

NUMBER BONDS						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Compose		Secure fluency in			
	numbers to 10 from 2		addition and			
	parts, and partition		subtraction			
	numbers to 10 into		facts that bridge 10,			
	parts,		through continued			
	including recognising		practice.			
	odd and even		3NF-1			
	numbers.					
	1AS-1					
	Represent and use	Recall and use addition	Calculate			
	number bonds and	and subtraction facts to	complements to			
	related subtraction	20 fluently, 2AS - 1	100.			
	facts within 20	(Secure fluency within	3AS -1			
	(Develop fluency	10 - <mark>2NF-1</mark> )				
	within 10 – 1NF-1)					
		Derive and use related				
		facts up to 100				
		2AS -3				
	MENTAL CALCULATION					
To find the total of	Add and subtract one-	Add and subtract	Add and subtract		Add and subtract	Perform mental
items in two	digit and two-digit	numbers using concrete	numbers mentally,		numbers mentally with	calculations, including
groups by counting	numbers to 20,	objects, pictorial	including:		increasingly large	with mixed operations
all of them.	including zero	representations, and	* a three-digit		numbers	and large numbers



To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.		<ul> <li>mentally, including:</li> <li>a two-digit number and ones 2AS -3</li> <li>a two-digit number and tens 2 AS - 3</li> <li>two two-digit numbers 2AS - 4</li> <li>adding three one- digit numbers</li> </ul>	number and ones * a three-digit number and tens * a three-digit number and hundreds		
To add and subtract two single-digit numbers and count on and back to find the answer using quantities and objects	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods), and relate additive expressions and equations to real-life contexts. 1AS-2	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot			Use their knowledge of the order of operations to carry out calculations involving the four operations



	WRITTEN METHODS						
EYFS	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)	Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more?" 2AS-2	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 3AS - 2	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.	
			Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction,			Understand that 2 numbers can be related additively and quantify additive relationships 6AS -1	



	and how both relate to the part–part– whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction. <b>3AS - 3</b>		
			Use a given additive calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. 6AS-2



	PROBLEM SOLVING						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
To solve problems, including doubling, halving and sharing.	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 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 simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (also in Measurement)	Solve problems involving addition, subtraction, multiplication and division