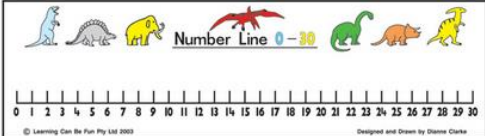
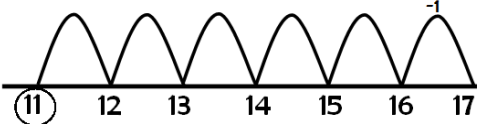

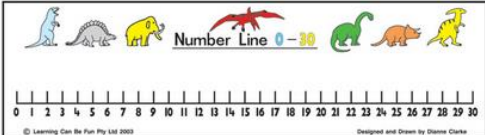
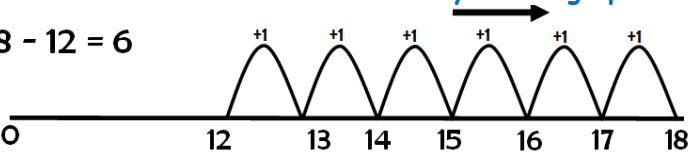




Red= NC 2014

Blue= St Annes

Year	What will subtraction look like?
R	<p>Teacher modelling, pictorial representation</p> <p>Practical demonstrations of subtraction relating to 'take away'.</p> <p>Vocabulary of subtraction in practical activities.</p> <p>Counting out - a child finding 9-3 holds up 9 fingers and folds down three.</p> <p>Counting back from- a child finding 9-3 counts back three numbers from 9; 'eight, seven, six'.</p> <p>Use of number line to support subtraction as taking away.</p>
1	<p>National Curriculum 2014</p> <ul style="list-style-type: none"> ➤ read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs ➤ represent and use number bonds and related subtraction facts within 20 ➤ add and subtract one-digit and two-digit numbers to 20, including zero ➤ solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = _ - 9$. <p><u>Vocabulary:-</u></p> <ul style="list-style-type: none"> • Subtraction • Takeaway (counting back) • What is ... less than ... ? • Finding the difference (counting up) • How many more is ... than...? <p>Use a number line to count back ("takeaway") when solving subtraction problems.</p>  <p>$17 - 6 = 18$</p>  <p>Pupils understand subtraction as finding the difference (counting up method on number line).</p> <p>Difference introduced practically and then on a number lines</p> <p>$12 - 5 =$</p>   <p>When pupils have understood counting back using their own number line, they can also use a number line to find the difference by counting up.</p> <p>$18 - 12 = 6$</p> 

2

National Curriculum 2014

- 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
 - recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two-digit number and ones
 - a two-digit number and tens
 - two two-digit numbers
 - adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

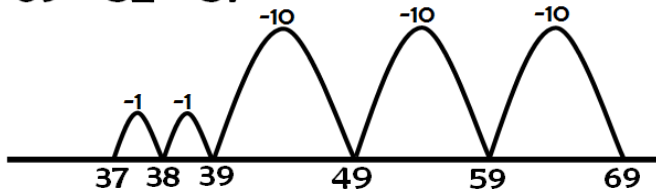
Vocabulary:-

- Subtraction
- Takeaway (counting back)
- What is ... less than ... ?
- Finding the difference (counting up)
- How many more is ... than...?
- Subtraction is not commutative

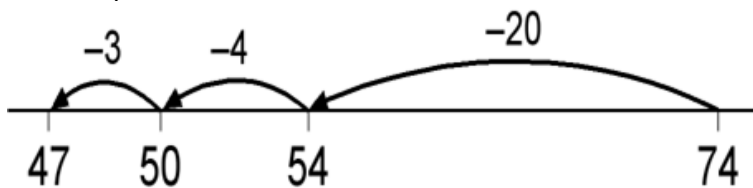
Use a number line to count back ("takeaway") when solving subtraction problems.

Subtracting 10s and 1s separately

$$69 - 32 = 37$$

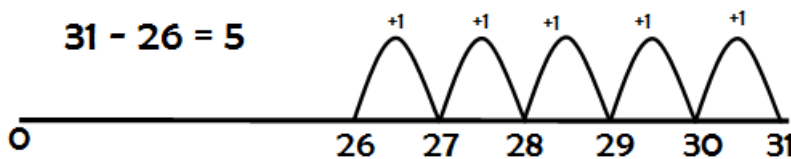


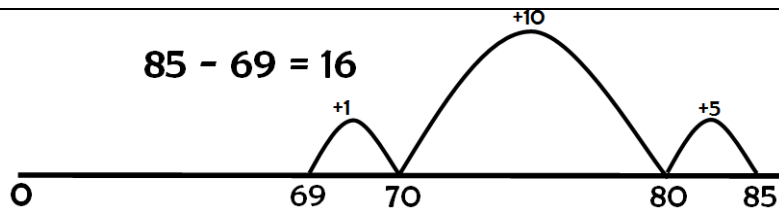
Subtracting multiples of 10 and single digit numbers in one jump (bridging through 10/100 where necessary)



Use a number line to "find the difference" (counting up method on number line).

$$31 - 26 = 5$$





3

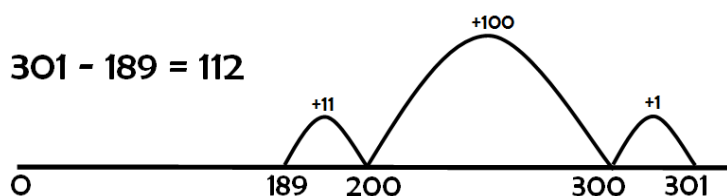
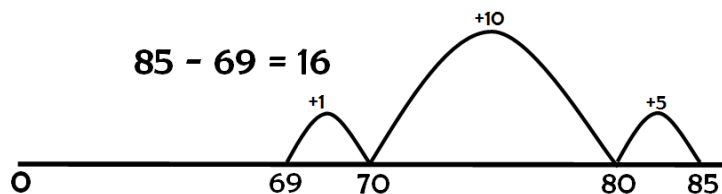
National Curriculum 2014

- solve problems, including missing number problems, using number facts, place value, and more complex subtraction.
- subtract numbers mentally, including:
 - a three-digit number and ones
 - a three-digit number and tens
 - a three-digit number and hundreds
- subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers

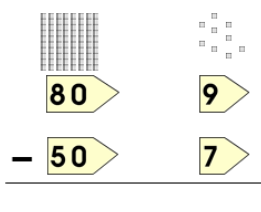
Vocabulary:-

- Subtraction
- Takeaway (counting back)
- What is ... less than ... ?
- Finding the difference (counting up)
- How many more is ... than...?
- Subtraction is not commutative
- Expanded written method for subtraction
- Inverse

Solve subtraction problems using the counting up method on a number line (finding the difference)



Use formal written expanded method for subtraction. Base ten apparatus us used to support when introduced.



$$\begin{array}{r}
 300 \\
 \cancel{400} - 150 \quad 7 \\
 - 200 \quad 60 \quad 5 \\
 \hline
 100 \quad 90 \quad 2
 \end{array}$$

Counting back is still used when subtracting a small number (e.g. $234 - 12$) and where appropriate when calculating mentally.

4

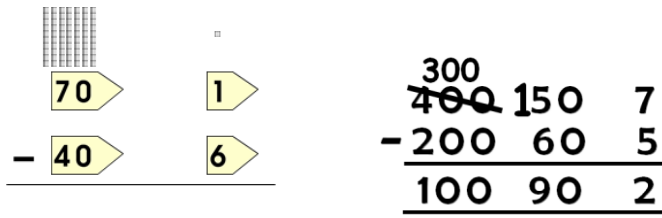
National Curriculum 2014

- subtract numbers with up to 4 digits using the formal written method of columnar subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

Vocabulary:-

- Subtraction
- Takeaway (counting back)
- What is ... less than ... ?
- Finding the difference (counting up)
- How many more is ... than...?
- Subtraction is not commutative
- Exchanging
- Expanded written method for subtraction
- Inverse

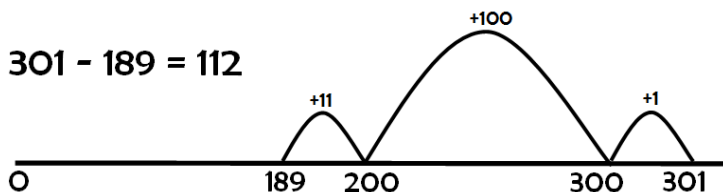
Use formal written expanded method for subtraction. Base ten apparatus is used to support when introduced, including exchanging.



Use formal written expanded method for subtraction, when expanded method for subtraction has been mastered.

$$\begin{array}{r} 245 \\ - 127 \\ \hline 118 \end{array}$$

Solve subtraction problems using the counting up method on a number line.



5

National Curriculum 2014

- subtract whole numbers with more than 4 digits, including using formal written method (columnar subtraction)
- subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
-

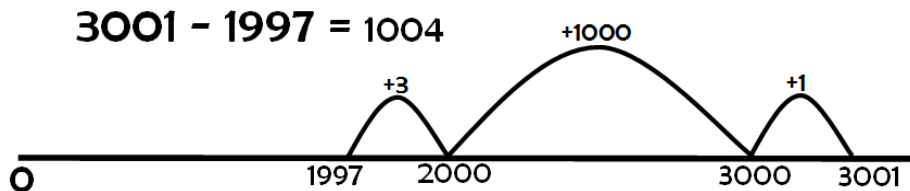
Vocabulary:-

- Subtraction
- Compact written method for subtraction
- Finding the difference, how many more, how many fewer

Use compact formal written method for subtraction, including for decimals (Some children will still use expanded written (lower ability)).

$$\begin{array}{r} \overset{1}{\cancel{2}} \overset{13}{\cancel{4}} \overset{1}{\cancel{3}} 5 \\ - \quad 783 \\ \hline 1652 \end{array}$$

Solve subtraction problems by 'finding the difference' using the counting up method.



6

National Curriculum 2014

- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use negative numbers in context, and calculate intervals across zero

Vocabulary:-

- Subtraction
- Compact written method for subtraction
- Finding the difference, how many more, how many fewer

Use compact formal written method for subtraction, including decimals.

$$\begin{array}{r} \overset{1}{\cancel{2}} \overset{13}{\cancel{4}} \overset{1}{\cancel{3}} 5 \\ - \quad 783 \\ \hline 1652 \end{array}$$

$$\begin{array}{r} \overset{8}{\cancel{9}} \overset{1}{\cancel{1}} 5 \\ - \quad \overset{1}{\cancel{5}} \overset{1}{\cancel{4}} 2 \\ \hline \overset{1}{\cancel{3}} \overset{1}{\cancel{7}} 3 \end{array}$$

$$\begin{array}{r} \overset{3}{\cancel{4}} \overset{1}{\cancel{1}} \overset{6}{\cancel{7}} \overset{11}{\cancel{2}} \overset{10}{\cancel{0}} \\ - \quad \quad \quad 3 \quad 4 \quad . \quad 7 \quad 1 \\ \hline 3 \quad 8 \quad 2 \quad . \quad 4 \quad 9 \end{array}$$

Use a number line when solving problems involving negative numbers.

E.g. The difference between -13 and 12 is 25.

