

VALENCE PRIMARY SCHOOL Subject Progression Grid

NUMBER BONDS								
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6			
represent and use	recall and use addition and							
number bonds and	subtraction facts to 20							
related subtraction facts	fluently, and derive and							
within 20	use related facts up to 100							
	MENTAL CALCULATION							
add and subtract one-	add and subtract numbers	add and subtract		add and subtract numbers	perform mental			
digit and two-digit	using concrete objects,	numbers mentally,		mentally with increasingly	calculations, including with			
numbers to 20, including	pictorial representations,	including:		large numbers	mixed operations and large			
zero	and mentally, including:	* a three-digit			numbers			
	* a two-digit number and	number and ones						
	ones	* a three-digit						
	* a two-digit number and	number and tens						
	tens	* a three-digit						
	* two two-digit numbers	number and						
	* adding three one-digit	hundreds						
	numbers							
read, write and interpret	show that addition of two				use their knowledge of the			
mathematical	numbers can be done in				order of operations to			
statements involving	any order (commutative)				carry out calculations			
addition (+), subtraction	and subtraction of one				involving the four			
(-) and equals (=) signs	number from another				operations			
(appears also in Written	cannot							
Methods)								





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WRITTEN METHODS							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)		add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)			
	INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS						
	recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	estimate the answer to a calculation and use inverse operations to check answers	estimate and use inverse operations to check answers to a calculation	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.		





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PROBLEM SOLVING							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \Box - 9$	solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement)	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division		



