Multiplication and Division Progression: EYFS – Y4

	EYFS	Y1 Block 1 Summer 1	Y2 Block 4 (Aut 2 – Spr 1)	Y3 Block 3 (Aut 2 – Spr 1)	Y4 Block 4 (Aut 2 – Spr 1)
		Number: Multiplication and Division	Number: Multiplication and Division	Number: Multiplication and Division	Number: Multiplication and Division
White Rose Maths Small Steps	Summer term: -Doubling -Sharing and Grouping -Even and Odd	-Count in 10s -Make equal groups -Add equal groups -Make arrays. -Make doubles. -Make equal groups - grouping. -Make equal groups – sharing.	-Recognise equal groups. -Make equal groups. -Add equal groups. -Multiplication sentences using the x symbol. -Multiplication sentences from pictures. -Use arrays. -2 times-table. -5 times-table. -10 times-table Make equal groups – sharing. -Make equal groups – grouping. -Divide by 2. -Odd and even numbers. -Divide by 5. -Divide by 10.	-Multiplication – equal groups. -Multiplying by 3. -Dividing by 3. -The 3 times-table. -Multiplying by 4. -Dividing by 4. -The 4 times-table. -Multiplying by 8. -Dividing by 8. -The 8 times-table. Comparing statements. -Related calculations. - Multiply 2-digits by 1-digit (1). -Multiply 2-digits by 1-digit (2). -Divide 2-digits by 1-digit (1). -Divide 2-digits by 1-digit (2). -Divide 2-digits by 1-digit (3). -Scaling. -How many ways?	-Multiply by 10. -Multiply by 100. -Divide by 10. -Divide by 100. -Multiply by 1 and 0. -Divide by 1 and itself -Multiply and divide by 6. -6 times-table and division facts. -Multiply and divide by 9. -9 times-table and division facts. -Multiply and divide by 7. -7 times-table and division facts 11 and 12 times-table. -Multiply 3 numbers. -Factor pairs. -Efficient multiplication. -Written methods. -Multiply 2-digits by 1 –digit. -Multiply 3-digits by 1-digit. -Divide 2-digits by 1-digit (1). -Divide 2-digits by 1-digit (2). -Correspondence problems.
National Curriculum Link	Numerical Patterns ELG- Explore and represent patterns within numbers up to 10, including evens and odds, <u>double facts and how quantities can be distributed equally.</u>	-Count in multiples of twos, fives and tens. -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.	-Recall and use multiplication and division facts for the 2-, 5- and 10-times tables, including recognising odd and even numbers. -Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. -Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. -Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	-Count from 0 in multiples of 4, 8, 50 and 100. -Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. -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 objectives	-Recall and use multiplication and division facts for multiplication tables up to 12 × 12. -Count in multiples of 6, 7, 9. 25 and 1000. -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 -multiply two-digit and three-digit numbers by a one-digit number using formal written layout -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.
Ready To Progress links WR small steps links		**1NF–2** Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. (Covered in Count in 10s)	**2MD–1** Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. (Covered in Multiplication sentences using the x symbol, Multiplication sentences from pictures, Use arrays, 2 times-table, 5 times-table, 10 times-table) **2MD–2** Relate grouping problems where the number of groups is unknown to multiplication equations with a	**3NF-2** Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. (Covered in 2 times-table, 5 times-table, Divide by 2, Divide by 5, Divide by 10, Multiply by 4, Divide by 4, The 4 times-table, Multiply by 8, Divide by 8, The 8 times-table)	**4NPV-1** Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. (Covered in Multiply by 10, Multiply by 100, Divide by 10, Divide by 100) **4NF-1** Recall multiplication and division facts up to 12 × 12 and recognise products in multiplication tables as multiples of the corresponding number.

| | | | | missing factor, and to division equations (quotitive division). (Covered in Make equal groups – sharing, Make equal groups – grouping, Divide by 2, Divide by 5, Divide by 10) | **3NF–3** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). (Covered in Related calculations, Scaling)

3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division. (Covered in Multiply by 3, Divide by 3, The 3 times-table, Multiply by 4, Divide by 4, The 4 times-table, Multiply by 8, Divide by 8, The 8 times-table, Comparing statements, How many ways?) | (Covered in Multiply by 10, Divide by 10, Multiply and divide by 6, 6 times-table and division facts, The 3 times-table, Multiply and divide by 9, 9 times-table and division facts, Multiply and divide by 7, 7 times-table and division facts, 11- and 12-times tables, multiply 3 numbers, factor pairs).

4NF-2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. (Covered in Divide 2-digits by 1 digit (1), Divide 2-digits by 1 digit (2))

4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) (These strategies are covered within this block, but not as a separate step)

4MD-1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. (Covered in Multiply by 10, Multiply by 100, Divide by 10, Divide by 100)

4MD-2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. (Covered in Multiply by 10, Divide by 10, Multiply and divide by 6, 6 times-table and division facts, The 3 times-table, Multiply and divide by 9, 9 times-table and division facts, Multiply and divide by 7, 7 times-table and division facts, 11 and 12 times-table, Multiply 3 numbers, Factor pairs)

4MD-3 Understand and apply the distributive property of multiplication. (Covered in Efficient multiplication, Written methods)

4NPV-4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts. (This can be addressed here and in Statistics in summer term) |