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 mentally, including:

- a three-digit number and ones
- a three-digit number and tens
- a three-diait number and hundreds

Assessment Question :

Prior Learning

Number + Place Value	**Question 4:** I can subtract 2 numbers by counting on	I feel

a) 89 - 72 = ☐

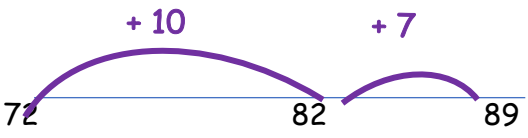
b) 151 – 136 = ☐

Teacher Input Ideas:

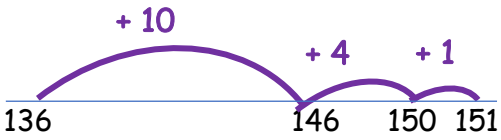
Recap with the children mental subtraction methods such as counting back. For example: 232- 20 and 387- 100, encouraging the children to apply their knowledge of place value. Ask the children to model how they worked out the answer to question 4 a and b of the prior learning assessment task. Discuss with the children that the amounts are close in value therefore finding the difference through counting on is an efficient method to use, rather than counting back 72 from 89.

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 that are taking place when counting on and begin to understand how these can be chunked rather than counting on in ones.

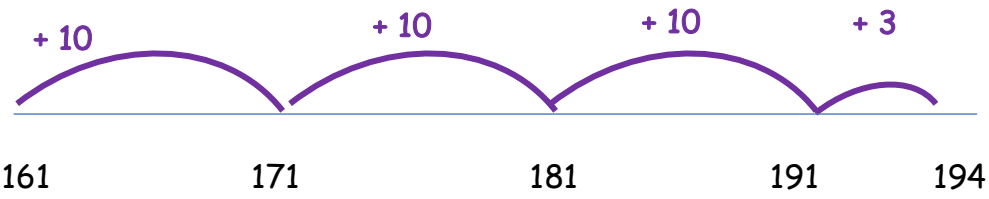
89 - 72 =



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 them with 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 provide on the task sheet.

Green Practice: Most suited for children who show some understanding of counting on in Question 4 however will benefit from securing counting on in chunks to find to difference.

This activity is similar to the purple activity however the children are encouraged to cross more boundaries of ten when counting on and to count on in larger chunks.

Yellow Practice: Most suited for children who demonstrate understanding of counting on to find the difference and will benefit from less structured support.

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) 24	2) 22	3) 13
4) 6	5)16	6)21

Green:

1) 32	2) 14	3) 28
4) 46	5) 22	

Yellow:

1) 32	2) 14	3)25
4) 27	5) 51	

Mastery:

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

BRICKWORK Mathematics

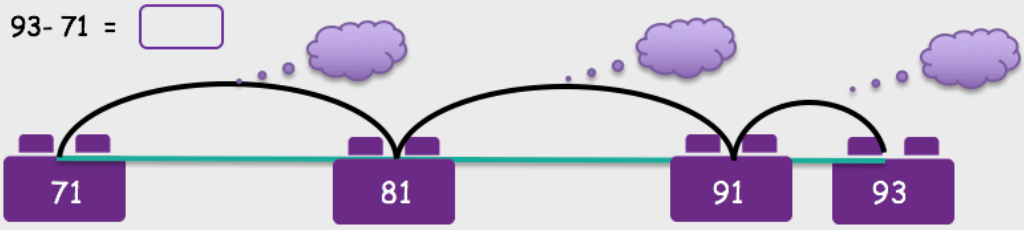
Purple Activity

LO: I can mentally count on to find the difference for subtraction sums.

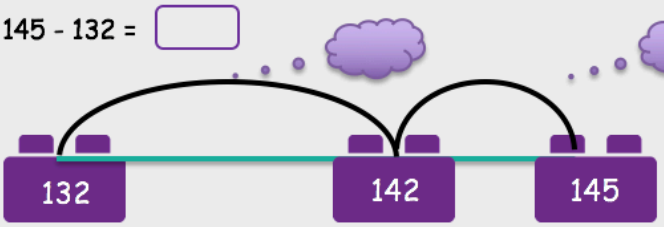
Work out the answer to each sum. Record your working out in the thought bubbles.

1) 87- 63 = ☐

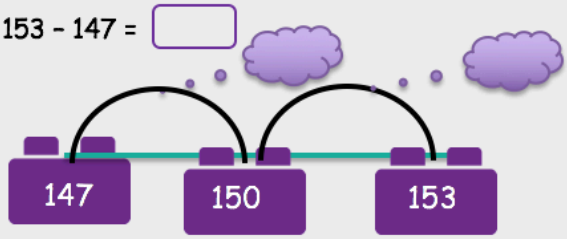
2) 93- 71 = ☐



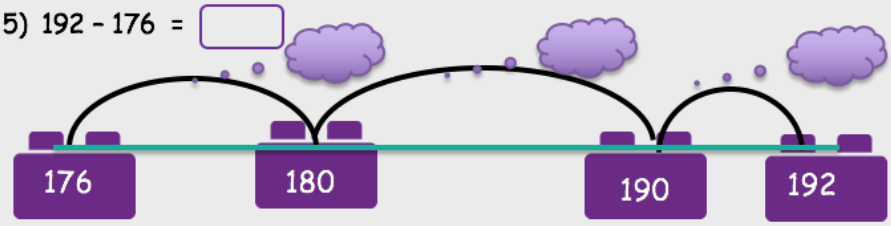
3) 145 - 132 = ☐



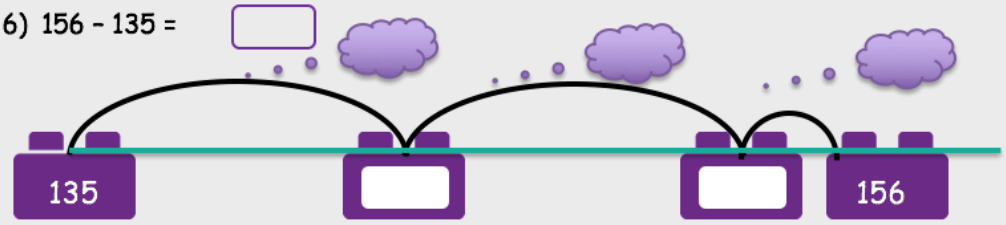
4) 153 - 147 = ☐



5) 192 - 176 = ☐



6) 156 - 135 = ☐



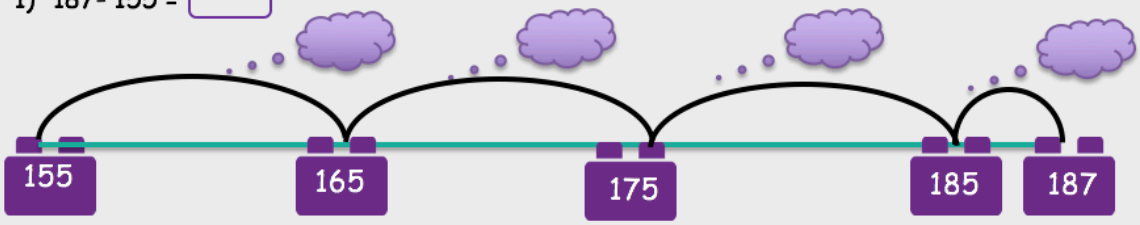
BRICKWORK Mathematics

Green Activity

LO: I can mentally count on to find the difference for subtraction sums.

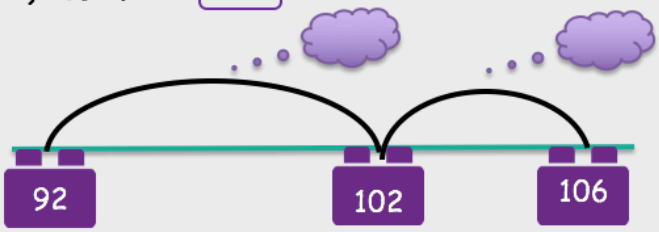
Work out the answer to each sum. Record your working out in the thought bubbles.

1) 187 - 155 = ☐

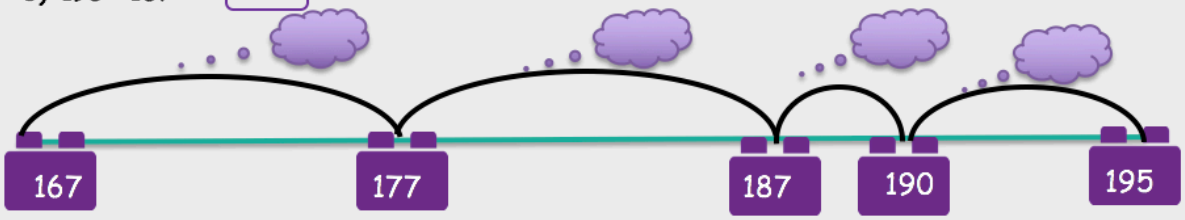


2) 106 - 92 = ☐

187

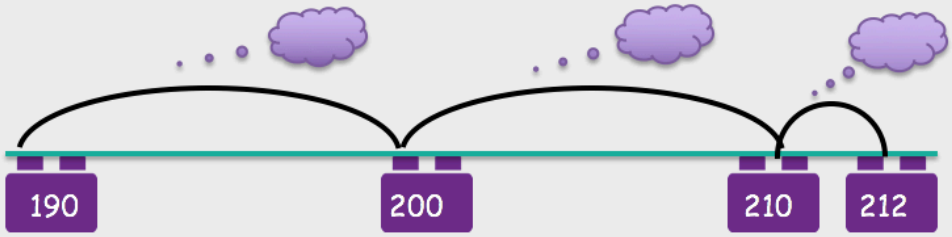


3) 195 - 167 = ☐



4) 256 - 210 = ☐

5) 212 - 190 = ☐

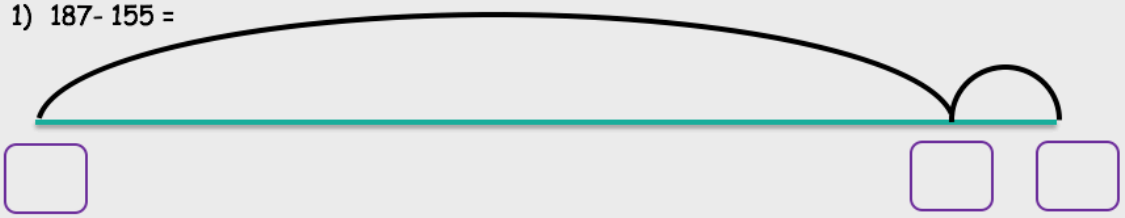


Yellow Activity

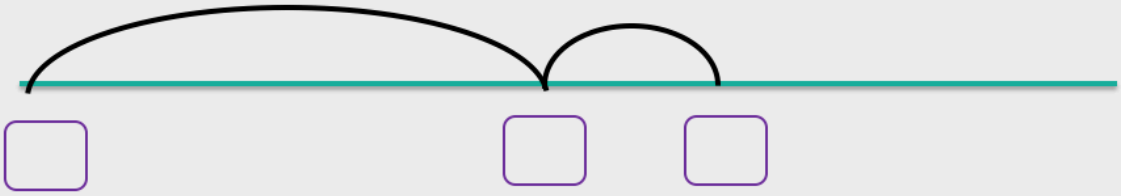
LO: I can mentally count on to find the difference for subtraction sums.

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

1) 187- 155 =



2) 106 - 92



3) 300- 275 =

4) 254- 227 =

5) 285 - 234 =

BRICKWORK Mathematics

Mastery

Fluency

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