



Calculation Methods – Principles of Teaching and Progression

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition	<p>Combining two parts to make a whole: part whole model.</p> <p>Starting at the bigger number and counting on.</p> <p>Regrouping to make 10.</p>	<p>Adding three single digits.</p> <p>Column method - no regrouping.</p>	<p>Column method-regrouping. (up to 3 digits)</p>	<p>Column method-regrouping. (up to 4 digits)</p>	<p>Column method-regrouping. (with more than 4 digits) (Decimals- with the same amount of decimal places)</p>	<p>Column method-regrouping. (Decimals- with different amounts of decimal places)</p>
Subtraction	<p>Taking away ones</p> <p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10</p>	<p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10</p> <p>Column method- no regrouping</p>	<p>Column method with regrouping. (up to 3 digits)</p>	<p>Column method with regrouping. (up to 4 digits)</p>	<p>Column method with regrouping. (with more than 4 digits) (Decimals- with the same amount of decimal places)</p>	<p>Column method with regrouping. (Decimals- with different amounts of decimal places)</p>
Multiplication	<p>Doubling</p> <p>Counting in multiples</p> <p>Arrays (with support)</p>	<p>Doubling</p> <p>Counting in multiples</p> <p>Repeated addition</p> <p>Arrays- showing commutative multiplication</p>	<p>Counting in multiples</p> <p>Repeated addition</p> <p>Arrays- showing commutative multiplication</p> <p>Grid method</p>	<p>Column multiplication</p> <p>(2 and 3 digit multiplied by 1 digit)</p>	<p>Column multiplication</p> <p>(up to 4 digit numbers multiplied by 1 or 2 digits)</p>	<p>Column multiplication</p> <p>(multi digit up to 4 digits by a 2 digit number)</p>

Division	Sharing objects into groups Division as grouping	Division as grouping Division within arrays	Division within arrays Division with a remainder Short division (2 digits by 1 digit- concrete and pictorial)	Division within arrays Division with a remainder Short division (up to 3 digits by 1 digit- concrete and pictorial)	Short division (up to 4 digits by a 1 digit number interpret remainders appropriately for the context)	Short division Long division (up to 4 digits by a 2 digit number- interpret remainders as whole numbers, fractions or round)
----------	-----------------------------------------------------	------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------