

## Mathematics overview: Year 5

Topics	Essential skills	Essential knowledge
Numbers and the number system	<ul style="list-style-type: none"> <li>Identify multiples and factors of a number</li> <li>Count forwards and backwards through zero</li> <li>Round to one decimal place</li> <li>Use columnar addition and subtraction with numbers of any size</li> <li>Multiply a three- or four-digit number by a two-digit number using long multiplication</li> <li>Divide numbers up to four-digits by a single-digit number using short division and interpret the remainder</li> <li>Add and subtract fractions with denominators that are multiples of the same number</li> <li>Write decimals as fractions</li> <li>Understand that per cent relates to number of parts per hundred</li> <li>Convert between adjacent metric units of measure for length, capacity and mass</li> <li>Measure and draw angles</li> <li>Calculate the area of rectangles</li> <li>Distinguish between regular and irregular polygons</li> </ul>	<ul style="list-style-type: none"> <li>Know the place value headings up to millions</li> <li>Recall primes to 19</li> <li>Know the first 12 square numbers</li> <li>Know the Roman numerals I, V, X, L, C, D, M</li> <li>Know percentage and decimal equivalents for <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math></li> <li>Know rough conversions between metric and Imperial units</li> <li>Know that angles are measured in degrees</li> <li>Know angles in one whole turn total 360°</li> <li>Know angles in half a turn total 180°</li> <li>Know that area of a rectangle = length × width</li> </ul>
Counting and comparing		
Calculating: addition and subtraction		
Calculating: multiplication and division		
Investigating properties of shapes		
Visualising and constructing		
Exploring time		
Exploring fractions, decimals and percentages		
Pattern sniffing		
Measuring space		
Investigating angles		
Calculating fractions, decimals and percentages		
Calculating space		
Checking, approximating and estimating		
Mathematical movement		
Presentation of data		