Laceyfield Mastery Maths Medium Term Plan – Year 4

'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	Number: place value	Number: place value	Number: Place value	Number: Addition and subtraction	Number: Addition and subtraction	Number: Addition and subtraction	Measure: Perimeter and length	Measure: Perimeter and length	Number: Multiplication and division	Number: Multiplication and division	Cyclical Consolidation
Spring	Number: Multiplication and division	Number: Multiplication and division	Number: Multiplication and division	Number: Multiplication and division	Measure: Area	Number: Fractions	Number: Fractions	Number: Fractions	Number: Fractions	Number: Decimals	Number: Decimals	Cyclical Consolidation
Summer	Number: Fractions /Decimals	Number: Fractions/ Decimals	Measure: Money	Measure: Money	Measure: Time	Measure: Time	Geometry: Properties of shape	Geometry: Properties of shape	Geometry: Position and direction	Number: Addition and subtraction	Number: Multiplication and division	Cyclical Consolidation

- All statistics objectives 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 for resources/powerpoints
- Time is drip fed throughout the year, as well as teaching the unit block
- Quick maths is constantly used to revisit areas

- Ready to progress document is used to inform planning

- Bespoke plans have been adapted to support COVID recovery

Strand one - Number				Strand 2 - Measure	Strand 3 - Geometry		Strand 4 - Statistics
Number and place value objectives	Addition/ subtraction objectives	Multiplication / division objectives	Fractions (including decimals)	Measurement objectives	Properties of shapes objectives	Position and direction objectives	Statistics objectives
count in multiples of 6, 7, 9, 25 and 1000

find 1000 more or less than a given number

count backwards through zero to include negative numbers

recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

order and compare numbers beyond 1000

identify, represent and estimate numbers using different representations | add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

estimate and use inverse operations to check answers to a calculation

solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. | 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

multiply two-digit and three-digit numbers by a one-digit number using formal written layout | recognise and show, using diagrams, families of common equivalent fractions

count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a | Convert between different units of measure [for example, kilometre to metre; hour to minute]

measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

find the area of rectilinear shapes by counting squares

estimate, compare and calculate different measures, including money in pounds and pence

read, write and convert time between analogue and digital 12- and | compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

identify acute and obtuse angles and compare and order angles up to two right angles by size

identify lines of symmetry in 2-D shapes presented in different orientations

complete a simple symmetric figure with respect to a specific line of symmetry. | describe positions on a 2-D grid as coordinates in the first quadrant

describe movements between positions as translations of a given unit to the left/right and up/down

plot specified points and draw sides to complete a given polygon. | interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.

solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. |

round any number to the nearest 10, 100 or 1000 solve number and practical problems that involve all of the above and with increasingly large positive numbers read Roman numerals to 100 (I to C) and know that overtime, the numeral system changed to include the concept of zero and place value.		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.	whole number add and subtract fractions with the same denominator recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to ¼, ½, ¾ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths round decimals with one decimal place to the nearest whole number compare numbers with the same number of	24-hour clocks solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.			

			decimal places up to two decimal places solve simple measure and money problems involving fractions and decimals to two decimal places				