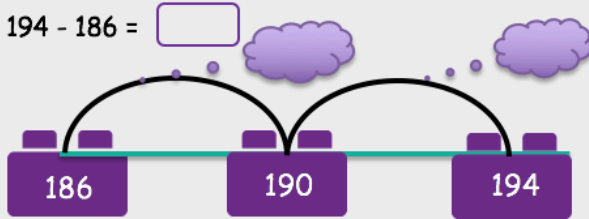
1) $95 - 73 =$



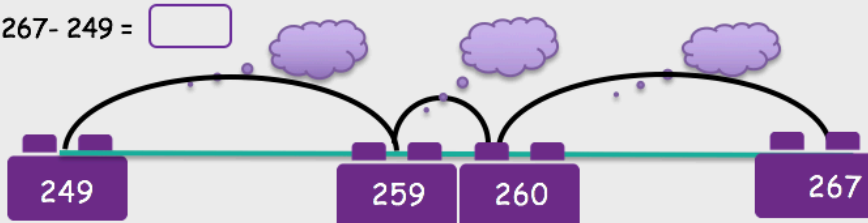
2) $109 - 84 =$



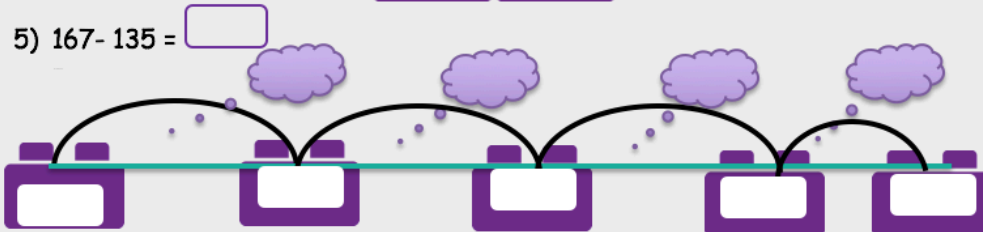
3) $194 - 186 =$



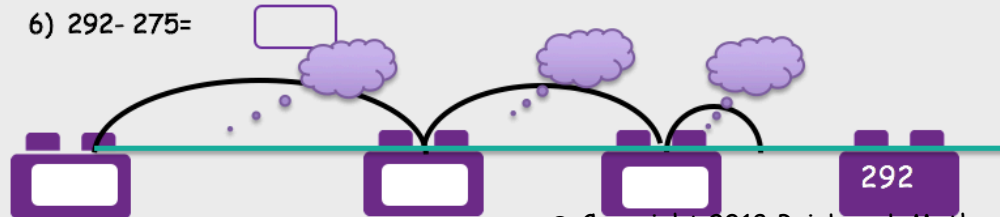
4) $267 - 249 =$



5) $167 - 135 =$

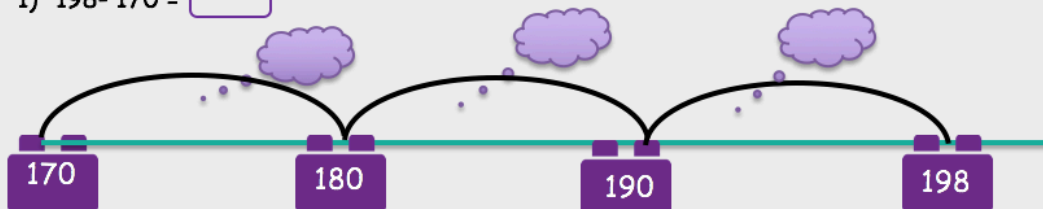


6) $292 - 275 =$

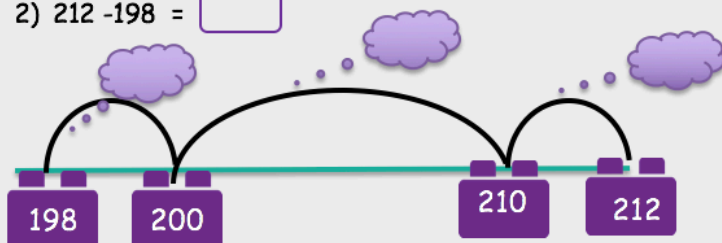


Work out the answer to each sum. Record your working out in the thought bubbles.

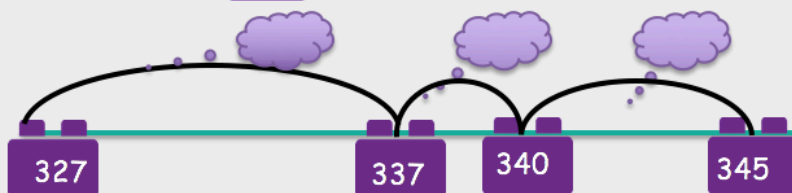
1) $198 - 170 =$



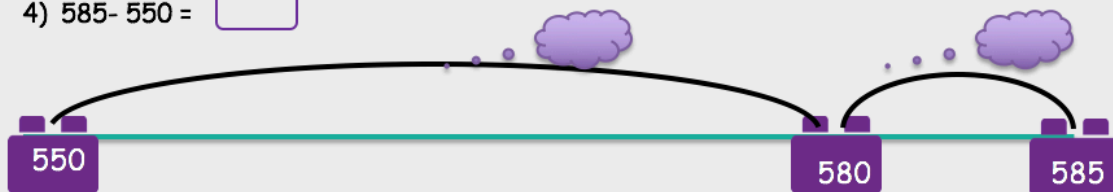
2) $212 - 198 =$



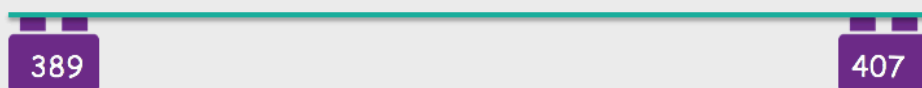
3) $345 - 327 =$



4) $585 - 550 =$

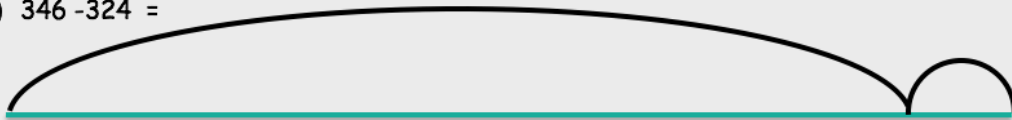


5) $407 - 389 =$



Look at each sum. Use a number line to work out the difference.

1) $346 - 324 =$



2) $202 - 195 =$



3) $500 - 445 =$

4) $524 - 495 =$

5) $672 - 560 =$

On each block is a subtraction sum. Pick a block at a time to work out the answer to the sum. Decide how you are going to work it out and which method you are going to use.

$52 - 11$

$89 - 84$

$166 - 10$

$93 - 72$

$254 - 100$

$123 - 119$

$167 - 15$

$228 - 210$

$342 - 20$

$208 - 195$

$354 - 120$

$352 - 329$