Ellingham C of E Primary School Year 5 Assessment Expectations Mathematics: Calculation 2		
End of Term 1	**End of Term 2**	**End of Term 3**
Calculation: Multiplication and Division		
Mental calculation:		
	I can multiply and divide numbers mentally drawing upon known facts, place value and properties of numbers to support mental calculation with larger numbers and decimals.	I confidently multiply and divide numbers mentally drawing upon known facts, place value and properties of numbers to support mental calculation with larger numbers and decimals.
I can multiply and divide whole numbers and those involving decimals by 10 and 100.	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 and apply in a wider range of puzzles and contexts.
I use multiplication and division as inverses e.g. by multiplying and dividing by powers of ten in scale drawings or by powers of 1000 in converting between units such as kilometres and meters.		I confidently use multiplication and division as inverses e.g. by multiplying and dividing by powers of ten in scale drawings or by powers of 1000 in converting between units such as kilometres and meters.
I am beginning to use and explain the equals sign to indicate equivalence, including in missing number problems (e.g. 2 x 24 = 12 x 4; 33 = 5 x ◊).	I use and explain the equals sign to indicate equivalence, including in missing number problems (e.g. 2 x 24 = 12 x 4; 33 = 5 x ◊).	I confidently use and explain the equals sign to indicate equivalence, including in missing number problems (e.g. 2 x 24 = 12 x 4; 33 = 5 x ◊).
I sometimes solve problems involving multiplication and division including using their knowledge of factors and multiples.	I solve problems involving multiplication and division including using my knowledge of factors and multiples, squares and cubes.	I solve more complex problems involving multiplication and division including using my knowledge of factors and multiples, squares, cubes and primes.
Written calculation:		
I multiply numbers up to 4 digits by a one digit number using a formal written method, including short multiplication.	I multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including short multiplication and long multiplication for two-digit numbers.	I fluently multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including short multiplication and long multiplication for two-digit numbers.
I am beginning to divide numbers up to 4 digits by a one-digit number using the formal written method of short division and start to interpret remainders appropriately for the context as fractions, as decimals or by rounding.	I 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 as fractions, as decimals or by rounding.	I fluently divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for a wide range of contexts as fractions, as decimals or by rounding.
Problem Solving:		
I solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	I solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. I solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	I solve more complex problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. I solve more complex problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.