



Maths Long term planning 2022-23

Year 1

Advent 1 6 weeks 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
Number and Place Value (2 weeks 4 days) Count to and across 100, forwards and backwards beginning with 0 or 1 from any given number.	Number and Place Value (3 weeks) Count, read and write numbers to 100 in numerals, Read and write numbers from 1 to 20 in numerals and words.	Number and Place Value (1 week) Given a number, identify one more and one less. Count in multiples of 2, 5 and 10.	Multiplication and division (2 weeks) Solve one step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of teacher.	Number and Place Value (1 week) Identify and represent numbers using objects and pictorial representations, including the number line, and use the language of equal to, more than, less than, fewer, most, least	Multiplication and division (2 weeks) Solve one step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of teacher.
	Addition, subtraction (2 weeks) Represent and use number bonds and related subtraction facts within 10.	Fractions (2 weeks) Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	Addition, subtraction (1 week) Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equal (=) signs.	Fractions (2 weeks) Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	Addition, subtraction (2 weeks) Add and subtract one -digit and two-digit numbers to 20, including 0. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems e.g. $7 = _ + 9$.
Geometry (2 weeks) Recognise and name common 2D shapes.	Assessment week (1 week)	Geometry (1 week) Recognise and name common 2D and 3D shapes.	Assessment week (1 week)	Geometry (2 weeks) Describe position, direction and movement including hole, half, quarter and three quarter turns.	Assessment week (1 week)
Measurement (2 weeks) Recognise and use language related to dates, including days of the week, weeks, months and years.	Measurement (2 weeks) Sequence events in chronological order using language such as before, after, next, first, today, yesterday, tomorrow, morning, afternoon, evening.	Measurement (2 weeks) Measure and begin to record length, height, mass/weight, capacity and volume and time (hours, minutes, seconds)	Measurement (1 week) Compare, describe and solve practical problems for lengths and heights, mass or weight, capacity and volume, time.	Measurement (1 week) Recognise and know the value of different denominations of coins and notes.	Measurement (2 weeks) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
Ongoing topics	Problem solving: Solve problems using number facts and place value Solve problems with addition and subtraction <i>Arithmetic – using all four operations</i> <i>Place value to be included throughout all other topics</i> <i>Estimation and checking through use of inverse operation</i>				



Maths Long term planning 2022-23

Year 2

Advent 1 6 weeks 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
Number and Place Value (2 weeks 4 days)	Multiplication and division (3 weeks)	Number and Place Value (1 week)	Multiplication and division (1 week)	Number and Place Value (1 week)	Multiplication and division (2 weeks)
Recognise the place value of each digit in a two-digit number (tens, ones). Compare and order numbers from 0 up to 100; use < and > and = signs.	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the x and ÷ and = signs.	Count in steps of 2, 3 and 5 from 0, and in tens from any number forwards or backwards. Read and write numbers to at least 100 in numerals and in words.	Show that multiplication of two numbers can be done in any order and division of one number by another cannot.	Identify, represent and estimate numbers using different representations, including the number line. Use place value and number facts to solve problems.	Solve problems involving x and ÷ using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in context.
Addition, subtraction (2 weeks)	Statistics (2 weeks)	Addition, subtraction (2 weeks)	Fractions (2 weeks)	Addition, subtraction (2 weeks)	Fractions (2 weeks)
Add and subtract numbers using concrete objects and pictorial representatives including: A two-digit number and ones, a two-digit number and tens, two two-digit numbers, three one-digit numbers. Recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100.	Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.	Solve problem with addition and subtraction: Using concrete objects and pictorial representatives, including those involving numbers, quantities and measures. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Show the addition of two numbers can be done in any order but subtraction cannot.	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.	Add and subtract numbers mentally including: A two-digit number and ones, a two-digit number and tens, two two-digit numbers, three one-digit numbers. Solve problem with addition and subtraction: applying increased knowledge of mental and written methods.	Write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognize the equivalent of $\frac{2}{4}$ and $\frac{1}{2}$.
Geometry (1 week)	Assessment week (1 week)	Geometry (1 weeks)	Geometry (1 week)	Assessment week (1 week)	Statistics (2 weeks)
Identify and compare the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. Compare and sort common 2D shapes and everyday objects.		Identify 2D shapes on the surface of 3D shapes. Compare and sort common 2D and 3D shapes and everyday objects. Identify and describe the properties of 3D shapes including 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)		Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
Measurement (1 week)	Measurement (2 weeks)	Measurement (2 weeks)	Statistics (1 week)	Measurement (2 weeks)	
Choose and use appropriate standard units to estimate and measure	Find different combinations of coins that equal the same amounts of money.	Compare and sequence intervals of time. Know the number of minutes	Ask and answer questions about totaling and comparing categorical data.	Solve simple problems in a practical context involving	

length/height in any direction (cm/m) mass (g/kg) temperature (oC), capacity (ml/l) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. Compare and order length, mass, volume, capacity and record results using <, >, =.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	in one hour and the number of hours in a day. 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.	addition and subtraction of money of the same unit including giving change.	Measurement (1 week) Solve simple problems in a practical context involving addition and subtraction of money of the same unit including giving change.
Ongoing topics	Problem solving: Solve problems using number facts and place value Solve problems with addition and subtraction Arithmetic – using all four operations Place value to be included throughout all other topics Estimation and checking through use of inverse operation			

	<h2>Maths Long term planning 2022-23</h2>	<h2>Year 3</h2>
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Advent 1 6 weeks 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
Number and Place Value (1 week and 4 days) Read and write numbers up to 1000 in numerals and words. Recognise the place value of each digit in a 3-digit number. Compare and order numbers to 1,000. Count from 0 in multiples of 4, 8, 50 and 100.	Multiplication and division (2 weeks) Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental then progressing to formal written methods.	Number and Place Value (1 week) Find ten or 100 more or less than any given number. Count from 0 in multiples of 4, 8, 50 and 100.	Multiplication and division (2 weeks) Solve problems including missing number problems, involving multiplication and division.	Number and Place Value (1 week) Consolidate number and place value learning. Solve number problems and practical problems involving three ideas. Count from 0 in multiples of 4, 8, 50 and 100.	Multiplication and division (2 weeks) 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 objects.
Addition, subtraction (2 weeks) Add and subtract numbers mentally including: a three digit number and ones; a three digit number and tens, a three digit number and hundreds.	Fractions (3 weeks) Count up and down in tenths, recognize that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognise and show, using diagrams, equivalent fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	Addition, subtraction (2 weeks) Add and subtract numbers with up to three digits using formal written methods of column addition and subtraction. Estimate the answer to a calculation and use the inverse.	Fractions, decimals and percentages (1 week) Compare and order unit fractions, and fractions with the same denominators.	Addition, subtraction (2 week) Solve problems including missing number problems, using number facts, place value, and more complex addition and subtraction.	Fractions, decimals and percentages (2 weeks) Add and subtract fractions with the same denominator within one whole e.g. $5/7$ and $1/7 = 6/7$ Consolidate fractions objectives and solve associated problems.

	Recognise, find and write fractions of a discrete set of objects; unit fractions and non-unit fractions with small denominators.				
	Assessment week (1 week)	Statistics (1 week) Interpret and present data using bar charts, pictograms and tables.	Assessment week (1 week)	Statistics (2 weeks) Solve one step and two step questions using information presented in scaled bar charts and pictograms and tables. E.g. how many more? Fewer?	Assessment week (1 week)
Measurement (3 weeks) Tell and write the time from an analogue clock, including using roman numerals from I to XII, and 12 and 24 hr clocks. Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as O'Clock, a.m, p.m, morning, afternoon, noon and night. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events e.g. calculate the time taken for a task.	Geometry (2 weeks) Recognise 3D shapes in different orientations and describe them. Draw 2D shapes and make 3D shapes using modelling materials.	Measurement (2 weeks) Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Geometry (1 week) Identify right angles, recognizing that two right angles make a half turn, three make three quarters of a turn and four make a full turn. Identify whether angles are greater than or less than a right angle.	Geometry (1 week) Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	Measurement (2 weeks) Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2D shapes
Ongoing topics	Problem solving: Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Begin to use multiplication and division facts for the 6 multiplication table Solve problems that involve fractions Solve problems, including missing number problems for addition, subtraction, multiplication and division Arithmetic – using all four operations Place value to be included throughout all other topics Estimation and checking through use of inverse operation				

	Maths Long term planning 2022-23	Year 4
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Advent 1 6 weeks and 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
Number and Place Value	Multiplication and division (2 weeks)	Number and Place Value	Multiplication and division	Number and Place Value	Multiplication and division

<p>(1 week and 4 days) Recognise the place value of each digit in a four-digit number.</p> <p>Order and compare numbers beyond 1,000.</p> <p>Find 1,000 more or less than a given number.</p> <p>Round any number to the nearest 10, 100 and 1000.</p> <p>Count from 0 in multiples of 4, 8, 50 and 100.</p>	<p>Recognize and use factor pairs and commutativity in mental calculations.</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 three numbers.</p> <p>Recognise and use factor pairs and commutativity in mental calculations.</p>	<p>(1 week) Read roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value.</p> <p>Count from 0 in multiples of 4, 8, 50 and 100.</p>	<p>(2 weeks) 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.</p>	<p>(1 week) Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</p> <p>Count backward through 0 to include negative numbers.</p> <p>Identify, represent and estimate numbers using different representations.</p> <p>Count from 0 in multiples of 4, 8, 50 and 100.</p>	<p>(2 weeks) Multiply two digit and three-digit numbers by a one-digit number using formal written layout.</p>
<p>Addition, subtraction (3 weeks) Add and subtract numbers with up to four digits using the formal written methods of column addition and subtraction where appropriate.</p> <p>Estimate and use inverse operations to check answers to a calculation.</p>	<p>Fractions, decimals and percentages (3 weeks) Recognise and show, using diagrams, families of common equivalent fractions. Recognize and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.</p> <p>Count up and down in hundredths.; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10.</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>Addition, subtraction (2 weeks) Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Fractions, decimals and percentages (2 weeks) Compare numbers with the same number of decimal places up to two decimal places.</p> <p>Round decimals with one decimal place to the nearest whole number.</p> <p>Recognise and write decimal equivalents of any number of tenths or hundredths.</p>	<p>Addition, subtraction (1 week) Consolidation and mastery: Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Assessment week (1 week)</p>
<p>Geometry (1 week) Compare and classify geometric shapes including quadrilaterals and triangles based on their properties and sizes.</p> <p>Identify acute and obtuse angles and compare and order angles.</p>	<p>Assessment week (1 week)</p>	<p>Geometry (1week) Identify lines of symmetry in 2-D shapes, presented in different orientations.</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p>		<p>Geometry (2 week) Describe positions on a 2D 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 complete a given polygon.</p>	<p>Fractions, decimals and percentages (2 weeks) Solve simple measure and money problems involving fractions and decimals to two decimal places.</p> <p>Add and subtract fractions with the same denominator.</p>
<p>Measurement (1 week) Read, write and convert time between analogue and digital, 12 and 24 hr clocks.</p> <p>Convert between different units of measure e.g. minute to hour. Solve problems involving comparing from hours to minutes, minutes to seconds, years to months and weeks to days.</p>	<p>Statistics (2 weeks) Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p>	<p>Measurement (2 weeks) Estimate, compare and calculate different measures including money in £ and p.</p> <p>Convert between different units of measure e.g. km to m</p>	<p>Assessment week (1 week)</p>	<p>Statistics (2 weeks) Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p>	<p>Measurement (2 weeks) Measure and calculate the perimeter of a rectilinear figure in cm and m.</p> <p>Find the area of rectilinear shapes by counting squares.</p>
<p>Ongoing topics</p>	<p>Problem solving: Solve number and practical problems that involve all elements of place value taught and with increasingly large positive numbers.</p>				

<p>Solve problems involving increasingly harder fractions to calculate quantities and fractions to divide quantities including none unit fractions where the answer is a whole number.</p> <p>Recall multiplication and division facts for multiplication tables up to 12 x 12</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure using decimal notation, including scaling.</p> <p>Arithmetic – using all four operations</p> <p>Place value to be included throughout all other topics</p> <p>Estimation and checking through use of inverse operation</p>
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	<h2>Maths Long term planning 2022-23</h2>	<h2>Year 5</h2>
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Advent 1 6 weeks and 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
<p style="text-align: center;">Number and Place Value (2 weeks and 4 days)</p> <p>Count forwards and backwards in steps of powers of 10 from any given number up to 1000000.</p> <p>Read, write, order and compare numbers to at least 1,000000 and determine value of each digit.</p> <p>Round any number up to 1,000000 to the nearest 10, 100, 1000, 10000 and 100,000.</p>	<p style="text-align: center;">Multiplication and division (2 weeks)</p> <p>Multiply and divide numbers mentally, drawing upon known facts.</p> <p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p>	<p style="text-align: center;">Number and Place Value (2 weeks)</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative numbers including through '0'.</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place. (link to Fractions topic).</p> <p>Read roman numerals to 1,000 and recognise years written in roman numerals.</p>	<p style="text-align: center;">Multiplication and division (2 weeks)</p> <p>Multiply numbers up to 4-digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers. Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p>	<p style="text-align: center;">Number and Place Value (1 week)</p> <p>Consolidation of previous terms' objectives.</p> <p>Solve number problems and practical problems that involve all elements of place value.</p>	<p style="text-align: center;">Multiplication and division (2 weeks)</p> <p>Recognise and use squared numbers and cubed numbers and the notation for squared and cubed.</p>
<p style="text-align: center;">Addition, subtraction (2 weeks)</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Add and subtract whole numbers with more than 4 digits including using formal methods (columnar and subtraction).</p>	<p style="text-align: center;">Fractions, decimals and percentages (3 weeks)</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, including tenths and hundredths. Add and subtract fractions with the same denominator</p>	<p style="text-align: center;">Addition, subtraction (2 weeks)</p> <p>Use rounding to check answers to calculations and determine (in context of a problem) levels of accuracy.</p>	<p style="text-align: center;">Fractions, decimals and percentages (1 weeks)</p> <p>Read and write decimal numbers as fractions e.g. 0.69 = 69/100.</p> <p>Recognise and use thousandths and relate to tenths, hundredths and decimal equivalents.</p>	<p style="text-align: center;">Addition, subtraction (1 week)</p> <p>Solve addition and subtraction multi step problems in context, deciding which operations and methods to use and why.</p>	<p style="text-align: center;">Fractions, decimals and percentages (3 weeks)</p> <p>Multiply proper fractions and mixed numbers by whole numbers (supported by materials and diagrams).</p> <p>Recognise the % symbol and understand that % relates to the number of parts per 100.</p>

	<p>and denominators that are multiples of the same number.</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than one as a mixed number e.g. $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$</p>				<p>Write percentages as a fraction with denominator 100 as a decimal fraction e.g. $20\% = 0.2 = 20/100$.</p>
<p>Geometry (1 week)</p> <p>Know angles are measured in degrees, estimate and compare acute, obtuse and reflex angles.</p> <p>Identify angles at a point and one whole turn (total 360o). Identify angles at a point and one whole half turn (total 180o).</p> <p>Identify other multiples of 90o. Measure and draw angles in degrees.</p>	<p>Assessment week (1 week)</p>	<p>Geometry (2 weeks)</p> <p>Identify 3-D shapes including cubes and other cuboids from 2-D representations.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal size and angles.</p>	<p>Assessment week (1 week)</p>	<p>Geometry (2 weeks)</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>Assessment week (1 week)</p>
<p>Statistics (1 week)</p> <p>Complete, read and interpret information in tables, including timetables.</p>	<p>Measurement (2 weeks)</p> <p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</p> <p>Calculate and compare the area of rectangles (including squares) including using standard units, square centimetres and square metres and estimate the area of irregular shapes.</p>		<p>Measurement (1 week)</p> <p>Estimate volume (e.g. using 1cm³ blocks to build cuboids (including cubes) and capacity (e.g. using water).</p> <p>Convert between different units of metric measure 9e.g. km to m; cm to m; cm to mm; g to kg; l to ml)</p>	<p>Statistics (2 weeks)</p> <p>Solve comparison, sum and difference problems using information presented in a line graph.</p>	<p>Measurement (1 week)</p> <p>Understand equivalents between metric units and common imperial units such as inches, pounds and pints.</p>
<p>Ongoing topics</p>	<p>Problem solving:</p> <p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including scaling by simple fractions and problems involving simple rates, ensure understanding of the equals sign and its meaning.</p> <p>Solve problems involving numbers up to 3 decimal places</p> <p>Solve problems which involve knowing percentage and decimal equivalents for $1/2$, $1/4$, $1/5$, $2/5$, $4/5$ and those with a denominator of a multiple of 10 or 25.</p> <p>Solve problems involving graphs, charts and timetables.</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure using decimal notation, including scaling.</p> <p>Arithmetic – using all four operations</p> <p>Place value to be included throughout all other topics</p> <p>Estimation and checking through use of inverse operation</p>				



Maths Long term planning 2022-23

Year 6

Advent 1 6 weeks and 4 days	Advent 2 8 weeks	Lenten 1 6 weeks	Lenten 2 5 weeks	Trinity 1 6 weeks	Trinity 2 7 weeks
<p style="text-align: center;">Number and Place Value (2 weeks 4 days)</p> <p>Count forwards and backwards in steps of powers of 10 from any given number up to 1000000.</p> <p>Read, write, order and compare numbers to at least 1,000000 and determine value of each digit.</p> <p>Round any number up to 1,000000 to the nearest 10, 100, 1000, 10000 and 100,000.</p>	<p style="text-align: center;">Multiplication and division (2.5 weeks)</p> <p>Multiply and divide numbers mentally, drawing upon known facts.</p> <p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p>	<p style="text-align: center;">Number and Place Value (1 week)</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative numbers including through '0'.</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place. (link to Fractions topic).</p> <p>Read roman numerals to 1,000 and recognise years written in roman numerals.</p>	<p style="text-align: center;">Multiplication and division (2 weeks)</p> <p>Multiply numbers up to 4-digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.</p> <p>Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p>	<p style="text-align: center;">Number and Place Value (1 week)</p> <p>Consolidation of previous terms' objectives.</p> <p>Solve number problems and practical problems that involve all elements of place value.</p>	<p style="text-align: center;">Multiplication and division (2 weeks)</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p> <p>Recognise and use squared numbers and cubed numbers and the notation for squared and cubed.</p>
<p style="text-align: center;">Addition, subtraction (1.5 weeks)</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Add and subtract whole numbers with more than 4 digits including using formal methods (columnar and subtraction).</p>	<p style="text-align: center;">Fractions, decimals and percentages (2.5 weeks)</p> <p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</p> <p>Identify the value of each digit in numbers given to three decimal places.</p> <p>Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions.</p>	<p style="text-align: center;">Addition, subtraction (1 week)</p> <p>Use rounding to check answers to calculations and determine (in context of a problem) levels of accuracy.</p>	<p style="text-align: center;">Fractions, decimals and percentages (2 weeks)</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form.</p> <p>Recall and use equivalences between simple fractions, decimals and percentages.</p> <p>Multiply one digit numbers with up to two decimal places by whole numbers.</p> <p>Divide proper fractions by whole numbers.</p>	<p style="text-align: center;">Addition, subtraction (1 week)</p> <p>Solve addition and subtraction multi step problems in context, deciding which operations and methods to use and why.</p>	<p style="text-align: center;">Fractions, decimals and percentages (2 weeks)</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p> <p>Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.</p>
<p style="text-align: center;">Geometry (1.5 weeks)</p> <p>Draw 2-D shapes using given dimensions and angles.</p> <p>Recognise, describe and build simple 3-D shapes, including making nets.</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.</p>	<p style="text-align: center;">Assessment week (1 week)</p>	<p style="text-align: center;">Geometry (2 weeks)</p> <p>Illustrate and name parts of a circle, including radius, diameter and circumference and know that diameter is twice the radius.</p> <p>Describe positions on a full coordinate grid.</p>	<p style="text-align: center;">Measurement (1 week)</p> <p>Recognise when it is possible to use formulae for area and volume of shape.</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres and extending to other units.</p>	<p style="text-align: center;">Algebra (1 week)</p> <p>Use simple formulae, generate and describe linear number sequences. Express missing number problems, algebraically. Find pairs of numbers that satisfy number sentences involving two unknowns. Enumerate all possibilities of combinations of two variables.</p>	<p style="text-align: center;">Statistics (1 week)</p> <p>Interpret and construct pie charts and lone graphs and use these to solve problems.</p>
				SATs Week	

<p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles.</p>		<p>Draw and translate simple shapes on the coordinate plane, and reflect them in an axes.</p>			
<p>Statistics (1 week) Calculate and interpret the mean as an average. Interpret and construct pie charts and lone graphs and use these to solve problems.</p>	<p>Measurement (2 weeks) Use, read, write and convert between standard unity, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa, using decimal notation up to three decimal places. Convert between miles and kilometres. Recognise that shapes with the same areas can have different perimeters and vice versa. Calculate the area of parallelograms and triangles.</p>	<p>Ratio and Proportion (2 weeks) Solve problems involving relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages e.g. of measures and such as 15% of 360 and the use of percentages for comparison.</p>		<p>Geometry (2 weeks) Describe positions on a full coordinate grid. Draw and translate simple shapes on the coordinate plane, and reflect them in an axes.</p>	<p>Measurement (2 weeks) Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p>
<p>Ongoing topics</p>	<p>Problem solving: Solve addition and subtraction multi step problems in context, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division. Solve comparison, sum and difference problems using information presented in graphs and charts. Solve problems which require answers to be rounded to specified degrees of accuracy. Solve problems involving the calculation of percentages. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Place value to be included throughout all other topics Estimation and checking through use of inverse operation</p>				