

Topic		Year 3 maths objectives	Year 4 maths objectives
Autumn Term			
Team building (1 week)	Place value	<ul style="list-style-type: none"> recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 	<ul style="list-style-type: none"> Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). <u>Order and compare numbers beyond 1000.</u>
Romans (4 weeks)	Addition	<ul style="list-style-type: none"> add numbers with up to three digits, using the efficient written methods of columnar addition 	<ul style="list-style-type: none"> Add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate.
	Time and Roman numerals	<ul style="list-style-type: none"> tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute 	<ul style="list-style-type: none"> Read, write and convert time between analogue and digital 12- and 24-hour clocks. 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.
	Data and statistics	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables 	<ul style="list-style-type: none"> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
	Shape	<ul style="list-style-type: none"> Make 3D shapes using modelling materials 	
Electricity (2 weeks)	Multiplication	<ul style="list-style-type: none"> recall and use multiplication 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 and progressing to efficient written methods 	<ul style="list-style-type: none"> Recall multiplication facts for multiplication tables up to 12 x 12. Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. <p>Use place value, known and derived facts to multiply and divide mentally, including:</p> <ul style="list-style-type: none"> multiplying by 0 and 1; dividing by 1;
	Fractions	<ul style="list-style-type: none"> 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 add and subtract fractions with the same denominator within 	<ul style="list-style-type: none"> Add and subtract fractions with the same denominator.

		one whole	
Performance (5 weeks)	Counting and place value	<ul style="list-style-type: none"> Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. Identify, represent and estimate numbers using different 	<ul style="list-style-type: none"> Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 more or less than a given number. Identify, represent and estimate numbers using different representations. Round any number to the nearest 10, 100 or 1000.
	Subtraction	<ul style="list-style-type: none"> Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction 	<ul style="list-style-type: none"> Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate.
	Measures	<ul style="list-style-type: none"> Estimate the answer to a calculation and use inverse operations to check answers. Measure, compare, add and subtract lengths (m/cm/mm); Measure, compare, add and subtract mass (kg/g); Measure, compare, add and subtract volume/capacity (l/ml). 	<ul style="list-style-type: none"> Estimate and use inverse operations to check answers to a calculation. Estimate, compare and calculate different measures
	Fractions	<ul style="list-style-type: none"> 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. Recognise and show, using diagrams, equivalent fractions with small denominators. 	<ul style="list-style-type: none"> Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to 1/4, 1/2, 3/4.
	Angles	<ul style="list-style-type: none"> Recognise angles as a property of shape or a description of a turn. 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. 	<ul style="list-style-type: none"> Identify acute and obtuse angles and compare and order angles up to two right angles by size
Ancient Britain (2 weeks)	Shape and counting (links to history and time)	<ul style="list-style-type: none"> Draw 2-D shapes and make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. 	<ul style="list-style-type: none"> Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Plot specified points and draw sides to complete a given polygon. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.

	Division	<ul style="list-style-type: none"> • <u>Recall and use multiplication and division facts for the 3x table.</u> • <u>Recall and use multiplication and division facts for the 4x table.</u> • <u>Recall and use multiplication and division facts for the 8x table.</u> • <u>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know</u> 	<ul style="list-style-type: none"> • <u>Recall multiplication and division facts for multiplication tables up to 12 x 12.</u>
Values – what matters most (1 weeks)	Time	<ul style="list-style-type: none"> • <u>an analogue clock and 12-hour and 24-hour clocks;</u> • an analogue clock, including using Roman numerals from I to XII. • Estimate and read time with increasing accuracy to the nearest minute. • Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. • Know the number of seconds in a minute and the number of days in each month, year and leap year • Compare durations of events [for example to calculate the time taken by particular events or tasks]. 	<ul style="list-style-type: none"> • Read, write and convert time between analogue and digital 12- and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
Spring Term			
Chocolate (4 weeks)	Counting, rounding, place value	<ul style="list-style-type: none"> • <u>Count from 0 in multiples of 4, 8, 50 and 100</u> • Read and write numbers up to 1000 in numerals and in words. • <u>Solve number problems and practical problems involving these ideas</u> 	<ul style="list-style-type: none"> • <u>Count backwards through zero to include negative numbers.</u> • <u>Round any number to the nearest 10, 100 or 1000.</u> • <u>Round decimals with one decimal place to the nearest whole number.</u> • Solve number and practical problems that involve all of the above and with increasingly large positive numbers.
	Addition and Subtraction	<p>Add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> • <u>a three-digit number and ones;</u> • <u>a three-digit number and tens;</u> • <u>a three-digit number and hundreds.</u> • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. • Estimate the answer to a calculation and use inverse operations to check answers. 	<ul style="list-style-type: none"> • 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 to a calculation. • <u>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</u> •

		<ul style="list-style-type: none"> Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	
	Time	<p>Tell and write the time from:</p> <ul style="list-style-type: none"> <u>an analogue clock and 12-hour and 24-hour clocks;</u> an analogue clock, including using Roman numerals from I to XII. 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 midnight. 	<ul style="list-style-type: none"> Read, write and convert time between analogue and digital 12- and 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
	Fractions	<ul style="list-style-type: none"> Recognise and use fractions as numbers: unit fractions (numerator of 1) and non-unit fractions with small denominators. Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above. 	<ul style="list-style-type: none"> Compare numbers with the same number of decimal places up to two decimal places.
Imaginary worlds (3 weeks)	Multiplication and division	<ul style="list-style-type: none"> <u>Recall and use multiplication and division facts for the 3x table.</u> <u>Recall and use multiplication and division facts for the 4x table.</u> <u>Recall and use multiplication and division facts for the 8x table.</u> <u>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 and progressing to formal written methods.</u> 	<ul style="list-style-type: none"> Recall multiplication and division facts for multiplication tables up to 12 x 12. <p>Use place value, known and derived facts to multiply and divide mentally, including:</p> <ul style="list-style-type: none"> multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Recognise and use factor pairs and commutativity in mental calculations. Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
	Coordinates, movement	<ul style="list-style-type: none"> Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. 	<ul style="list-style-type: none"> <u>Identify lines of symmetry in 2-D shapes presented in different orientations.</u> Complete a simple symmetric figure with respect to a specific line of symmetry.

			<ul style="list-style-type: none"> Describe positions on a 2-D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/right and up/down.
	Word problems and problem solving	<ul style="list-style-type: none"> 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. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	<ul style="list-style-type: none"> 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. <u>Solve simple measure and money problems involving fractions and decimals to two decimal places.</u> <u>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</u>
Famous Artists (3 weeks)	Solving problems with four operations	<ul style="list-style-type: none"> Solve problems, including missing number problems, involving multiplication and division Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Add and subtract amounts of money to give change, using both £ and p in practical contexts. 	<p><u>Solve simple measure and money problems involving fractions and decimals to two decimal places.</u></p> <p>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit</p>
	Perimeter, shape and symmetry	<ul style="list-style-type: none"> Measure the perimeter of simple 2-D shapes. 	<ul style="list-style-type: none"> <u>Identify lines of symmetry in 2-D shapes presented in different orientations.</u> Complete a simple symmetric figure with respect to a specific line of symmetry. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares. <u>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</u>
	Fractions problems	<ul style="list-style-type: none"> <u>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.</u> <u>Recognise, find and write fractions of a discrete set of objects:</u> 	<ul style="list-style-type: none"> Compare numbers with the same number of decimal places up to two decimal places. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions

		<u>unit fractions and non-unit fractions with small denominators.</u> <ul style="list-style-type: none"> Add and subtract fractions with the same denominator within one whole [for example, $5/7 + 1/7 = 6/7$]. Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above. 	<p>where the answer is a whole number.</p> <ul style="list-style-type: none"> Add and subtract fractions with the same denominator. Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $1/4$, $1/2$, $3/4$.
Animals and Humans 2 (2 weeks)	<u>Place value and inverse problems</u>	<u>Solve number problems and practical problems involving these ideas (place value)</u>	<ul style="list-style-type: none"> Solve number and practical problems that involve all of the above (place value) and with increasingly large positive numbers.
	Word problems including money	<ul style="list-style-type: none"> <u>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</u> <u>Measure, compare, add and subtract lengths (m/cm/mm);</u> <u>Measure, compare, add and subtract mass (kg/g);</u> <u>Measure, compare, add and subtract volume/capacity (l/ml).</u> 	<ul style="list-style-type: none"> <u>Convert between different units of measure</u> [for example, kilometre to metre; hour to minute]. 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. Estimate, compare and calculate different measures, including money in pounds and pence.
How does a Christian follow Jesus? (2 weeks)	Fractions	Solve problems that involve all of the above. (fractions)	<ul style="list-style-type: none"> 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.
	Data	<ul style="list-style-type: none"> <u>Interpret and present data using bar charts, pictograms and tables.</u> 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. 	<ul style="list-style-type: none"> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. <u>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</u>
<p>Summer Term</p> <p>Final themes and topics to be decided based on pupil progress during Spring and Autumn terms.</p>			
Inventors and Machines (4 weeks)			

Protecting the environment (7 weeks)			
Bullying (1 weeks)			
Changes (1 weeks)			