

## Links to the National Curriculum Programme of Study

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
1	<p>Given a number, identify one more and one less.</p> <p>Identify and represent numbers using concrete objects and pictorial representations including the number line, and use the language of: <i>equal to</i>, <i>more than</i>, <i>less than</i> (<i>fewer</i>), <i>most</i>, <i>least</i>.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects.</p>	<p>Represent and use number bonds and related subtraction facts within 20 (Y1).</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs (Y1).</p> <p>Solve problems with addition and subtraction:</p> <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 methods.</li> </ul> <p>Recall and use addition and subtraction facts to 20 fluently.</p>	<p>Use place value and number facts to solve problems (Y2).</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 (Y2).</p> <p>Solve problems with addition and subtraction:</p> <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 methods (Y2).</li> </ul> <p>Add and subtract numbers mentally.</p> <p>Identify, represent and estimate numbers using different representations.</p>	<p>Add and subtract numbers mentally (Y3).</p> <p>Identify, represent and estimate numbers using different representations (Y3).</p> <p>Recognise the place value of each digit in a three-digit number (Y3).</p> <p>Add and subtract numbers with up to three digits (Y3).</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (Y3).</p>	<p>Recognise the place value of each digit (Y4).</p> <p>Add and subtract numbers with up to 4 digits (Y4).</p> <p>Identify, represent and estimate numbers using different representations (Y4).</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths (Y4).</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p>	<p>Add and subtract numbers mentally with increasingly large numbers (Y5).</p> <p>Solve problems involving numbers with up to three decimal places (Y5).</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use, read and write and convert between standard units, converting measurements of length, mass, volume (and time) from a smaller unit of measure to a larger unit and vice versa, using decimal notation up to three decimal places.</p>

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2	<p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects.</p>	<p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding three one digit numbers.</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Solve problems with addition and subtraction:</p> <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 methods.</li> </ul> <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Recall and use multiplication and division facts for the 2 and 10 multiplication tables (Y2).</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs (Y2).</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot (Y2).</p> <p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts (Y2).</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know.</p> <p>Solve problems, including missing number problems, involving multiplication and division.</p>	<p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>Use place value, known and derived facts to multiply and divide mentally.</p>	<p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math> (Y4).</p> <p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime numbers).</p> <p>Recognise and use square and cube numbers and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>).</p> <p>Solve problems involving multiplication and division including their knowledge of factors, multiples, squares and cubes.</p>	<p>Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers (Y5).</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime numbers) (Y5).</p> <p>Recognise and use square and cube numbers and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>) (Y5).</p> <p>Solve problems involving multiplication and division including their knowledge of factors, multiples, squares and cubes (Y5).</p> <p>Perform mental calculations, including with missed operations and large numbers.</p> <p>Identify common factors, common multiples and prime numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p>

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
3	<p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects.</p>	<p>Use place value and number facts to solve problems.</p> <p>Count in steps of tens from any number, forward and backward.</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>Solve problems with addition and subtraction:</p> <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 methods.</li> </ul>	<p>Find 10 or 100 more or less than a given number.</p> <p>Identify, represent and estimate numbers using different representations.</p> <p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>	<p>Recognise the place value of each digit in a four-digit number.</p> <p>Add and subtract numbers with up to 4 digits.</p>	<p>Recognise the place value of each digit (Y4).</p> <p>Add and subtract numbers with up to 4 digits (Y4).</p> <p>Identify, represent and estimate numbers using different representations (Y4).</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths (Y4).</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Solve problems involving numbers with up to three decimal places.</p>	<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</p> <p>Identify the value of each digit in numbers given to three decimal places.</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use, read and write and convert between standard units, converting measurements of length, mass, volume (and time) from a smaller unit of measure to a larger unit and vice versa, using decimal notation up to three decimal places.</p>

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
4	<p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects.</p>	<p>Count in steps of twos and in tens from zero, forward and backward.</p> <p>Recall and use multiplication and division facts for the 2 and 10 multiplication tables.</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p> <p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	<p>Recall and use multiplication and division facts for the 4 and 8 multiplication tables.</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental methods.</p> <p>Solve problems, including missing number problems, involving multiplication and division.</p> <p>Identify, represent and estimate numbers using different representations</p>	<p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>Use place value, known and derived facts to multiply and divide mentally.</p> <p>Recognise and use factor pairs and commutativity in mental calculations.</p>	<p>Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths (Y4).</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>Convert between different units of metric measure.</p>	<p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p>Solve problems involving the calculation of percentages (for example, of measure and such as 15% of 360) and the use of percentages for comparison.</p>

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
5	<p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects.</p>	<p>Solve problems with addition and subtraction:</p> <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 methods.</li> </ul> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <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> </ul> <p>Use place value and number facts to solve problems.</p>	<p>Add and subtract numbers mentally.</p> <p>Identify, represent and estimate numbers using different representations.</p> <p>Recognise the place value of each digit in a three-digit number.</p> <p>Add and subtract numbers with up to three digits.</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>	<p>Recognise the place value of each digit.</p> <p>Add and subtract numbers with up to 4 digits.</p> <p>Identify, represent and estimate numbers using different representations.</p>	<p>Recognise the place value of each digit (Y4).</p> <p>Add and subtract numbers with up to 4 digits (Y4).</p> <p>Identify, represent and estimate numbers using different representations (Y4).</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths (Y4).</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Solve problems involving numbers with up to three decimal places.</p>	<p>Solve problems involving numbers with up to three decimal places (Y5).</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use, read and write and convert between standard units, converting measurements of length, mass, volume (and time) from a smaller unit of measure to a larger unit and vice versa, using decimal notation up to three decimal places.</p>

Block	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
6	<p>Count in different multiples including ones, twos, fives and tens</p> <p>Solve simple one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</p> <p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity</p>	<p>Count in steps of twos, fives and in tens from zero, forward and backward.</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p> <p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know.</p>	<p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</p>	<p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math> (Y4).</p> <p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime numbers).</p> <p>Recognise and use square and cube numbers and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>).</p> <p>Solve problems involving multiplication and division including their knowledge of factors, multiples, squares and cubes.</p>	<p>Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers (Y5).</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime numbers) (Y5).</p> <p>Recognise and use square and cube numbers and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>) (Y5).</p> <p>Solve problems involving multiplication and division including their knowledge of factors, multiples squares and cubes (Y5).</p> <p>Perform mental calculations, including with missed operations and large numbers.</p> <p>Identify common factors, common multiples and prime numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations&gt;</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p>