3 Autumn	Fluency Focus	NC Objectives	Remember (Prior knowledge)	Know (New knowledge)	Mathematics Guidance June 2020 Ready-to-progress criteria
1	Mastering Number Project	recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas.	read and write numbers to at least 100 in numerals and in words recognise the place value of each digit in a two-digit number (tens, ones)	LO: Know how to represent numbers up to 100 LO: Know how to represent a number as a standard and non-standard partition of 10s and 1s, e.g. 39 = 30 + 9, 39 = 20 + 19 LO: Know how many tens and ones represent one hundred, and how to count in hundreds LO: Know how to represent numbers up to 1000 (using place value grid and various manipulatives, in both standard and non-standard e.g. 860 is 8 hundreds and 6 tens, but also 7 hundreds and 16 tens etc) (x 2 lessons)	NPV1, NPV2, NPV3, NPV4

2	Mastering Number Project	recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas. count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	given a number, identify one more and one less compare and order numbers from 0 up to 100; use < > and = signs	LO: Know how to work out and write numbers on a number line up to 1000 LO: Know how to find 1, 10 and 100 more or less than a given number LO: Know how to compare amounts up to 1000 LO: Know how to compare numbers up to 1000 (as both a number and its denomination e.g. 800, or 80 tens, compared to 706, or seven hundreds and 6 ones) (x 2 lessons)	NPV1, NPV2, NPV3, NPV4
3	Mastering Number Project	recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas. count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers	LO: Know how to order numbers up to 1000 LO: Know how to count in 50s LO: Know how to count, add and subtract in multiples of 100 LO: Know how to add and subtract ones to a number made of hundreds, tens and ones (no exchange)	NPV1, NPV2, NPV3, NPV4

4	Mastering Number Project	add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers	LO: Know how to add and subtract ones to a number made of tens and ones (exchange) LO: Know how to add and subtract ones to a number made of hundreds, tens and ones (exchange) LO: Know how to add and subtract tens to a number made of hundreds, tens and ones (no exchange) LO: Know how to add and subtract tens to a number made of hundreds, tens and ones (exchange) LO: Know how to add and subtract hundreds to a number made of hundreds, tens and ones	NF1, AS1, AS2, AS3

5	Mastering Number Project	add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers	LO: Know how to add and subtract tens and ones to a number made of hundreds, tens and ones (no exchange) LO: Know how to add and subtract tens and ones to a number made of hundreds, tens and ones (exchange) (exchange of ones to tens, then tens to hundreds, then both) LO: Know how to add and subtract hundreds, tens and ones to a number made of hundreds, tens and ones (no exchange) LO: Know how to add and subtract hundreds, tens and ones to a number made of hundreds, tens and ones (exchange) (exchange of ones to tens, then tens to hundreds, then both)	AS1, AS2, AS3
6	Mastering Number Project	add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	LO: Know how to add and subtract using a formal written method (X 2 – 3 lessons) LO: know the 8 fact families for a number bond LO: Know how to estimate and check answers	AS1, AS2, AS3

7	Mastering Number Project	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 that 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 objects.	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward / recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	LO: Know the times tables for 2, 5 and 10 LO: Know how to make equal groups by sharing and by grouping, and therefore divide by 2, 5 and 10 LO: Know the times table for 3 (x 2 lessons – first multiply and divide by 3 (through both sharing and grouping), then count in 3s, then multiply 0 x 3 = 0, 1 x 3 = 3, then 3 x 0 = 0, 3 x 1 = 3 etc) LO: Know the times table for 4(x 2 lessons – continue into week 8) – first multiply and divide by 4 (through both sharing and grouping), then count in 4s, then multiply 0 x 4 = 0, 1 x 4 = 4, then 4 x 0 = 0, 4 x 1 = 4 etc)	**MD1**
8	Mastering Number Project	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 that 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 objects	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward / recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	LO: Know the times table for 8 (x 2 lessons – first multiply and divide by 8 (through both sharing and grouping), then count in 8s, then multiply 0 x 8 = 0, 1 x 8 = 8, then 8 x 0 = 0, 8 x 1 = 8 etc) LO: Know how to compare multiplication and division statements LO: Know related multiplication and division calculations (e.g. 6 x 2 = 12, so 60 x 2 = 120)	**MD1**

9	Mastering Number Project	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 that 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 objects		LO: Know how to multiply a number made of tens and ones by a number made of ones, using repeated addition (no exchange, not formal) LO: Know how to multiply a number made of tens and ones by a number made of ones, using repeated addition (exchange, not formal) LO: Know the formal method for multiplication	**MD1**

10	Mastering Number Project	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 that 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 objects		LO: Know how to divide a number made of tens and ones by a number made of ones, using sharing and grouping (no exchange, not formal) LO: Know how to divide a number made of tens and ones by a number made of ones, using sharing and grouping (exchange, not formal) LO: Know how to divide a number made of tens and ones by a number made of ones, using sharing and grouping, where the answer has a remainder (no exchange, not formal) LO: Know how to solve scaling problems LO: Know how to work systematically	**MD1**
11	Time for assessments & consolidation				
12					