

## CURRICULUM INTENT: PREP SCHOOL CURRICULUM - MATHS

At North London Prep School we endeavour to teach our children a rich and progressive maths curriculum. By developing a child's ability to solve problems, reason and calculate, we aim to give them the opportunity to further understand the world that surrounds them. Using Power Maths combined with White Rose Maths, we have a cumulative curriculum aligned with the national curriculum that, values the importance of challenge and success for all pupils. Taking a mastery approach, we use all five big ideas in lessons, working on fluency and variation as well as using different representation and structure, pupils develop their mathematical thinking and use all these to help them reason and solve problems. Lessons move in small steps, building on prior knowledge to deepen pupil's understanding of key mathematical concepts as well as mathematical language and enable them to master these. As children move through the curriculum, they learn various strategies to add, subtract, multiply and divide using both mental and written methods. Each lesson, children are able to develop their reasoning skills further through the use of the NLPS Master's Glasses, that give them the opportunity to solve a problem and then either prove they are right, use their prior knowledge to solve a problem, explain how they solved the problem, convince through reasoning that they have found the answer or evaluate their method and explore other methods to solve a problem.

In addition to this, we understand the importance of children having a fluent, accessible, and automatic knowledge of their Times Tables. At NLPS we love our Times Tables! We learn these through song in class as well as Times Table Rockstars, which children can access in school and at home. We have a Tuesday Times Table Challenge, which includes multiple levels that build on our times table knowledge. We also solve word problems, to become Maths Wizards on a weekly basis, giving us an opportunity to practice our reading skills and apply our mathematical knowledge through different representations, we celebrate these through our weekly celebration assemblies.

### Long Term Aim of Mathematics:

By the time our pupils leave Year 6 we aim to ensure that their skills reflect the expectation of the national curriculum, and they will:

- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Will use the different strategies they have learned to manipulate numbers up to 10,000,000.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

## CURRICULUM IMPLEMENTATION: MATHS

	AUTUMN TERM		SPRING TERM		SUMMER TERM		TRIPS AND EVENTS
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
<b>Year 3 Knowledge</b>	<b>Place Value</b> Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	<b>Addition and Subtraction</b> Add and subtract numbers with up to 3 digits using formal written methods of columnar addition	<b>Multiplication and Division</b> Multiply two-digit by one-digit numbers using formal written and mental methods. Solve problems, including missing	<b>Fractions</b> Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing	<b>Fractions</b> Recognise and show equivalent fractions with small denominators. Add and subtract fractions with the	<b>Shape</b> Draw 2D shapes and make 3D shapes. Recognise and describe 3D shapes in different orientations.	NSPCC Number Day  Pi Day

	<p>Recognise the place value of each digit in a 3-digit number.</p> <p>Read, write, and compare numbers up to 1,000 in numerals and in words.</p> <p>Solve number problems.</p>	<p>and subtraction to solve problems.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers.</p>	<p>number problems, involving multiplication and division.</p>	<p>one-digit numbers or quantities by 10.</p> <p>Recognise, use, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p>	<p>same denominator within one whole.</p> <p>Compare and order unit fractions, and fractions with the same denominators.</p>	<p>Recognise angles as a property of shape described as a turn.</p> <p>Identify right angles and identify whether angles are greater than or less than a right angle.</p> <p>Identify horizontal, vertical, pairs of perpendicular and parallel lines.</p>	
	<p><b>Addition and Subtraction</b></p> <p>Add and subtract numbers with up to 3 digits, using mental methods.</p> <p>Use inverse operations to check answers.</p>	<p><b>Multiplication and Division</b></p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p>	<p><b>Length and Perimeter</b></p> <p>Measure, compare, add, and subtract lengths (m/cm/mm).</p> <p>Measure the perimeter of simple 2D shapes.</p>	<p><b>Mass and capacity</b></p> <p>Measure, compare, add and subtract mass (kg/g); volume/capacity (l/ml).</p>	<p><b>Money</b></p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</p>	<p><b>Statistics</b></p> <p>Interpret and present data using bar charts, pictograms, and tables.</p> <p>Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.</p>	
					<p><b>Time</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>With accuracy estimate and read time to the nearest minute using time-specific vocabulary.</p> <p>Compare durations of events in seconds, minutes, and hours.</p>		
<b>Year 3 Skills</b>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p>	<p><b>NSPCC Number Day</b></p> <p><b>Pi Day</b></p>

	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p>Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	
	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., calculating the number of parcels left to deliver.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., grouping flowers into vases.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., Calculating how far a paper airplane travels.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., comparing the masses of fruits.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., comparing times on stopwatches.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples: e.g., constructing 3D shapes using smaller 3D shapes.</p>	
	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.</p>	
<b>Year 4 Knowledge</b>	<p><b>Place Value</b> Count in multiples of 6, 7, 9, 25 and 1,000. Count backwards to negative numbers. Identify, represent, and estimate numbers recognising the place value of each digit in a four-digit number, using different representations. Read Roman numerals to 100. Order and compare numbers beyond 1,000.</p>	<p><b>Area</b> Find the area of rectilinear shapes by counting squares.</p>	<p><b>Multiplication and Division</b> Recognise and use factor pairs in mental calculations.  Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.  Solve problems involving multiplying and adding, including using the distributive law to multiply two-</p>	<p><b>Fractions</b> Recognise and show, using diagrams, families of common equivalent fractions.  Count up and down in hundredths; recognise how hundredths arise through division.  Solve problems involving increasingly harder fractions.</p>	<p><b>Decimals</b> Round decimals with 1 decimal place to the nearest whole number.  Compare numbers with the same number of decimal places up to 2 decimal places.  Solve simple problems involving fractions and decimals to 2 decimal places.</p>	<p><b>Shape</b> 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 2 right angles by size.  Identify lines of symmetry in 2-D shapes presented in</p>	<p><b>NSPCC Number Day</b>  <b>Pi Day</b></p>

<p>Round any number to the nearest 10, 100 or 1,000.</p> <p>Solve number and practical problems with increasingly large positive numbers.</p>		<p>digit numbers by 1 digit.</p>	<p>Add and subtract fractions with the same denominator.</p> <p>Recognise and write decimal equivalents <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math> to <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, <math>\frac{3}{4}</math> and of any number of tenths or hundreds.</p>		<p>different orientations.</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p>	
<p><b>Addition and Subtraction</b></p> <p>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.</p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p><b>Multiplication and Division</b></p> <p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.</p>	<p><b>Length and Perimeter</b></p> <p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</p>	<p><b>Decimals</b></p> <p>Recognise and write decimal equivalents of any number of tenths or hundreds.</p> <p>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.</p>	<p><b>Money</b></p> <p>Estimate, compare and calculate different measures, including money in pounds and pence.</p>	<p><b>Statistics</b></p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p>	
				<p><b>Time</b></p> <p>Read, write and convert time between analogue and digital 12- and 24-hour clocks.</p> <p>Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.</p>	<p><b>Position and Direction</b></p> <p>Describe positions on a 2-D grid as coordinates in the first quadrant.</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down.</p> <p>Plot specified points and draw sides to</p>	

						complete a given polygon.	
<b>Year 4 Skills</b>	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.	<b>NSPCC Number Day</b>  <b>Pi Day</b>
	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating scores in a game.	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., number of slabs needed for a patio.	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating perimeter of a flower bed.	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating slices of pizza.	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., How much change is given.	<b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g. identifying positions on a map.	
	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	
<b>Year 5 Knowledge</b>	<b>Place Value</b> Read, write, order, and compare numbers to at least 1,000,000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any	<b>Multiplication and Division</b> Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers. Know and use the vocabulary of prime	<b>Multiplication and Division</b> Multiply numbers up to 4 digits by a one- or two-digit number using mental methods or a formal written method, including long multiplication for two-digit numbers.	<b>Decimals and Percentages</b> Read and write decimal numbers as fractions. Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.	<b>Shape</b> Identify 3D shapes, including cubes and other cuboids, from 2D representations. Know angles are measured in degrees: estimate and compare acute,	<b>Negative Numbers</b> Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	<b>NSPCC Number Day</b>  <b>Pi Day</b>

<p>given number up to 1,000,000.</p> <p>Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.</p> <p>Solve number problems and practical problems.</p> <p>Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.</p>	<p>numbers, prime factors and composite numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>).</p> <p>Solve problems involving multiplication and division.</p>	<p>Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p>	<p>Read, write, order, compare and solve problems using numbers with up to 3 decimal places.</p> <p>Recognise and understand the per cent symbol (%).</p> <p>Solve problems which require knowing percentage and decimal equivalents</p> $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}.$	<p>obtuse and reflex angles.</p> <p>Draw given angles, and measure them in degrees (°).</p>		
<p><b>Addition and Subtraction</b></p> <p>Add and subtract whole numbers with more than 4 digits, using mental methods and formal written methods.</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and</p>	<p><b>Fractions</b></p> <p>Compare and order fractions whose denominators are all multiples of the same number.</p> <p>Identify, name and write equivalent fractions of a given fraction, represented visually.</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write</p>	<p><b>Fractions</b></p> <p>Add and subtract fractions with the same denominator, and denominators that are multiples of the same number.</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p>	<p><b>Perimeter and Area</b></p> <p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</p> <p>calculate and compare the area of rectangles using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>), and estimate the area of irregular shapes.</p>	<p><b>Position and Direction</b></p> <p>Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</p>	<p><b>Converting Units</b></p> <p>Convert between different units of metric measure.</p> <p>Understand and use approximate equivalences between metric units and common imperial units.</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure.</p>	

	methods to use and why.	mathematical statements.		<p><b>Statistics</b></p> <p>Solve comparison, sum, and difference problems using information presented in a line graph.</p> <p>Complete, read and interpret information in tables, including timetables.</p>	<p><b>Decimals</b></p> <p>Recognise and use thousandths and relate them to tenths, hundredths, and decimal equivalents.</p>	<p><b>Volume</b></p> <p>Estimate volume [for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity.</p>		
<b>Year 5 Skills</b>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b></p> <p>Reading and understanding worded problems.</p> <p>Explaining methods using subject specific language.</p> <p>Using stem sentences when speaking and in written explanations.</p>	<p><b>NSPCC Number Day</b></p> <p><b>Pi Day</b></p>	
	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g., comparing capacities of Olympic stadiums.</p>	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g., calculating how much paint is needed for a room from half full tins of paint.</p>	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g., calculating the capacity of a jar from a fraction.</p>	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g., calculating the perimeter of a football pitch.</p>	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g., reflecting coordinates on a map.</p>	<p><b>SMSC:</b></p> <p>Applying skills to a range of representations</p> <p>Real-life examples e.g. identifying the volume of a glass/ jar.</p>		
	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>	<p><b>Subject Specific Skills:</b></p> <p>Key mathematical terms.</p> <p>Using a variety of methods to solve problems.</p>		
<b>Year 6 Knowledge</b>	<b>Place Value</b>	<b>Multiplication and Division</b>	<b>Ratio and Proportion</b>	<b>Fractions, Decimals and Percentages</b>	<b>Shape</b>	<b>Consolidation</b>	<b>NSPCC Number Day</b>	

<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</p> <p>Round any whole number to a required degree of accuracy.</p> <p>Use negative numbers in context, and calculate intervals across 0.</p> <p>Solve number and practical problems.</p>	<p>Multiply and divide numbers up to 4 digits by a two-digit whole number using formal written methods and interpret remainders as whole number remainders, fractions, or by rounding; check answers using accurate estimation.</p> <p>Perform mental calculations.</p> <p>Identify common factors, common multiples and prime numbers.</p>	<p>Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>	<p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p> <p>Solve problems involving the calculation of percentages and the use of percentages for comparison.</p>	<p>Draw 2-D shapes using given dimensions and angles; finding unknown angles in regular polygons and straight lines.</p> <p>Recognise, describe and build simple 3D shapes, including making nets.</p> <p>Compare and classify geometric shapes based on their properties and sizes.</p> <p>Illustrate and name parts of circles.</p>	<p>Consolidate their numerical and mathematical capability from key stage 2.</p>	<p><b>Pi Day</b></p>
<p><b>Addition and Subtraction</b></p> <p>Use their knowledge of the order of operations to carry out calculations.</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>	<p><b>Fractions</b></p> <p>Use common factors and multiples to simplify fractions.</p> <p>Compare and order fractions, including fractions <math>&gt;1</math>.</p> <p>Add and subtract fractions with different denominators and mixed numbers.</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form.</p> <p>Divide proper fractions by whole numbers.</p>	<p><b>Algebra</b></p> <p>Use simple formulae.</p> <p>Generate and describe linear number sequences.</p> <p>Express missing number problems algebraically.</p> <p>Find pairs of numbers that satisfy an equation with 2 unknowns.</p> <p>Enumerate possibilities of combinations of 2 variables.</p>	<p><b>Area, Perimeter and Volume</b></p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p>Calculate the area of parallelograms and triangles.</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (<math>\text{cm}^3</math>) and cubic metres (<math>\text{m}^3</math>), and other units [for example, <math>\text{mm}^3</math> and <math>\text{km}^3</math>].</p>	<p><b>Position and Direction</b></p> <p>Describe positions on the full coordinate grid (all 4 quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>		



		<p><b>Converting Units</b> Use, read, write and solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.</p> <p>Convert between miles and kilometres.</p>	<p><b>Decimals</b> Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.</p> <p>Identify the value of each digit in numbers given to 3 decimal places.</p> <p>Multiply one-digit numbers with up to 2 decimal places by whole numbers.</p> <p>Use written division methods where the answer has up to 2 decimal places.</p> <p>Solve problems and round answers to specified degrees of accuracy.</p>	<p><b>Statistics</b> Interpret and construct pie charts and line graphs and use these to solve problems.</p> <p>Calculate and interpret the mean as an average.</p>			
<b>Year 6 Skills</b>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>Literacy:</b> Reading and understanding worded problems. Explaining methods using subject specific language. Using stem sentences when speaking and in written explanations.</p>	<p><b>NSPCC Number Day</b></p> <p><b>Pi Day</b></p>
	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., comparing</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating number of points in a game.</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating the</p>	<p><b>SMSC:</b> Applying skills to a range of representations Real-life examples e.g., calculating</p>	<p><b>SMSC:</b> Applying skills to a range of representations</p>	

	temperatures between different locations.	fractions of hay bales for horse feed.		percentage of paper and plastic recycled.	angles to create a frame.		
	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	<b>Subject Specific Skills:</b> Key mathematical terms. Using a variety of methods to solve problems.	

## IMPACT:

We are confident that through learning maths with mastery in mind children will:

- show a quick recall of facts and methods. This includes the recollection of the times table.
- Demonstrate a growth mindset when problems are encountered.
- achieve objectives (expected standard) for their year group.
- have the flexibility and fluidity to move between different contexts and representations of maths.
- recognise relationships and make connections in maths lessons with fluidity.
- Show a high level of pride in the presentation and understanding of the work.

Impact will be measured through:

- Children being able to explain multiple ways of solving problems using the correct mathematical terminology.
- Children choosing the most efficient method to solve problems.
- Their understanding of the relevance and importance of what they are learning in relation to real world concepts.
- Having a positive view of maths due to learning in an environment where maths is promoted as being exciting and enjoyable.
- Maths books showing evidence of a high quality of work, with teaching sequences showing progression of fluency, reasoning and problem solving.
- Tracking of children's attainment through end of topic tests and half-termly assessments.
- Weekly whole school tests for times tables.
- Tracking of pupil progress in Times Tables through teacher access to Times Table Rockstars.