NUMBER BONDS							
Foundation Stage 1	Foundation Stage 2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers	2AS-1 Add and subtract across 10	3AS-1 Calculate complements to 100			6AS-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships
		Represent and use number bonds and related subtraction facts within 20 Composition of numbers up to 10 (Number bonds) Composition of numbers beyond 10 (11-19) as 10 and a bit. Identify the doubles within 10.	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 To identify the different ways that 10 can be composed. Apply knowledge of facts within 10 to addition and subtraction within 20 WITHIN the 10s boundary				
MENTAL CALCULATIONS							
			2AS–4 Add and subtract within 100 by applying related one-digit addition and				6AS/MD–4 Solve problems with 2 unknowns

			subtraction facts: add and subtract any 2 two- digit number				
Find the total number of items in two groups by counting all of them	Add and subtract 2 single digit numbers by counting on	Add and subtract one-digit and two-digit numbers to 20, including zero Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods) Apply knowledge of composition when adding or subtracting	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers Add 3 numbers using known facts - identifying bonds of 10 and knowledge of the composition of 11 to 19 as '10 and a bit' Subtract by bridging through ten. The composition of twenty using known facts- include missing numbers.	Add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds		Add and subtract numbers mentally with increasingly large numbers	Perform mental calculations, including with mixed operations and large numbers Use their knowledge of the order of operations to carry out calculations involving the four operations

WRITTEN METHODS							
		1AS- 2 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	2AS–2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".	3AS–2 Add and subtract up to three-digit numbers using columnar methods.			6AS, MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.
		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							
			2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract	3AS–3 Manipulate the additive relationship: Understand the inverse relationship			

			only ones or only tens to/from a twodigit number.	between addition and subtraction, 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.			
			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.
PROBLEM SOLVING							
		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial	Solve problems with addition and subtraction: * using concrete objects and pictorial	Solve problems, including missing number problems, using number facts, place value, and more complex	Solve addition and subtraction two-step problems in contexts, deciding which operations and	Solve addition and subtraction multi-step problems in contexts, deciding which operations and	Solve addition and subtraction multi-step problems in contexts, deciding which operations and

		representations, and missing number problems such as 7 = □ - 9	* representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods	addition and subtraction	methods to use and why	methods to use and why	methods to use and why Solve problems involving addition, subtraction, multiplication and division