



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)

	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 5</u>	<u>Week 6</u>	<u>Week 7</u>	<u>Week 8</u>	<u>Week 9</u>	<u>Week 10</u>	<u>Week 11</u>	<u>Week 12</u>
<u>Autumn</u>	Place value	Place value	Place value	Place value	Addition and subtraction	Addition and subtraction	Addition and subtraction	Addition and subtraction	Addition and subtraction	Money	Money	Consolidation
<u>Spring</u>	Multiplication and division	Multiplication and division	Multiplication and division	Multiplication and division	Multiplication and division	Fractions	Fractions	Fractions	Length and height	Length and height	Mass, capacity and temperature	Mass, capacity and temperature
<u>Summer</u>	Statistics	Statistics	Shape	Shape	Shape	Position and direction	Position and direction	Problem solving	Problem solving	Time	Time	Consolidation

- **All statistics and measurement objectives** are taught in an afternoon as part of the project
- Fractions and shape have been adapted from the White Rose LTP to allow for coverage and consolidation of fractions before the SATs.
- Each unit has been planned for mastery teaching 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 - odds and evens, shape, time etc.

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	solve problems with addition and subtraction: <ul style="list-style-type: none"> • 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 multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity
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	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs	write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$
compare and order numbers from 0 up to 100; use $<$, $>$ and = signs			
read and write numbers to at least 100 in numerals and in words	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> • a two-digit number and ones • a two-digit number and tens • two two-digit numbers • adding three one-digit numbers 	show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	
use place value and number facts to solve problems.			
	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from 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 and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.		

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 ($^{\circ}$ C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	order and arrange combinations of mathematical objects in patterns and sequences	interpret and construct simple pictograms, tally charts, block diagrams and simple tables
compare and order lengths, mass, volume/capacity and record the results using $<$, $>$ and =	identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	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).	ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]		ask and answer questions about totalling and comparing categorical data.
find different combinations of coins that equal the same amounts of money	compare and sort common 2-D and 3-D shapes and everyday objects.		
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.			