Subtraction

Year 3

To be able to Subtract numbers with up to 3 digits

Mental methods for year 3

Can recall and use subtraction facts to 20 and derive and use related facts up to 100

10 – 8 = 2

100 – 80 = 120

Apply this beyond 100

200 -80- 120

Can mentally subtract a 2 digit number and ones

Can mentally subtract a 2 digit number and tens

Can mentally subtract two 2 digit numbers

Can mentally subtract a three digit number and ones, tens and hundreds.

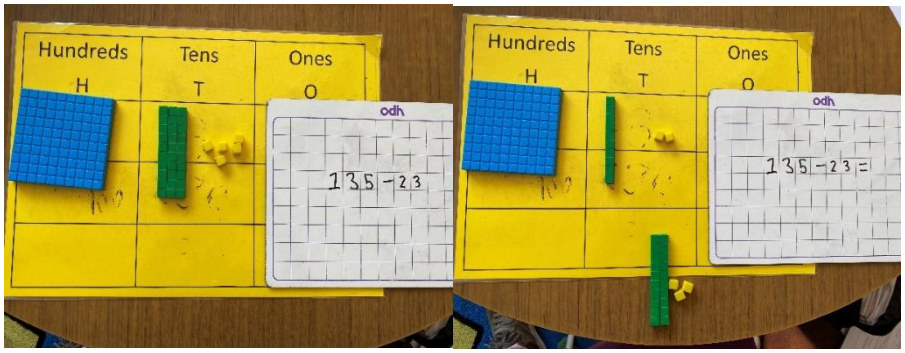
Can use the compensation method to subtract 10 and adding 1 (e.g. 34 - 9 =? 34 – 10+1)

Progressing to adjusting to multiples of 10 (e.g. 68 - 38 = ? 70 - 38 + 2)

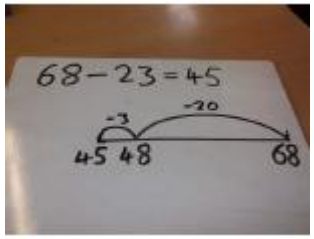
Using partitioning and recombining numbers to support addition

Written methods

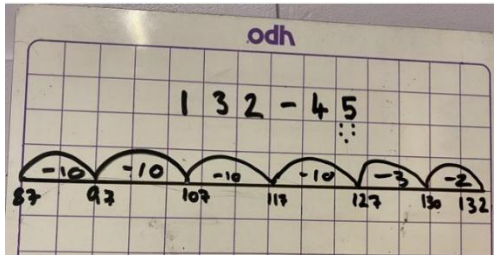
Concrete – Use of Dienes/ counters to support subtraction



Using number lines to subtract pairs of numbers under 100 initially and **where appropriate.**

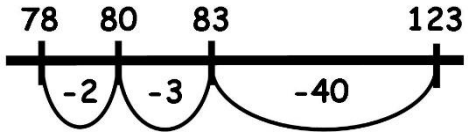
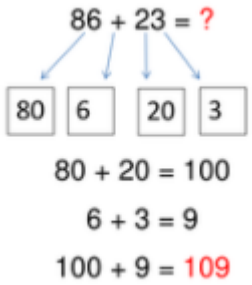
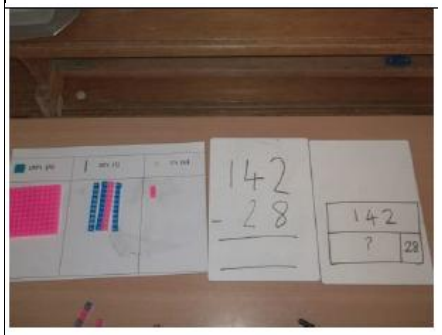
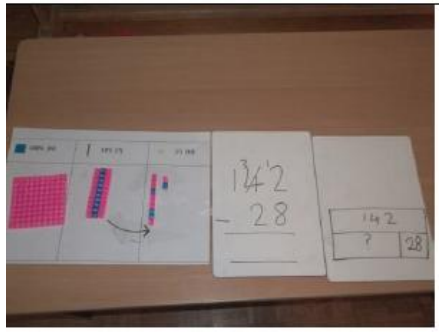


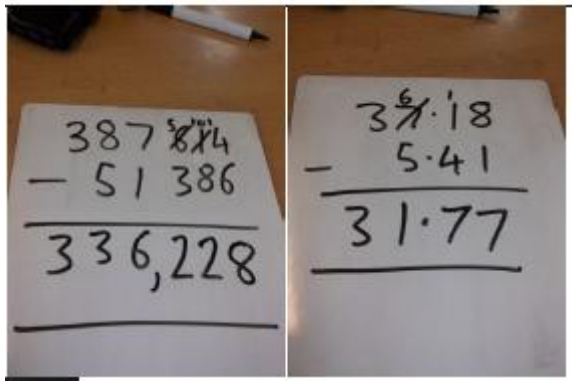
Can subtract by partitioning tens and ones and subtracting tens first followed by the ones or vice versa .

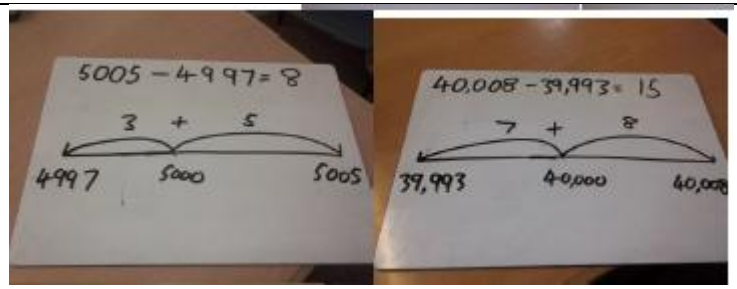


Progressing onto subtracting 3 digit and a 1 or 2-digit number.

Can subtract by bridging back through a place value boundary (tens/hundreds) and subtracting remaining ones before tens.

		 Progression to larger chunked jumps of multiples of ten/ hundreds to support efficient calculations.  If appropriate, introduce children to partitioning as an efficient method for subtraction calculations. Numbers not crossing place value boundaries. Progression measured by efficient use of the number line. Fewest steps. **E.O.Y = Children can choose most efficient method on a numberline**
Year 4 Subtract numbers with up to 4 digits using columnar subtraction where appropriate	**Mental methods for Year 4 building on mental methods in Year 3** Can mentally subtract pairs of numbers below 100 (e.g. 67 - 33) Can draw upon knowledge of known facts to support subtraction (e.g. – 100+60/ 1000- 600/ 10,000 - 6000) Mentally subtract multiples of 10/100 from any 4 digit number Rounding and adjusting to the nearest 100 when working with subtraction calculations	Written methods Continuing to use concrete resources to support – Introduce children to formal column subtraction progressing to exchanging from tens back to ones.   Progression to using formal written columnar subtraction set out with 3 digit and onto 4 digit. Progression seen through exchanging across place value boundaries.

	(e.g. 138 - 69 =? 138 - 70 +1 or 299 -48 =? 300 – 48 +1) Using partitioning and recombining numbers to support subtraction where appropriate	7 13 1 8 4 5 - 5 6 9 2 7 6 3 12 1 4 3 2 8 - 1 4 3 6 8 9 2
Year 5 Subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction)	**Mental methods for Year 5** Subtract numbers mentally with increasingly large numbers building and applying on strategies from Years 3 & 4 Using rounding and adjusting including rounding to 3dp when working with decimals. Can compensate and adjust multiples with decimals (e.g. 5.7 - 3.9 becomes 5.7. - 4.0 + 0.1)	Written methods Using counters to support subtraction of decimals to 2dp. Using formal written methods including carrying across hundreds, tens and ones boundaries when working with numbers up to 1,000,000.  8 12 11 1 9 3 2 1 • 9 7 - 4 5 7 8 • 5 3 4 7 4 3 • 4 4 Use of increasingly efficient methods for solving larger subtraction calculations with counting on where appropriate.

		
Year 6 see appendix 1 Maths National Curriculum	**Mental methods for Year 6** **Pupils now apply all mental strategies taught for subtraction with increasingly large numbers, including decimals.** **Use estimations to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy** **Pupils round answers to a specified degree of accuracy**	Use of formal subtraction methods to solve increasingly large, complex calculations with the most efficient strategy including counting on where appropriate. T Th Th H T O 7 $^{4}\cancel{5}$, $^{1}5$ $^{2}\cancel{3}$ $^{1}2$ − 2 2, 6 2 3 5 2, 9 0 9 $^{0}\cancel{1}$ $^{1}1$ 7 6 5 • $^{8}\cancel{9}$ $^{11}\cancel{2}$ $^{1}1$ − 1 0 9 4 2 • 8 7 6 0 0 8 2 3 • 0 4 5 