Laceyfield Mastery Maths Medium Term Plan – Year 2

'Effective mastery curricula in mathematics are designed in relatively small carefully sequenced steps, which must each be mastered before pupils move to the next stage. Fundamental skills and knowledge are secured first.This often entails focusing on curriculum content in considerable depth at early stages.' (NCETM, 2014)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number: Place Value** **NP1** Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning. **NP2** Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.	**Number: Place Value** **NP1** Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning. **NP2** Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10	**Number: Place Value** **NP1** Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning. **NP2** Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10	**Number: 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division).	**Cyclical Consolidation**

Spring	**Measurement: Money**	**Measurement: Money**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Geometry: Properties of shape**	**Geometry: Properties of shape WB:**	**Number: Addition and subtraction**	**Number: Addition and subtraction**	**Number: Addition and subtraction**	Cyclical Consolidation
	NP1 *Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning.* ***NP2*** *Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.*	***NP1*** *Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning.* ***NP2*** *Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.* ***AS1*** *Add and subtract across 10* ***AS2*** *Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".* ***AS3*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number* ***AS4*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.*	***MD1*** *Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.* ***MD2*** *Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).*	***MD1*** *Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.* ***MD2*** *Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).*	***MD1*** *Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.* ***MD2*** *Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).*	***MD1*** *Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.* ***MD2*** *Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).*	***G1*** *Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.*	***G1*** *Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.*	***NF1*** *Secure fluency in addition and subtraction facts within 10, through continued practice.* ***AS1*** *Add and subtract across 10* ***AS2*** *Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".* ***AS3*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number* ***AS4*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.*	***NF1*** *Secure fluency in addition and subtraction facts within 10, through continued practice.* ***AS1*** *Add and subtract across 10* ***AS2*** *Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".* ***AS3*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number* ***AS4*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.*	***NF1*** *Secure fluency in addition and subtraction facts within 10, through continued practice.* ***AS1*** *Add and subtract across 10* ***AS2*** *Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".* ***AS3*** *Add and subtract within 100 by applying related one digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number* ***AS4*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.*	

Summer	**Number: place value** ***NP1*** *Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and nonstandard partitioning.* ***NP2*** *Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10*	**Number: Addition and subtraction** ***NF1*** *Secure fluency in addition and subtraction facts within 10, through continued practice.* ***AS1*** *Add and subtract across 10* ***AS2*** *Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".* ***AS3*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number* ***AS4*** *Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.*	**Number: Multiplication and division** ***MD1*** *Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.* ***MD2*** *Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).*	**Geometry: Position and direction**	**Geometry: Position and direction**	**Measurement: Length and Height**	**Measurement: Length and Height**	**Number: Fractions**	**Number: Fractions**	**Measurement: Time**	**Measurement: Time**	**Cyclical Consolidation**

- **<u>All statistics and measurement objectives</u>** are taught in an afternoon as part of the project
- Each unit has longer in order to go into greater depth. However, there is still enough time to revisit addition, subtraction, multiplication, division and fractions in summer term. Therefore, children are still receiving the cyclical approach
- Follow whiterose small steps for each unit
- In the summer term when you revisit, recap as necessary, build on previous skills, deepen knowledge
- Use NCETM spines, whiterose, I see reasoning, Classroom Secrets and Primary Stars for tailored resources
- Time is drip fed throughout the year, as well as teaching the unit block
- Quick maths is constantly used to revisit areas
- Green areas highlight RTP focus for each week
- Bespoke plans have been adapted to support COVID recovery

Strand one - Number			
Number and place value objectives	**Addition/ subtraction objectives**	**Multiplication / division objectives**	**Fractions**
count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward recognise the place value of each digit in a two-digit number (tens, ones) identify, represent and estimate numbers using different representations, including the number line compare and order numbers from 0 up to 100; use q, G and = signs read and write numbers to at least 100 in numerals and in words use place value and number facts to solve problems.	solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 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 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	recognise, find, name and write fractions 1/3 ,1/4 2/4 and 3/4 of a length, shape, set of objects or quantity write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Strand 2 - Measure	Strand 3 - Geometry		Strand 4 - Statistics
Measurement objectives	**Properties of shapes objectives**	**Position and direction objectives**	**Statistics objectives**
choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels compare and order lengths, mass, volume/capacity and record the results using G, q and = recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day.	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] compare and sort common 2-D and 3-D shapes and everyday objects.	order and arrange combinations of mathematical objects in patterns and sequences use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	interpret and construct simple pictograms, tally charts, block diagrams and simple tables ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ask and answer questions about totalling and comparing categorical data.