Calculation Policy : Subtraction

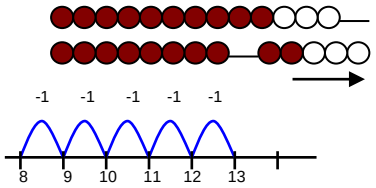
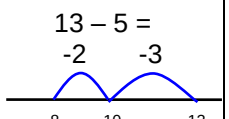
<table>
<tr><th></th><th>Age related expectations</th><th colspan="3">Methods</th><th>Rapid recall</th><th>Mental calculation</th></tr>
<tr><td>EYFS</td><td>Find 1 less than a number (up to 10)

Subtraction as ‘taking away’ from a group

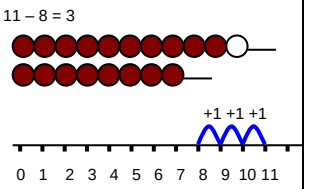
1 digit – 1 digit</td><td>Practical or recorded using ICT (e.g. digital photos / pictures on IWB)</td><td>Pictures / Objects
I have five cakes. I eat two of them. How many do I have left?

Might be recorded as:
5 – 2 = 3</td><td>Symbols
Mum baked 9 biscuits. I ate 5. How many were left?
[Might be recorded as: 9 – 5 = 4]
 </td><td>1 less
(nos. up to 20)</td><td>(see recording)</td></tr>
<tr><td>Y1</td><td>Subtraction as ‘taking away’ and ‘difference’ (by counting on)

Subtract 1 digit + 2 digit numbers to 20 including zero</td><td>Pictures / Symbols

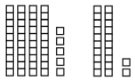
(see above)</td><td>Taking away – jumps of 1
(modelled using bead strings)
13 – 5 =8
 
</td><td>Taking away (efficient jumps)
 

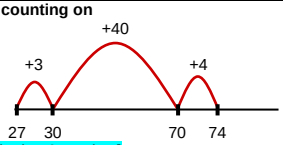
No number line:
13 – 3 = 10
10 – 2 = 8

Counting on – jumps of 1
(modelled using bead strings)
11 – 8 = 3
 

Counting on
(efficient jumps)
Number line / no number line
8 + 2 = 10
10 + 1 = 11</td><td>Subtraction facts to 10

1 or 10 less than a number</td><td>Subtract 1 digit numbers from 20</td></tr>
<tr><td>Y2</td><td>Subtraction as inverse of addition

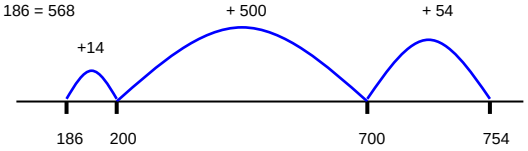
Subtract numbers including 2 digit no and 1’s, 2 digit no and tens, two 2 digit nos.</td><td colspan="2">Pictures / Symbols
45 – 22 = 23
 

Partitioning
74 - 27
74 – 20 = 54
54 – 4 = 50
50 – 3 = 47</td><td colspan="2">Number lines – counting on
74 -27 = 47
 

[Also jumps can be in 10s and 1s]

Empty or numbered lines are a useful way of modelling processes such as bridging through multiples of ten. The steps can be recorded by counting on. The steps may be recorded in a different order or combined. With practice children will record less information</td><td>Subtraction facts to at least 20 and use related fact up to 100</td><td>Difference by counting up

Subtract 1’s or tens from a 2 digit numbers

Subtract two 2 digit numbers eg 36-18</td></tr>
<tr><td>Y3</td><td>Subtract nos. with up to 3 digits using formal methods</td><td colspan="2">Number lines – counting on
754 – 186 = 568
 
</td><td>No number line – mental + jottings

Use the lower number as your starting point and the larger number as your ‘target number.’ From smallest number count on to the next multiple of 10. Then jump to the multiple of 10 before your target number, before finally arriving at your target number, e.g.

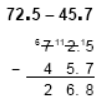
74 – 27 = 47

3 (to make 30)
40 (to make 70)
4 (to make 74)

Add all numbers together to find the difference.

Adapt jumps as needed using chn knowledge of place value
7.4 – 2.7 = 4.7

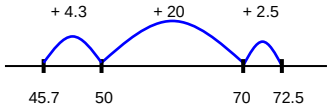
0.3 (to make 3.0)
4.0 (to make 7.0)
0.4 (to make 7.4)</td><td>Decomposition
(formal column method)

Ensure you use the place value of the column eg say 15 tenths take away 7 tenths not 15 – 7.
Say 60 take away 40, not 6-4</td><td>Subtraction facts – pairs that total 100

Differences of multiples of 10</td><td>Subtract 1’s, tens or hundreds from a 3 digit numbers

Subtract fractions with same denominator to 1</td></tr>
<tr><td>Y4</td><td>Subtract nos. with up to 4 digits using formal methods

Decimals: money (£7.85 - £3.49)</td><td colspan="2">72.5 – 45.7 = 26.8
 
</td><td colspan="2"></td><td>Derive differences of pairs of multiples of 10 / 100 / 1000</td><td>Consolidate Y3 above

Subtract fractions with same denominator</td></tr>
<tr><td>Y5</td><td>Subtract whole numbers with more than 4 digits

Solve problems involving no up to 3dp</td><td colspan="4"></td><td>Use number facts for mental subtraction
9 – 2 = 7
0.9 – 0.2 = 0.7
0.09 – 0.02 = 0.07</td><td>Subtract increasingly large numbers

Subtract fractions of same denominator and multiples of same number</td></tr>
<tr><td>Y6</td><td>Consolidate / extend Y5 including:
Solving multi-step problems

Subtract fractions with different denominators and mixed numbers</td><td colspan="4">Recognise when one written method is more efficient. (See above methods of recording)
➢ There was 2.5 litres in the jug. Stuart drank 385 ml. How much was left?
➢ 18.07 km – 3.243 km</td><td>(as above)</td><td>Consolidate Y5 above</td></tr>
</table>

Calculation Policy : Subtraction