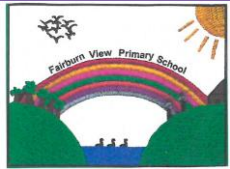


ADDITION AND SUBTRACTION

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Understanding addition and subtraction	In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting)	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)	Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)	
Addition and subtraction facts		Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes)	Recall and use addition and subtraction facts for 100 (multiples of 5 and 10) Derive and use addition and subtraction facts for 100 Derive and use addition and subtraction facts for multiples of 100 totalling 1000	Recall and use addition and subtraction facts for 100 Recall and use addition and subtraction facts for multiples of 100 totalling 1000 Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place)	Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place) Derive and use addition and subtraction facts for 1 (with decimal numbers to two decimal places)	Recall and use addition and subtraction facts for 1 (with decimal numbers to two decimal places)	
Mental methods		Add and subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations)	Select a mental strategy appropriate for the numbers involved in the calculation 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	Select a mental strategy appropriate for the numbers involved in the calculation Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds	Select a mental strategy appropriate for the numbers involved in the calculation Add and subtract mentally combinations of two and three digit numbers and decimals to two decimal places.	Select a mental strategy appropriate for the numbers involved in the calculation Add and subtract numbers mentally with increasingly large numbers and decimals to three decimal places	Select a mental strategy appropriate for the numbers involved in the calculation Perform mental calculations, including with mixed operations and large numbers and decimals	
Written Methods		Written methods are informal at this stage – see mental methods for expectation of calculations	Written methods are informal at this stage – see mental methods for expectation of calculations	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 and decimals with two decimal places using the formal written methods of columnar addition and subtraction where appropriate	Add and subtract whole numbers with more than 4 digits and decimals with three decimal places, including using formal written methods (columnar addition and subtraction)	Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction)	
Estimating and checking calculations			Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problem	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, an appropriate degree of accuracy	
Order of operations	Records, using marks that they can interpret and explain.					Use their knowledge of the order of operations to carry out calculations involving the four operations		
Solving addition and subtraction problems including those with missing		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = _ - 9	Solve problems with addition and subtraction including those with missing numbers: - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and	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 problems involving missing numbers	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve addition and subtraction problems involving missing numbers	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, including those with missing numbers	



ADDITION AND SUBTRACTION

numbers

	written methods					
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