

NUMBER BONDS					
		recognise a pair (numbers to 8) <b>Autumn</b> explore number bonds to 10 <b>Spring</b>			
Year 1 Year 2 Year 3			Year 4	Year 5	Year 6
represent and use number bonds and related subtraction facts to 10 and 20 and within 20	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				



RECALL, REPRESENT and USE						
Nursery use 'more' and 'a lot' <b>Autumn</b> know groups change when something is added/ taken away <b>Autumn</b>		Reception find one more and one less than numbers up to 5 <b>Autumn</b>				
Year 1	Year 2	Year 3	Year 4 Year 5 Year 6			
read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot					



CALCULATIONS					
			Reception combine two numbers together <b>Spring</b> understand that the quantity of a group can be changed by adding more and taking away <b>Summer</b>		
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs add and subtract one-digit and two-digit numbers to 20, including zero	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 and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction add and subtract numbers mentally, including: * a three-digit	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 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



number and ones * a three-digit number and tens * a three-digit number and hundreds  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		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					
			Reception solve extended problems <b>Summer</b> investigate relationships between numbers <b>Summer</b>		
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 = -	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 multistep problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multistep 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				Solve problems involving addition, subtraction, multiplication and division
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