

Maths medium term planning document

Teagues Bridge Primary school

2021 – Year 2



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This document is to be used in conjunction with the long-term planning document for each year group. It is also supported by the CLIC maths program providing teaching and consolidation of mental strategies for mathematics and the white rose small steps for teaching sequences. Weeks are a guideline and should be adapted for the needs of the children. Time for consolidation is designed for recapping of previous units to ensure learning is committed to the long-term memory. This can also be used to teach areas of misconceptions.

Year 2 : Autumn term

Resources including Nrich, White Rose and cross curricular	Specific Manipulatives	Non-negotiable end points	Mathematical aspect	Curriculum statements
		<p>Knows the properties of two digit numbers.</p> <p>Knows that counting can be done in varying step sizes.</p>	<p>Number and place value: counting, reading and writing 2-digit numbers, place value</p>	<ul style="list-style-type: none"> • To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. • To recognise the place value of each digit in a two-digit number (tens, ones). • To identify, represent and estimate numbers using different representations, including the number line. • To compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs. • To read and write numbers to at least 100 in numerals and in words. • To use place value and number facts to solve problems.
		<p>Knows number bonds to 20.</p>	<p>Addition and subtraction:</p>	<ul style="list-style-type: none"> • To solve problems with addition and subtraction:

		<p>Knows efficient strategies for adding and subtracting for up to two 2-digit numbers.</p> <p>Knows that addition is commutative.</p>		<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. • To recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. • To add and subtract 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. • To show that addition can be done in any order (commutative) and subtraction cannot. • To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
		<p>Knows how to find totals and equivalent amounts in money using notes and coins.</p>	<p>Measurement : Money</p>	<ul style="list-style-type: none"> • To recognise and use the symbols for pounds and pence; combine amounts to make a particular value • To find different combinations of coins that equal the same amounts of money • To solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

		<p>Knows the 2s, 5s and 10s times tables.</p> <p>Uses arrays to represent multiplication and division facts.</p> <p>Knows the operations of multiplication (repeated addition) and division (equal groups of).</p> <p>Knows that multiplication is commutative.</p>	<p>Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts</p>	<ul style="list-style-type: none"> • To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. • To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs. • To recognise and use the inverse relationship between multiplication and division in calculations. • To show that multiplication of two numbers can be done in any order • (commutative) and division for one number by another cannot. • To solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.

Year 2 Spring Term

Resources including Nrich, White Rose and cross curricular	Specific Manipulatives	Non-negotiable end points	Mathematical aspect	Curriculum statements
		<p>Knows the operations of multiplication (repeated addition) and division (equal groups of).</p> <p>Knows that multiplication is commutative.</p>	<p>Multiplication and division: repeated addition equal groups of</p>	<ul style="list-style-type: none"> • To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. • To calculate mathematical statements for multiplication and division within the multiplication tables and write them using multiplication, division and equals signs. • To recognise and use the inverse relationship between multiplication and division in calculations. • To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. • To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
		<p>Knows how data is represented and read.</p>	<p>Statistics: solving problems that</p>	<ul style="list-style-type: none"> • To interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

			involve collecting data in tallies, tables and pictograms	<ul style="list-style-type: none"> To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. To ask and answer questions about totalling and compare categorical data.
		<p>Know the mathematical names and properties of 2d and 3d shapes.</p> <p>Knows symmetry is reflection in a vertical line.</p> <p>Knows how to sort and match shapes.</p>	Geometry: properties of shape, symmetry	<ul style="list-style-type: none"> To identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line. To identify and describe the properties of 3D shapes including the number of edges, vertices and faces. To identify 2D shapes on the surface of 3D shapes, for example circle on a cylinder and a triangle on a pyramid. To compare and sort common 2D and 3D shapes and everyday objects.
		Knows that fractions of amounts can be calculated using multiplication and division facts	Fractions: finding fractions of quantities, shapes	<ul style="list-style-type: none"> To recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$.

		<p>Knows simple equivalence in halves and quarters.</p> <p>Knows thirds are three equal parts of a whole.</p>	and sets of objects, equivalence	<ul style="list-style-type: none"> To write simple fractions for example, $1/2$ of 6 = 3 and recognise the equivalence of two quarters and one half.
		<p>Knows the standard units of measure for length and height</p> <p>Knows the relationships between units of measure for length and height</p>	Measurement: Height and length	<ul style="list-style-type: none"> To choose and use appropriate standard units to estimate and measure length/ height in any direction; mass; temperature; volume and capacity to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. To compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$.

Year 2 – Summer term

Resources including Nrich, White Rose and cross curricular	Specific Manipulatives	Non-negotiable end points	Mathematical aspect	Curriculum statements
		Knows how to describe position and movement	Geometry: position and direction, right angles	<ul style="list-style-type: none"> To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in

		using right angles for quarter turns.		terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) and movement in a straight line.
		Knows the operation to use and chooses the efficient method. Knows facts to 100 using multiples of 10. Knows table facts for 2,5 and 10.	Calculation: Problem solving and efficient methods	<ul style="list-style-type: none"> • Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems • Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
		Knows how to read the time to the 5 minute interval. Knows the number of minutes in an hour and hours in a day.	Measurement: Time	<ul style="list-style-type: none"> • To 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
		Knows the relationships between units of measure for length, mass and capacity.	Measurement: length, mass, capacity	<ul style="list-style-type: none"> • To choose and use appropriate standard units to estimate and measure length/ height in any direction; mass; temperature; volume and capacity to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. • To compare and order lengths, mass, volume/capacity and record the results using >, < and =.

		<p>Knows the operation to use and chooses the efficient method.</p> <p>Knows facts to 100 using multiples of 10.</p> <p>Knows table facts for 2,5 and 10.</p>	Investigations	<ul style="list-style-type: none">• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems• Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
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