Simonside Primary School – Progression in Subtraction

Year group	Foundation	Rapid Recall	Mental calculation	Objective	Method	Practical methods	Pictorial/written methods	Vocabulary
EYFS		1 less Numbers up to 10		Compare sets of objects Remove objects from a set Say what is one less than a given number within 5 then 10 Use quantities and objects to subtract using single digit numbers	Practical / recorded using ICT (eg digital photos / pictures on IWB)	A range of Toys, Books, Beads, Rhymes, Counters, Number tiles, objects (stationary and moving) number lines, Numicon, stories, Role play  Taking away 1   Counting back single subtracting Digits Children should physically remove objects and count what is left.	Those who are ready will begin to make drawings of problems.  And begin to record using marks they can explain. 	Take away, left, left over, gone, one less, fewer, count back(wards), equals

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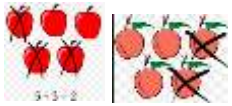
Y1	One less Subtraction; 5,6, 7,8,9 Count back. Number bonds. Subtract 10. Teens subtract 10. Difference between.	Subtraction facts using bonds to 10 1 or 10 less than a number	TU multiple of 10	Consolidation of EYFS Use subtraction (-) and equals (=) signs Represent and use subtraction facts within 20 Subtract one-digit and two-digit numbers to 20, including 0 Solve one-step problems that involve subtraction and missing number problems Concept of addition and subtraction as inverse operations	Practical / recorded using ICT Informal written methods Horizontal recording	Counting sticks, 100 Squares, Dienes, coins, cubes, bead strings, Numicon, number tracks, dominoes, dice etc.  Count back/take away subtraction 	Pictures to represent working out.    Count back on a number line  5 - ? = 3 Horizontal layout Missing numbers	Take away, left, left over, gone, one less, fewer, count back(wards), equals Subtract, minus, leave, how much/many less,

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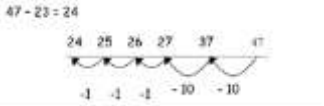
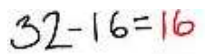
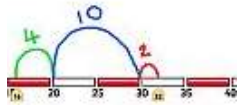
Y2	10 less. Number bonds. Subtraction: 20, 12,13,14,15,16,17 18,19 Subtract 1 digit from 2 digit by bridging. Partition second number, count back in 10's then 1's. Subtract 10 and multiples of 10. Subtract near multiples of 10. Difference between.	Subtraction facts using bonds to 20 Derive and use related facts to 100	TU –U/ multiple of 10 Difference of small numbers by counting up	Consolidation of Y1 Solve problems with subtraction, including those involving numbers, quantities and measures TU – U TU – T TU – TU Know that subtraction cannot be done in any order Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Practical Informal written methods Horizontal recording	Counting sticks, bead strings, number lines, 100 squares, Dienes,  43-20=14   5-2=3 Find the difference when numbers are close together.	Number line progressing to efficient jumps once children were secure in taking away, counting back. Moving on to finding the difference using a number line    Partitioning 33 - 12 30 - 10 = 20 3 - 2 = 1 20 + 1 = 21 Move on to column subtraction – if ready !!!!	Take away, left, left over, gone, one less, fewer, count back(wards), equals, subtract, minus, leave, how much/many less, inverse, partition difference takeaway subtract

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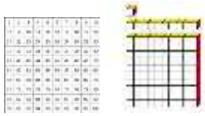
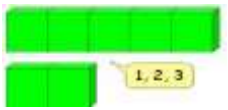
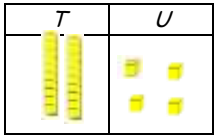
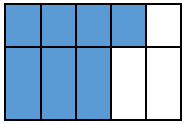
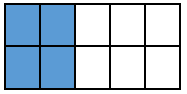
Y3	Subtract multiples of 10 and 100. Subtract single digit by bridging through boundaries. Partition second number to subtract. Difference between.	Subtraction facts to at least 20 Differences of multiples of 10	HTU - U HTU - T HTU - H HTU-HTU by finding the difference. TU - near multiple of 10	Consolidation of Y2 Subtraction as taking away. Subtraction as finding the difference. Subtract numbers with up to 3 digits, using formal written method (column) with decomposition. Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex subtraction. Subtract fractions with	Practical Informal written methods Horizontal recording Formal written method	Counting sticks, dienes, number lines, hundred square, fraction pictures etc.   use practical equipment ie chocolate, cakes etc.	*Counting back on a number line when teaching subtraction as taking away.* *Counting on using a number line when teaching subtraction as finding the difference.*  *Partitioning* *573 - 261* *500 - 200 = 300* *70 - 60 = 10* *3 - 1 = 2* *300+10+2=312* *Concrete method before moving to formal column method.*  *24-13=11*	Take away, left, left over, gone, one less, fewer, count back(wards), equals, subtract, minus, leave, how much/many less, inverse, partition difference takeaway subtract inverse, partition minus subtract takeaway how many less fewer

				the same denominator within one whole			*Column subtraction (with decomposition)* *7 12* *~~5~~~~8~~2* *- 237* *345* *Subtract fractions* *7/10 – 3/10 = 4/10*  *- 3/10 =* 	

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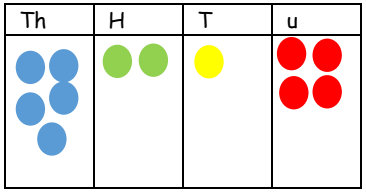
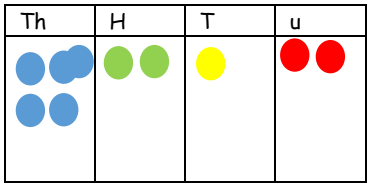
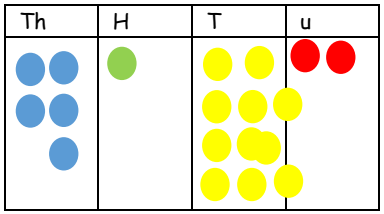
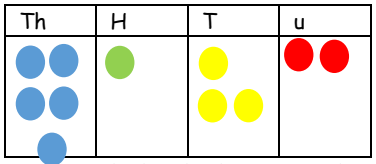
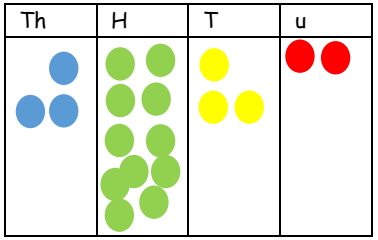
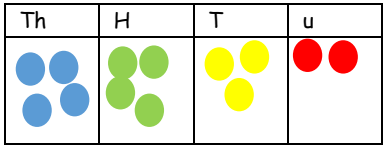
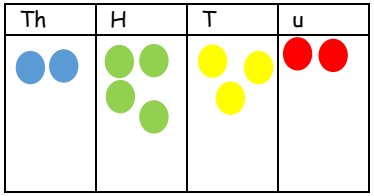
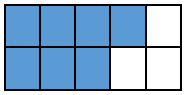
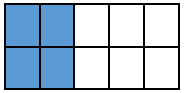
Y4	Subtract multiples of 10's, 100's and 1000's. Fluency of 2 digit subtract 2 digit. Partition second number to subtract. Decimal subtraction from 10 or 1. Difference between. Subtract near multiples by rounding and adjusting.	Derive differences of pairs of multiples of 10/100/1000	TU-TU Subtract pairs of multiples of 10/100/1000 ThHTU-ThHTU with a small difference	Consolidation of Y3 Subtract numbers with up to 4 digits using the formal written methods (column) Subtract decimals in context of money	Practical Informal written methods Horizontal recording Formal written method	Dienes, place value cards, place value counters, fraction cards. 	Partitioning 5678 - 3462 5000 - 3000 = 2000 600 - 400 = 200 70 - 60 = 10 8 - 2 = 6 2000 + 200 + 10 + 6 = 2216 Expanded method: 82 80 2 70 12 -57 50 7 50 7 Concrete method using place value counters: Exchange hundreds for tens and tens for units. 5 2 1 4 -2 7 8 2  Subtract starting from the right and exchanging where needed. Subtract the ones  Then subtract the tens, exchanging is	Take away, left, left over, gone, one less, fewer, count back(wards), equals, subtract, minus, leave, how much/many less, inverse, partition difference takeaway subtract, inverse, partition minus subtract takeaway how many less fewer Increase, decimal point, denominator, numerator Exchange Minus Subtract fewer partition

				Estimate and use inverse operations to check answers to a calculation Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why			needed.   Subtract the hundreds, again exchanging is needed.   Finally subtract the thousands  Answer: 2432	

				Subtract fractions with the same denominator			Moving on to formal column method with decomposition. 2 3 4 1 5 6 – 1 3 8 5 1 0 7 1 £ 6 • 3 1 5 – £ 4 • 1 7 £ 2 • 2 8 Subtract fractions 7/10 – 3/10 = 4/10  -3/10 	

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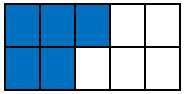
Y5	Subtract multiples of 10's, 100's 1000's and tenths. Fluency of 2 digit- 2digit including with decimals. Partition second number to subtract. Difference between. Adjust numbers to subtract.	Subtraction facts linked to bonds up to 1 (one dp) eg 1.0 – 0.7 = 0.3 U - U.t	Near multiple of 1000-near multiple of 1000 eg 6070-4097= Decimal-decimal 9.5-3.7	Consolidation of Y4 Subtract whole numbers with more than 4 digits, using formal written methods (column) Subtract numbers with up to 3 decimal places using formal written methods (column) Solve subtraction multi-step problems in contexts, deciding which operation and methods to use and why Subtract fractions with the same denominator, and denominators that are multiples of the same number	Practical Informal written methods Horizontal recording Formal written method	Dienes, place value counters, fraction cards  	Use expanded method to show place value as above for those who need it. Extend to: Column subtraction (with decomposition) Abstract method 5 $^{8}\not{9}^{10}\not{1}$ ^{1}4 - 2 7 8 7 3 1 2 7 3/5 – 1/10 = 5/10  	Take away, left, left over, gone, one less, fewer, count back(wards), equals, subtract, minus, leave, how much/many less, inverse, partition difference takeaway subtract, inverse, partition minus subtract takeaway how many less fewer, increase, decimal point, denominator, numerator exchange minus, subtract fewer partition tenths, hundredths, thousandths, partition, near multiples

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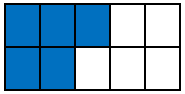
Y6	Subtract multiples of 10's, 100's, 1000's, tenths and hundredths. Fluency of 2 digit- 2digit including with decimals. Partition second number to subtract. Use number facts, bridging and place value. Adjust numbers to subtract. Difference between.	As previous with increasing fluency Subtract mentally with increasingly large numbers and mixed operations.	As above Integer/decimal (1dp) subtract integer/decimal (1dp)	Consolidation of Y5 Application of all prior skills learnt to increase fluency Solve multi-step problems deciding on appropriate operation Pupils explore the order of operations using brackets Subtract fractions with different denominators/ mixed numbers	Practical Informal written methods Formal written method	Dienes, place value counters, fraction cards/cubes  	As Y5. Embedding understanding of formal written method with decomposition using larger numbers and decimals. 3/4 - 2/3 = 9/12 - 8/12 = 1/12 3/5 – 1/10 = 5/10 (1/2)  	Take away, left, left over, gone, one less, fewer, count back(wards), equals, leave, how much/many less, inverse, partition difference takeaway subtract, inverse, partition minus how many less fewer, increase, decimal point, denominator, numerator exchange fewer partition, tenths, hundredths, thousandths, partition, near multiples Common denominator