

## Mathematics



Prior Learning	
<p>This unit will build on the knowledge and skills learned in Year 3. Prior learning will be knowledge of place value in a three-digit number and the reading, writing, comparing and ordering of numbers up to 1000. This term will also build on the children's prior knowledge of adding and subtracting numbers with up to three digits, using formal written methods of columnar addition and subtraction and their understanding of solving problems based on these methods as well as their recall of their multiplication and division facts for the 3, 4 and 8 multiplication tables.</p>	
Key vocabulary for this unit	
Negative number Thousand Ten thousand Partition Place Value Round Roman numerals Exchange Estimate Inverse operation	Area Rectilinear Mental calculations Total Sum of Difference Between Multiply Product Of Divide
Learning Sequence	
Place Value	<ul style="list-style-type: none"><li>• Find 1000 more or less than a given number.</li><li>• Count backwards through zero to include negative numbers.</li><li>• Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).</li><li>• Order and compare numbers beyond 1000.</li><li>• Identify, represent and estimate numbers using different representations.</li><li>• Round any number to the nearest 10, 100 or 1000.</li><li>• Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</li></ul>

	<ul style="list-style-type: none"> <li>• Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> </ul>
Addition and Subtraction	<ul style="list-style-type: none"> <li>• Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</li> <li>• Estimate and use inverse operations to check answers to a calculation.</li> <li>• Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
Area	<ul style="list-style-type: none"> <li>• Find the area of rectilinear shapes by counting squares.</li> </ul>
Mental Multiplication and Division	<ul style="list-style-type: none"> <li>• Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>• Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1.</li> </ul>
Assessment milestones	
<p><b>Mathematical Skills:</b></p> <ul style="list-style-type: none"> <li>• To solve one and two-step problems involving addition and subtraction.</li> <li>• To solve number and practical problems that involve knowledge of place value.</li> <li>• To identify, represent and estimate numbers using different representations.</li> <li>• To estimate and use inverse operations to check answers to a calculation.</li> <li>• To find the area of rectilinear shapes by counting squares</li> </ul>	<p><b>Mathematical Knowledge:</b></p> <ul style="list-style-type: none"> <li>• To count backwards through zero to include negative numbers.</li> <li>• To recognise the place value of each digit in a four-digit number</li> <li>• To order and compare numbers beyond 1000.</li> <li>• To round any number to the nearest 10, 100 or 1000.</li> <li>• To read Roman numerals to 100.</li> <li>• To add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</li> <li>• To recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>