

## Subject Specific-Skills: Age-related expectations in maths – Addition and subtraction

Year	Number bonds	Mental calculation	Written methods	Inverse operations, estimating and checking answers	Problem solving
1	Represent and use number bonds and related subtraction facts within 20	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 Mental Calculation)		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$
2	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> <li>a two-digit number and ones</li> <li>a two-digit number and tens</li> <li>two two-digit numbers</li> <li>adding three one-digit numbers</li> </ul>		Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Solve problems with addition and subtraction: <ul style="list-style-type: none"> <li>using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>applying their increasing knowledge of mental and written methods</li> </ul>
3		Add and subtract numbers mentally, including: <ul style="list-style-type: none"> <li>a three-digit number and ones</li> <li>a three-digit number and tens</li> <li>a three-digit number and hundreds</li> </ul>	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Estimate the answer to a calculation and use inverse operations to check answers	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
4			Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Estimate and use inverse operations to check answers to a calculation	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
5		Add and subtract	Add and subtract whole	Use rounding to check	Solve addition and

		numbers mentally with increasingly large numbers	numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	answers to calculations and determine, in the context of a problem, levels of accuracy	subtraction multi-step problems in contexts, deciding which operations and methods to use and why
<b>6</b>		Perform mental calculations, including with mixed operations and large numbers		Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why