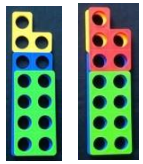
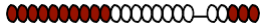
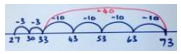
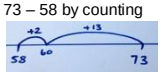
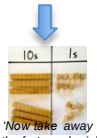
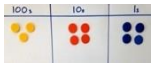
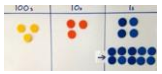
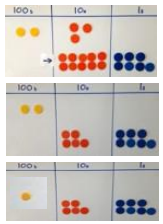
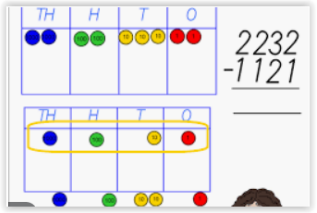
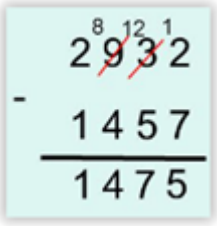
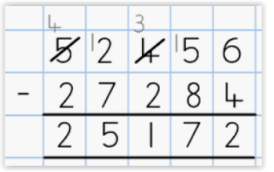
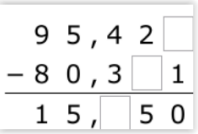
Subtraction Routeway

Written Methods	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	Subtract two 2 digit numbers using concrete objects, place value and pictorial representations		Use place value counters to support understanding of columnar subtraction.	Subtract numbers with up to 5 digits using the formal written method of columnar subtraction	Solve subtraction and multi-step problems in contexts, deciding which operations and methods to use and why
Developing conceptual understanding	Number bonds (Ten frame) Difference between 7 and 10 6 less than 10 is 4 Count out, then count how many are left. 7 – 4 = 3 Count back on a number track, then number line. 15 – 6 = 9 Difference between 13 and 8 13 – 8 = _ 8 + _ = 13  Using representations and apparatus, consolidate understanding of subtraction as taking from a set and counting what is left	Number track / Number line – jumps of 1 then efficient jumps using number bonds 23 – 5 = 18  Using a number line, 73 – 46 = 26  Difference between 73 – 58 by counting up, 58 + _ = 73  Taking away and exchanging, 73 – 46 *'Where's the forty and six?'* *Exchange to create 'sixty thirteen'* *'Twenty seven'*  *'Now take away the forty and six'*	Taking away and exchanging, 344 – 187 Place value counters *'Where's the one hundred and eighty and seven?*  *Exchange to create three hundred and thirty and fourteen. Now take away the 'seven'*  *Exchange to create two hundred, thirteen tens and seven Now take away the 'eighty'* *Now take away the 'one hundred*  Solve problems using the formal columnar methods of addition and subtraction $\begin{array}{r} 545 \\ +\ 327 \\ \hline 872 \end{array}$ $\begin{array}{r} 664 \\ -\ 237 \\ \hline 433 \end{array}$	 Subtract numbers with up to 4 digits, using the formal written method of compact subtraction. 	 Extend to include decimals to 2dp, in context $\begin{array}{r} 4\ 1 \\ 2.\not{8}\ 6 \\ -\ 1.3\ 9 \\ \hline 1.\ 1\ 7 \end{array}$ Subtract fractions with the same denominator and multiples of the same number 5/8 – 2/8 = 3/8 ½ – ¼ = 2/4 – ¼ = ¼ Solve addition and subtraction multi-step problems in context.	Examples: The Smith family has saved £675 towards their summer holiday. The cost of the holiday is £2019. How much more do they need to save? Two numbers have a difference of 1.58. One of the numbers is 4.72 What is the other? Is this the only answer? Columnar subtraction problems with missing digits: 
With jottings **… or in your head**	Solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = D – 9	Subtract numbers using concrete objects, pictorial representations, and mentally, including: * a 2 digit number and ones * a 2 digit number and tens * two 2 digit numbers * adding three 1 digit numbers	Subtract numbers mentally, including: * a 3 digit number and ones * a 3 digit number and tens * a 3 digit number and hundreds	Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why	Subtract numbers mentally with increasingly large numbers	Perform mental calculations, including with mixed operations and large numbers
Just know it!	Represent and use number bonds and related subtraction facts within 20 Add and subtract one-digit and two-digit numbers to 20, including zero	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Recall fluently addition and subtraction facts to 20 use and apply facts to add several single-digit numbers *e.g. 6 + 7 + 5, 8 + 9 + 8* know pairs of multiples of 10 that total 100 and pairs of multiples of 100 that total 1000	Subtract numbers mentally choosing explaining choice of best method / strategy	Know number bonds to 1000 (e.g. 645 + ? = 1000)	Know fraction and decimal number bonds (e.g. 1 = 2/3 + ?) (e.g. 0.45 + ? = 1.0)

Year 1 **PROGRESSION** **Year 6**