

**Year 3 and 4 Numeracy Long term map Year 2021 – 2022 – Updated December 2021**

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Autumn (7+7)</b>	Settling in to new class	Number: Place Value (6 weeks)  Multiplication taught weekly through Terror tables and TTRockstars						Addition and Subtraction (7 weeks)  Multiplication taught weekly through Terror tables and TTRockstars						
<b>Spring (6+7)</b>	Revision of Addition and Subtraction method (1 week)	Multiplication and Division – Mental (3 weeks)			Multiplication and Division Written (4 weeks)			Fractions Year 3 and 4  Decimals Year 4 (5 weeks)						
<b>Summer (5+7)</b>	Money (2 weeks)  (including use of column method for add and subtract)		Length Perimeter and Area (2 weeks)  (including use of multiplication column method)		Shape (2 weeks)	Position and Direction Year 4 work (for all)	Time (2 weeks)		Mass and Capacity Year 3 work (for all)	Statistics	Revision week			

\*Please note that these plans may change due to the speed and coverage needed for particular groups or children.

Objectives breakdown below - Year 3 Year 4

**Autumn term**

Number- Place Value	Number – Addition and Subtraction	Number – Multiplication and Division
<p>Read and write numbers up to 1000 in numerals and in words.</p> <p>Identify, represent and estimate numbers using different representations.</p> <p>Find 10 or 100 more or less than a given number. <b>Find 1000 more or less than a given number.</b></p> <p>Recognise the place value of each digit in a 3 digit number. <b>Recognise the place value of each digit in a 4 digit number.</b></p> <p>Order and compare numbers to 1000. <b>Order and compare numbers beyond 1000.</b></p> <p>Count from 0 in multiples of 50 and 100 <b>Count in multiples of 25 and 1000</b></p> <p>Solve number problems and practical problems involving these ideas. <b>Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</b></p> <p><b>Count backwards through zero to include negative numbers.</b></p> <p><b>Round any number to the nearest 10, 100 or 1000</b></p> <p><b>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</b></p>	<p>Add and subtract numbers mentally, including: a three digit number and ones; a three-digit number and tens; a three digit number and hundreds.</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. <b>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</b></p> <p>Estimate the answer to a calculation and use inverse operations to check answers. <b>Estimate and use inverse operations to check answers to a calculation.</b></p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. <b>Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.</b></p>	<p>Count from 0 in multiples of 4 and 8 <b>Count in multiples of 6, 7 and 9</b></p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. <b>Recall and use multiplication and division facts for multiplication tables up to 12 × 12.</b></p> <p><u>Write and calculate mathematical statements for multiplication and division using the multiplication tables they know</u>, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</p> <p><b>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.</b></p> <p><u>Solve problems, including missing number problems, involving multiplication and division</u>, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.</p> <p><b>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</b></p> <p><u>Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit</u>, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</p>

**Spring term**

<b>Number – multiplication and division</b>	<b>Fractions</b>	<b>Fractions and Decimals</b>
<p>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.</p> <p><b>Multiply two digit and three digit numbers by a one digit number using formal written layout.</b></p> <p>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.</p> <p><b>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.</b></p> <p><b>Recognise and use factor pairs and commutativity in mental calculations.</b></p>	<p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p> <p>Compare and order unit fractions, and fractions with the same denominators.</p> <p>Solve problems that involve all of the above.</p> <p><b>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.</b></p> <p>Recognise and show, using diagrams, equivalent fractions with small denominators.</p> <p><b>Recognise and show, using diagrams, families of common equivalent fractions.</b></p> <p>Add and subtract fractions with the same denominator within one whole.</p> <p><b>Add and subtract fractions with the same denominator.</b></p>	<p>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</p> <p><b>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</b></p> <p><b>Recognise and write decimal equivalents of any number of tenths or hundredths.</b></p> <p><b>Recognise and write decimal equivalents to a quarter, half and three quarters</b></p> <p><b>Round decimals with one decimal place to the nearest whole number.</b></p> <p><b>Compare numbers with the same number of decimal places up to two decimal places.</b></p>

**Summer term**

Measurement: Money	Geometry: Properties of Shapes	Measurement: Time	Measurement: volume and capacity (Y3)	Co-ordinates (Y4)	Statistics	Measurement – Length, Perimeter and Area
<p>Add and subtract amounts of money to give change using both £ and p in practical contexts.</p> <p><b>Estimate, compare and calculate different measures, including money in pounds and pence.</b></p> <p><b>Solve simple measure and money problems involving fractions and decimals to two decimal places.</b></p>	<p>Recognise angles as a property of shape or a description of a turn.</p> <p>Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.</p> <p><b>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</b></p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p> <p><b>Identify lines of symmetry in 2D shapes presented in different orientations.</b></p> <p><b>Complete a simple symmetric figure with respect to a specific line of symmetry.</b></p>	<p>Tell and write the time from an analogue clock, including using Roman numerals and 12-hour and 24-hour clocks.</p> <p><b>Read, write &amp; convert time between analogue and digital 12 and 24 hour clocks.</b></p> <p>Estimate and read time with increasing accuracy to the nearest minute.</p> <p>Record and compare time in terms of seconds, minutes and hours.</p> <p><b>Convert between different units of measure eg hour to minute.</b></p> <p>Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year.</p> <p><b>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</b></p>	<p>Measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml).</p>	<p><b>Describe positions on a 2D grid as coordinates in the first quadrant.</b></p> <p><b>Describe movements between positions as translations of a given unit to the left/ right and up/ down.</b></p> <p><b>Plot specified points and draw sides to complete a given polygon.</b></p>	<p>Interpret and present data using bar charts, pictograms and tables.</p> <p><b>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</b></p> <p>Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.</p> <p><b>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</b></p>	<p>Measure, compare, add and subtract: lengths (m/cm/mm).</p> <p>Measure the perimeter of simple 2D shapes. <b>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</b></p> <p>Continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed and simple equivalents of mixed units.</p> <p><b>Convert between different units of measure eg kilometre to metre.</b></p> <p><b>Find the area of rectilinear shapes by counting squares.</b></p>

	<p>Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.</p> <p><b>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</b></p>	<p>Compare durations of events (for example to calculate the time taken by particular events or tasks).</p>				
--	--	---	--	--	--	--