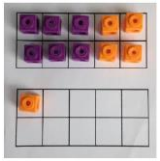
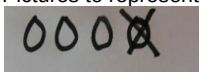
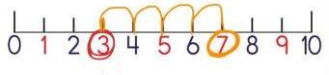
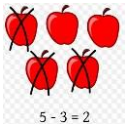
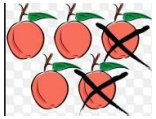
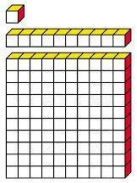
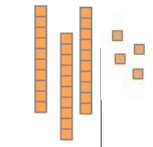
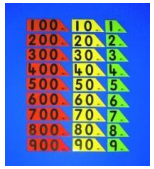
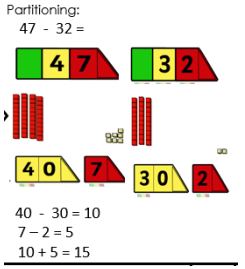
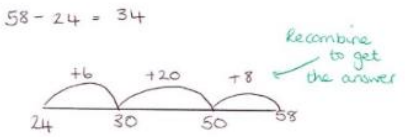
Lidget Green Primary School. Progress in Subtraction 2016

Year group	Objective	Method	Practical methods	Pictorial/written methods	Vocabulary	Mental recall
EYFS	Compare sets of objects Remove objects from a set Say what is one less than a given number within 5 then 10, then 20 Use quantities and objects to subtract using single digit numbers Subtract by counting back	Practical / recorded using ICT (eg digital photos / pictures on IWB)	Frogs on logs, Toys, Books, Beads, Rhymes, Counters, Number tiles, objects (stationary and moving) number lines, stories, Role play   Taking away one  Counting back numbers Comparing groups  Subtracting single digits	Drawings of problems  Begin to record using marks they can explain  	Take away, left, left over, gone, one less, fewer, difference between, count back(wards), leaves	What is one less than… (numbers up to 20)

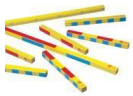
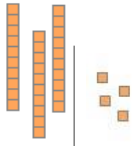
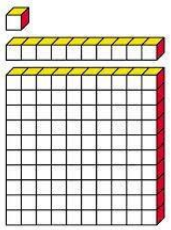
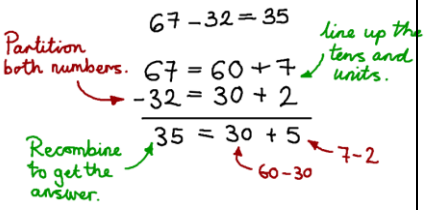
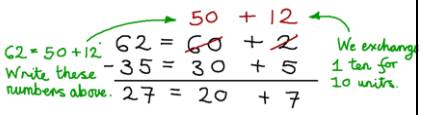
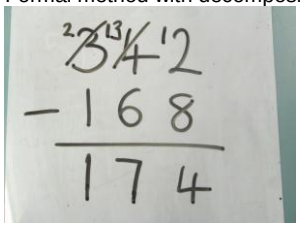
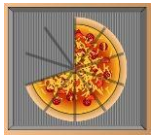
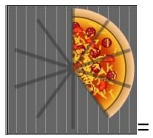
Lidget Green Primary School. Progress in Subtraction 2016

Y1	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, dominoes, dice, peg boards, tens frames   Counting back  Finding the difference   TU - U	Pictures to represent working out  Jumps along a number line in 1s  Horizontal layout  5 - 3 = 2 Missing numbers  5 - ? = 3	As previous. Subtract, minus, leave, how much/many less, equals, find the differences	Consolidation of EYFS Subtraction facts linked to number bonds to 20, e.g. 107=3

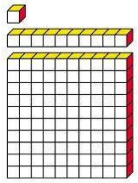
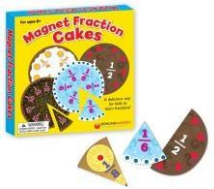
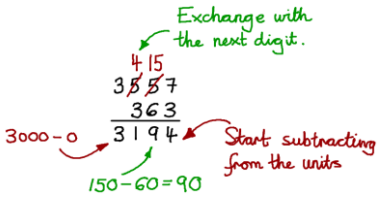
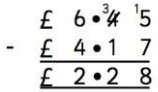
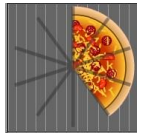
Lidget Green Primary School. Progress in Subtraction 2016

Y2	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, arrow cards      	Partitioning  Number line progressing to efficient jumps 	As previous. inverse, partition	Increase fluency of subtraction facts to 10 then 20 Derive and use related facts up to 100

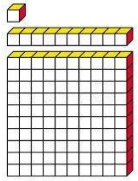
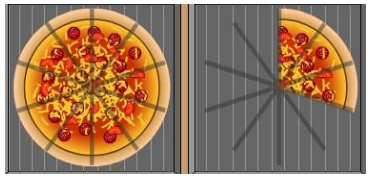
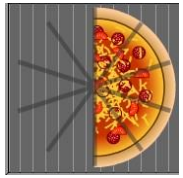
Lidget Green Primary School. Progress in Subtraction 2016

Y3	Consolidation of Y2 Expanded formal method Subtract numbers with up to 3 digits, using formal written method (column) without decomposition Subtract numbers with up to 3 digits, using formal written method (column) with decomposition using term EXCHANGE Estimate the answer to a calculation and use inverse operations to check answers Subtract fractions with the same denominator within one whole Solve problems, including missing number problems, using number facts, place value, and more complex subtraction	Practical Informal written methods Horizontal recording Formal written method	Counting sticks, dienes, number lines, hundred square, tape measures, fraction pictures, place value counters       	Expanded method without decomposition  Expanded method with decomposition. Remember, NO BORROWING – we EXCHANGE  Formal method with decomposition  Subtract fractions 7/10 – 3/10 = 4/10  - 3/10  =	As previous. column subtraction, exchange, common denominators, decomposition	HTU - U HTU - T HTU - H TU - near multiple of 10

Lidget Green Primary School. Progress in Subtraction 2016

Y4	Consolidation of Y3 Subtract numbers with up to 4 digits using the formal written methods (column) Subtract decimals in context of money 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 Subtract fractions with the same denominator	Practical Informal written methods Horizontal recording Formal written method	Dienes, tape measures, place value counters, coins, fraction cards, pizzas    	Partitioning 5678 - 3462 5000 - 3000 = 2000 600 - 400 = 200 70 - 60 = 10 8 - 2 = 6 2000 + 200 + 10 + 6 = 2216 Column subtraction (with decomposition)  Column subtraction using decimals (in context of money)  Subtract fractions 7/10 – 3/10 = 4/10  - 3/10 = 	As previous. Increase, decimal point, denominator, numerator	As previous with increasing fluency Subtract mentally with increasingly large numbers

Lidget Green Primary School. Progress in Subtraction 2016

Y5	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   	Column subtraction (with decomposition) As in Year 4 but with 3 decimal places Subtract fractions 13/10 – 4/5 = 5/10 = 1/2   TAKE AWAY 4/5 =	As previous. tenths, hundreths, thousandths, partition, near multiples	Subtract mentally with increasingly large numbers Subtraction facts linked to bonds up to 1 (one dp) eg 1.0 – 0.7 = 0.3 U - U.t
Y6	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 	3/4 - 2/3 ↓ ↓ 9/12 - 8/12 = 1/12	As previous. Common denominator	As previous with increasing fluency Subtract mentally with increasingly large numbers and mixed operations.