| Ellingham C of E Primary School Year 5 Assessment Expectations Mathematics: Calculation 1 |  |  |
| :---: | :---: | :---: |
| End of Term 1 | End of Term 2 | End of Term 3 |
| Developing and applying calculation: Addition and Subtraction |  |  |
| I am beginning to understand and use the relationships between the four operations and the principles of the arithmetic laws; commutative, associative and distributive to support calculation and to solve number puzzles, routine and non-routine problems and explain reasoning. |  | I understand and use the relationships between the four operations and the principles of the arithmetic laws; commutative, associative and distributive to support calculation and to solve number puzzles, routine and non-routine problems and explains reasoning. <br> (Distributivity can be expressed as $a(b+c)=a b+a c$ ). |
| I can use rounding, estimation and inverse operations to check answers to calculations and determine, in the context of a problem, levels of accuracy. | I often use rounding, estimation and inverse operations to check answers to calculations and determine, in the context of a problem, levels of accuracy. | I confidently use rounding, estimation and inverse operations to check answers to calculations and determine, in the context of a problem, levels of accuracy. |
| I add and subtract numbers mentally with increasingly large numbers e.g. Using place value and known facts to subtract one near multiple of 100 from another e.g. 607-499=108 or $2146-$ $1998=148$. I explain methods. | I add and subtract numbers mentally with increasingly large numbers e.g. Using place value and known facts to subtract one near multiple of 1000 from another e.g. 6097-4070 or 12462 2300. I explain methods. | I can add and subtract numbers mentally with increasingly large numbers identifying when a mental method is more appropriate. |
| Mental Calculation: |  |  |
| I mentally add and subtract tenths. | I mentally add and subtract tenths, and one digit whole numbers and tenths. | I mentally add and subtract decimals, including a mix of whole numbers and decimals, decimals with different numbers of decimal places, and complements of 1 (e.g.0.83+ $0.17=1$ ) |
| Written Calculation: |  |  |
| I continue to add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. | I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). | I fluently add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). |
| Problem Solving: |  |  |
| I can solve addition and subtraction multi-step problems with appropriate numbers in contexts, deciding which operations and methods to use and why. I solve calculation problems using information from a range of table and charts. |  | I solve addition and subtraction multistep problems with appropriate numbers in contexts, deciding which operations and methods to use and why. I solve calculation problems using information from a range of table and charts. |

