

<b>Year 5 – Area 2: calculation</b>		<b>2014/2015</b>
<b>Key vocabulary:</b>	<p>problem, solution, calculate, calculation, equation, operation, answer, method, explain, reasoning, reason, predict, relationship, rule, formula, pattern, sequence, term, consecutive</p> <p>place value, digit, numeral, partition, decimal point, decimal place, thousands, ten thousands, hundred thousands, millions, tenths, hundredths, positive, negative, above/below zero, compare, order, ascending, descending, greater than (&gt;), less than (&lt;), round, estimate, approximately</p> <p>add, subtract, multiply, divide, sum, total, difference, plus, minus, product, quotient, remainder</p>	
<b>National Curric Objectives for this area:</b>	<ul style="list-style-type: none"> <li>• Use knowledge of place value and addition and subtraction of two-digit numbers to derive sums and differences and doubles and halves of decimals (e.g. <math>6.5 \pm 2.7</math>, half of 5.6, double 0.34)</li> <li>• Recall quickly multiplication facts up to <math>10 \times 10</math> and use them to multiply pairs of multiples of 10 and 100; derive quickly corresponding division facts</li> <li>• Use understanding of place value to multiply and divide whole numbers and decimals by 10, 100 or 100</li> <li>• Extend mental methods for whole-number calculations, for example to multiply a two-digit by a one-digit number (e.g. <math>12 \times 9</math>), to multiply by 25 (e.g. <math>16 \times 25</math>), to subtract one near multiple of 1000 from another (e.g. <math>6070 - 4097</math>)</li> <li>• add and subtract numbers mentally with increasingly large numbers</li> <li>• Use knowledge of rounding, place value, number facts and inverse operations to estimate and check calculations</li> <li>• recognise and use square numbers and cube numbers, and the notation for squared ( <math>\square</math> ) and cubed ( <math>\cube</math> )</li> <li>• Use efficient written methods to add and subtract whole numbers and decimals with up to two places</li> <li>• Solve one-step and two-step problems involving whole numbers and decimals and all four operations, choosing and using appropriate calculation strategies, including calculator use</li> <li>• Refine and use efficient written methods to multiply and divide HTU <math>\times</math> U, TU <math>\times</math> TU, U.t <math>\times</math> U and HTU <math>\div</math> U</li> <li>• multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</li> </ul>	

**Term 1**

**Term 2**

**Term 3**

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|  | <ul style="list-style-type: none"><li>• divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</li><li>• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</li></ul> |
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