Maths Multiplication and Division Progression at Meanwood C of E Primary School

CURRICULUM SUBJECT:	Maths Multiplication and Division	SUBJECT LEADS:	Catherine Bowie
What are the Y6 end of school end goals?	To have a solid understanding of number and be confident using number in everyday situations To use basic maths to solve problems that involve application and thought To not fear maths and to see it as a gateway to improving understanding of the wider world To be able to use a range of strategies which provide recognised, reasonable solutions To have a can-do attitude to maths and be resilient when faced with difficult challenges		

How is the curriculum at Meanwood C of E Primary School sequenced towards these end points?

Multiplication and Division

Recall/Use

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• Explore and represent patterns with numbers to 10 including evens and odds, double facts and how quantities can be distributed evenly **Summer**		• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot **Spring 2**	• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables **Autumn 3** **Spring 1**	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations **Autumn 4**	• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • recognise and use square numbers and cube numbers, and the notation for	• identify common factors, common multiples and prime numbers • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy **Autumn 2**

				Spring 1	squared (^{2}) and cubed (^{3}) **Autumn 3**	
Calculations						
		• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs **Spring 2**	• write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods **Autumn 3** **Spring 1**	• multiply two-digit and three-digit numbers by a one-digit number using formal written layout **Spring 1**	• 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 • multiply and divide numbers mentally drawing upon known facts • 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 • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 **Autumn 3** **Spring 1**	• multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting

						remainders according to the context • perform mental calculations, including with mixed operations and large numbers **Autumn 2**
Solve Problems						
	• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Summer 1**	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts **Spring 2**	• solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects **Spring 1**	• solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects **Spring 1**	• solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates **Autumn 3** **Spring 1**	• solve problems involving addition, subtraction, multiplication and division **Autumn 2**
Combined						
					• solve problems involving	• use their knowledge of the

					addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign **Spring 1**	order of operations to carry out calculations involving the four operations **Autumn 2**