

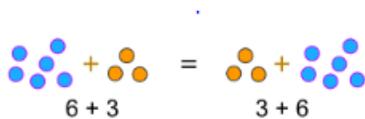
	Year 2	Year 3	Year 4	Year 5	Year 6
Addition	<p>Adding three single digits.</p> <p>Use of base 10 to combine two numbers.</p>	<p>Column method- regrouping.</p> <p>Using place value counters (up to 3 digits).</p>	<p>Column method- regrouping. (up to 4 digits)</p>	<p>Column method- regrouping.</p> <p>Use of place value counters for adding decimals</p>	<p>Column method- regrouping.</p> <p>Abstract methods.</p>
Key language: sum, total, parts and wholes, plus, add, altogether, more, 'is equal to' 'is the same as'.					
Subtraction	<p>Counting back</p> <p>Find the difference</p> <p>Part whole model</p> <p>Make 10</p>	<p>Column method with regrouping. (up to 3 digits using place value counters)</p>	<p>Column method with regrouping. (up to 4 digits)</p>	<p>Column method with regrouping.</p> <p>Abstract for whole numbers.</p> <p>Decimals with the same amount of decimal places.</p>	<p>Column method with regrouping.</p> <p>Abstract methods.</p> <p>Decimals with different amounts of decimal places.</p>
Key language: take away, less than, the difference, subtract, minus, fewer, decrease.					
Multiplication	<p>Arrays- showing commutative multiplication</p>	<p>Arrays 2 digits × 1 digit using base 10</p>	<p>Column multiplication (2 and 3 digit multiplied by 1 digit)</p>	<p>Column multiplication</p> <p>Abstract only but might need a repeat of year 4 first (up to 4 digit numbers multiplied by 1 or 2 digits)</p>	<p>Column multiplication</p> <p>Abstract methods (multi-digit up to 4 digits by a 2 digit number)</p>
Key language: double, times, multiplied by, the product of, groups of, lots of, equal groups.					

	Year 2	Year 3	Year 4	Year 5	Year 6
Division	<p>Division as grouping</p> <p>Division within arrays - linking to multiplication</p> <p>Repeated subtraction</p>	<p>Division with a remainder-using times tables facts and repeated subtraction.</p> <p>2 digits divided by 1 digit using base 10</p>	<p>Division with a remainder</p> <p>Short division (up to 3 digits by 1 digit- concrete and pictorial)</p>	<p>Short division (up to 4 digits by a 1 digit number including remainders)</p>	<p>Short division</p> <p>Long division (up to 4 digits by a 2 digit number)</p> <p>Children should exchange into the tenths and hundredths column too</p>
Key language: share, group, divide, divided by, half.					

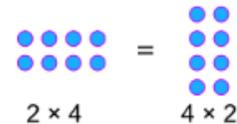
Commutative Law

In addition and multiplication, numbers may be added or multiplied together in any order. The Commutative Law does not work for subtraction or division.

$$a + b = b + a$$



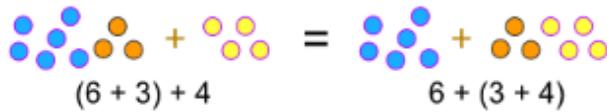
$$a \times b = b \times a$$



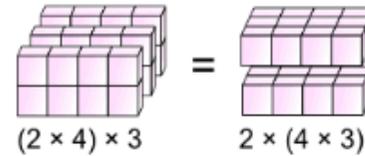
Associative Law

In addition and multiplication, no matter how the numbers are grouped, the answer will always be the same. The Associative Law does not work for subtraction or division

$$(a + b) + c = a + (b + c)$$



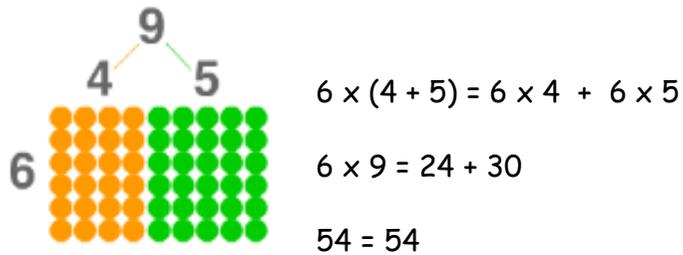
$$(a \times b) \times c = a \times (b \times c)$$



Distributive law

Multiplying a number is the same as multiplying its addends by the number, then adding the products. The Distributive Law does not work for division.

$$a \times (b + c) = a \times b + a \times c$$



Inverse

Addition and subtraction are inverse operations and multiplication and division are inverse operations. Inverse operations are handy for checking your calculations.