



Progression in Number: Addition and Subtraction



Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary							
add takeaway equals	numbers add takeaway number bond equals	put together, add, altogether, double, total, more than, equals, plus, make Subtract, takeaway, distance between, difference between, less than, minus, leave, fewer, left over, equals,	commutative, inverse, sum, partition, near double tens boundary, partition, rearrange, inverse	score hundreds boundary, exchange, carried digits	increase decrease	units boundary tenths boundary	
Number Bonds							
Solve real world mathematical problems with numbers up to 5. <i>Putting snack items on the tables. Teacher asking questions- e.g. have we got enough pencils, chairs?</i>	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10	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	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				
Mental Calculation							
Solve real world mathematical problems with numbers up to 5.	Have a deep understanding of number to 10, including the composition of each number. <i>Recall the composition of numbers 1 - 10 in different ways</i>	Add and subtract one digit and two-digit numbers to 20, including zero Read, write and interpret mathematical statements involving addition (+), subtraction (-) and	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens	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

	<p>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</p> <p><i>Instantly recall number bonds to 5 including some subtraction facts.</i></p> <p><i>Instantly recall some number bonds to 10</i></p> <p><i>Recall double numbers to 10.</i></p>	<p>equals(=) signs (appears also in Written Methods)</p>	<p>* two two-digit numbers * adding three one-digit numbers</p> <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>				
Written Methods							
<p>Experiment with their own symbols and marks as well as numerals.</p> <p><i>Number hunts</i> <i>Recording problems</i> <i>Recording scores in a game</i></p>		<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)</p>		<p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p>	<p>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p>	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p>	
Inverse operations, estimating and estimating answers							
			<p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Estimate the answer to a calculation and use inverse operations to check answers</p>	<p>Estimate and use inverse operations to check answers to a calculation</p>	<p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p>	<p>Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p>