



Progression in Maths:

Number: Addition and Subtraction

Progression statements taken from NCETM Progression Maps for KS1 and KS2
 EYFS statements taken from EYFS Development Matters. Statements in red taken from NCETM EYFS Progression charts.

EYFS 30-50 mths	EYFS 40-60 mths	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
NUMBER BONDS							
<p>Separates a group of three or four objects in different ways beginning to recognise that the total is still the same.</p>	<p>Finds the total number of items in two groups by counting all of them</p> <p><i>Identifying smaller numbers within a number (conceptual subitising). For instance, with giant ladybirds: 'There are 5 spots altogether. I can see 4 and 1, I can see 3 and 2, and I can see 1 and 1 and 1 and 1 and 1.'</i></p> <p><i>Exploring how numbers can be partitioned into different pairs of numbers through practical activities.</i></p> <p>ELG: Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.</p>	<p>Represent and use number bonds and related subtraction facts within 20</p>	<p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>				



Progression in Maths:

Number: Addition and Subtraction

EYFS 30-50 mths	EYFS 40-60 mths	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
MENTAL CALCULATION							
	<p>Can say how many are hidden in a known number of things e.g. five toys go into the tent, 2 come out. How many are left in the tent?</p> <p>Says the number that is 1 more than a given number</p> <p>In practical activities and discussion, begins to use the vocabulary involved in adding and subtracting.</p> <p>ELG: Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.</p>	<p>add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p>add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one digit numbers 	<p>add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds 		<p>add and subtract numbers mentally with increasingly large numbers</p>	<p>perform mental calculations, including with mixed operations and large numbers</p>
		<p>read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)</p>	<p>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>				<p>use their knowledge of the order of operations to carry out calculations involving the four operations</p>



Progression in Maths:

Number: Addition and Subtraction

EYFS 30-50 mths	EYFS 40-60 mths	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
WRITTEN METHODS							
Shows an interest in representing numbers.	In practical activities and discussion, begins to use the vocabulary involved in adding and subtracting. Records, using marks that they can interpret and explain	read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs <i>(Objective also shown in Mental Calculation)</i>		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 & CHECKING ANSWERS							
	Estimates how many objects they can see and checks by counting them. <i>Inverse operations: Recognises that when numbers are partitioned into two groups they can be recombined to make the same total.</i>	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.	



Progression in Maths:

Number: Addition and Subtraction

EYFS 30-50 mths	EYFS 40-60 mths	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
PROBLEM SOLVING							
Shows an interest in number problems	<p>Begins to identify own mathematical problems based on own interests and fascinations.</p> <p>ELG: They solve problems, including doubling, halving and sharing.</p>	<p>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$</p>	<p>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</p> <p>-----</p> <p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement)</p>	<p>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	<p>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</p>	<p>solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p>	<p>solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>-----</p> <p>Solve problems involving addition, subtraction, multiplication and division</p>