

St Gabriel's
Catholic School,
Mathematics
Medium Term
Planning Overviews
From Academic
Year 2014/15

National Curriculum 2014 - These plans reflect the new curriculum but do not apply to year 2 and year 6 until September 2015. Until then, these year groups will continue to be taught according to the previous curriculum. The expectation for Y6 is Level 4 (see below) and the expectation for year 2 is Level 2 (see appendix 1).

Level 4 Mathematics
Algebra
I am beginning to use simple formulae expressed in words.
I can use and interpret co-ordinates in the first quadrant.
Numbers and the number system
I can recognise and describe number patterns.
I can recognise and describe number relationships (e.g. multiple, factor, square)
I can use place value to \times and \div by 10 or 100.
I recognise approximate proportions of a whole and use simple fractions and percentages to describe them.
I can order decimals to 3 decimal places.
I am beginning to understand simple ratio.
Calculating
I can use all four operations mentally.
I quickly recall \times facts up to 10×10 and matching division facts.
I use efficient written methods for $+$, $-$ and short \times and \div .
I can multiply simple decimal by a single digit (e.g. 2.5×3).
I can solve problems with/without a calculator.
I can check my answers to ensure they are reasonable and in context of size or numbers.
Shape, Space and Measure
I can use the properties of 2D and 3D shapes.
I can make a 3D model by linking given faces or edges.
I can draw 2D shapes in different orientations on grids.
I can reflect simple shapes in mirror lines.
I can translate shapes vertically and horizontally.
I can rotate a simple shape around its' centre or a vertex.
I can choose and use appropriate units and instruments.
I interpret with increasing accuracy numbers on a range of measuring instruments.
Handling Data
I can collect and record discrete data.
I can group data into equal class intervals.
I continue to use Venn and Carroll diagrams to sort mathematical information.
I can construct and interpret frequency diagrams and simple line graphs.
I understand and use mode and range to describe sets of data.
Using and Applying Mathematics
I can develop my own strategies for solving problems.

I use my own strategies within maths and when applying maths to practical contexts.

I present my information and results in a clear and organised way.
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I can search for a solution by trying out ideas of my own.
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Aims of the 2014 National Curriculum

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.
- can **solve problems** by **applying** 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.

This document

This document aims to split up the objectives for each year group into terms. Most objectives will be revisited before the end of the year to encourage fluency. Some of the objectives will be taught in a cumulative way, others will simply be revisited with the aim that when children see the same sort of problems, they will apply the correct maths to them.

There are 36 mapped weeks for the delivery of the year groups' objectives. It is important that the order of the units is maintained; however there are 2 flexible weeks (as the academic year is normally 38) that could be used for reinforcement at any point. Each half term also has an assessment and review week built in but again, there is flexibility there and it does not have to be the last week of the term every time.

Teachers complete the plans by adding dates, suggested activities and texts of their own and adjust them as they go along as a result of what happens in the children's learning. They break down the objectives further as necessary on their normal short term (weekly) planning sheets. Remember that the medium term plan is an outline and does not need huge amounts of detail in the suggested activities box.

Medium Term Plan - Year 1 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Counting	<ul style="list-style-type: none"> -To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. -To 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. 		Ten in the bed
		Addition and subtraction to 5 or more (part 1)	<ul style="list-style-type: none"> -To read and write numbers from 1 to 20 in numerals and words. When given a number, identify one more and one less. -To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. -To add and subtract one-digit and two-digit numbers to 20, including zero. 		
		Addition and subtraction to 5 or more (part 2)	<ul style="list-style-type: none"> -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Addition totals to 10	<ul style="list-style-type: none"> -To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. -To represent and use number bonds and related subtraction facts within 20. -To add and subtract one-digit and two-digit numbers to 20 ($9 + 9$, $18 - 9$), including zero. 		
		Properties of shape	<ul style="list-style-type: none"> -To recognise and name common 2D and 3D shapes, including: 2D shapes (rectangles (including squares), circles and triangles) 3D shapes (cuboids (including cubes), pyramids and spheres). 		
		Addition and subtraction to 10	<ul style="list-style-type: none"> -To represent and use number bonds and related subtraction facts within 20. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $x - 7 = 2$ 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 1 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Counting and number order	<ul style="list-style-type: none"> -To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. -To count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens. -To 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. -To read and write numbers from 1 to 20 in numerals and words. 		
		Place value and comparing quantities and numbers	<ul style="list-style-type: none"> -When given a number, identify one more and one less. -To 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. -To read and write numbers from 1 to 20 in numerals and words. 		
		Developing mental strategies for addition	<ul style="list-style-type: none"> -To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. -To represent and use number bonds and related subtraction facts within 20. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Subtraction as difference	<ul style="list-style-type: none"> -To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. -To represent and use number bonds and related subtraction facts within 20. -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Measures	<ul style="list-style-type: none"> -To compare, describe and solve practical problems for: lengths and heights (long/short, longer/shorter, tall/short, double/half) mass or weight (heavy/light, heavier than, lighter than) capacity/volume (full/empty, more than, less than, quarter) time (quicker slower, earlier later). -To recognise and know the value of different denominations of coins and notes. 		
		Addition and subtraction using money	<ul style="list-style-type: none"> -To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. -To represent and use number bonds and related subtraction facts within 20. -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 1 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Counting, reading and writing number patterns	<ul style="list-style-type: none"> -To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. -To count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens. -When given a number identify one more and one less. -To read and write numbers from 1 to 20 in numerals and words. 		
		Doubles and near doubles	<ul style="list-style-type: none"> -To represent and use number bonds and related subtraction facts within 20. -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Grouping and sharing	-To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.		
		Fractions	-To recognise, find and name a half as one of two equal parts of an object, shape or quantity.		
		Measures, including time	<ul style="list-style-type: none"> -To sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. -To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. -To measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds). 		
		Addition and subtraction to 15	<ul style="list-style-type: none"> -To add and subtract one-digit and two-digit numbers to 15, including zero. -To solve one-step problems that involve addition and subtraction, using objects and pictorial representations, and missing number problems. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 1 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Counting and place value	<ul style="list-style-type: none"> -To count, read and write numbers to 100 in numerals, count in different multiples including ones, twos, fives and tens. -When given a number, identify one more and one less. -To 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. 		
		Addition and subtraction beyond totals of 10	<ul style="list-style-type: none"> -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Grouping and sharing	<ul style="list-style-type: none"> -To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 		
		Shape, position and movement	<ul style="list-style-type: none"> -To recognise and name common 2D and 3D shapes, including: 2D shapes (rectangles (including squares), circles and triangles) 3D shapes (cuboids (including cubes), pyramids and spheres). -To describe position, directions and movements, including half, quarter and three- quarter turns. 		
		Measuring and time	<ul style="list-style-type: none"> -To compare, describe and solve practical problems for: lengths and heights (long/short, longer/shorter, tall/short, double/half) mass or weight (heavy/light, heavier than, lighter than) capacity/volume (full/empty, more than, less than, quarter) time (quicker slower, earlier later). - To measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds). -To sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. 		
		Addition and subtraction totals to 20	<ul style="list-style-type: none"> -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 1 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Addition to totals to 10	<ul style="list-style-type: none"> -To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. -To count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens. -To 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. -To read and write numbers from 1 to 20 in numerals and words. 		
		Addition and subtraction to 20	<ul style="list-style-type: none"> -To represent and use number bonds and related subtraction facts within 20. -To add and subtract one-digit and two-digit numbers to 20, including zero. -To solve one-step problems involving addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Fractions	<ul style="list-style-type: none"> -To recognise, find and name a half as one of two equal parts of an object, shape or quantity. -To recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. 		
		Multiplication and division	<ul style="list-style-type: none"> -To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 		
		Measuring	<ul style="list-style-type: none"> -To measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time (hours, minutes, seconds). 		
		Moving and turning	<ul style="list-style-type: none"> - To describe position, directions and movements, including half, quarter and three- quarter turns. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 1 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value	<ul style="list-style-type: none"> - When given a number, identify one more and one less. - To 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. 		
		Addition and subtraction	<ul style="list-style-type: none"> - To add and subtract one-digit and two-digit numbers to 20, including zero. - To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. 		
		Fractions	<ul style="list-style-type: none"> - To recognise, find and name a half as one of two equal parts of an object, shape or quantity. - To recognise, find and name a quarter as one of four equal parts of an object shape or quantity. 		
		Multiplication and division	<ul style="list-style-type: none"> - To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 		
		Time and using standard units	<ul style="list-style-type: none"> - To measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds). - To recognise and use language relating to dates, including days of the week, weeks, months and years. - To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. 		
		Shape, position and movement	<ul style="list-style-type: none"> - To order and arrange combinations of objects and shapes in patterns. - To recognise and name common 2D and 3D shapes, including: 2D shapes (rectangles (including squares), circles and triangles) 3D shapes (cuboids (including cubes), pyramids and spheres). 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: counting, reading and writing 2-digit numbers, place value	<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. 		
		Addition: concrete, visual and number facts	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: 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. 		One is a snail...
		Subtraction: concrete, visual and number facts	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: <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 2-digit number and tens; two two-digit numbers; adding three one-digit numbers. - To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. 		
		Multiplication and division: repeated addition and repeated subtraction	<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. 		
		Geometry: properties of 3D and 2D shape	<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 as the surface of 3D shapes, e.g circle/cylinder and triangle/pyramid. -To compare and sort common 2D and 3D shapes and everyday objects. 		
		Measures: length, mass, capacity, money	<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 $=$. -To recognise and use symbols for pounds and pence; combine amounts to make a 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 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: comparing, ordering two-digit numbers and knowing their place value	<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. 		
		Addition and subtraction: using recall of addition and subtraction facts and mental calculation strategies	<ul style="list-style-type: none"> - To solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures - Applying their increasing knowledge of mental and written methods. -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. 		
		Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<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 (x), division (r) 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. 		
		Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> - To recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. -To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. 	Use manipulatives	
		Geometry: position, direction, motion Measures: time	<ul style="list-style-type: none"> -To order and arrange combinations of mathematical objects in patterns. -To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti - clockwise) and movement in a straight line. - To compare and sequence intervals of time. -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. 		
		Data: solving problems that involve collecting data intallies, tables and pictograms	<ul style="list-style-type: none"> -To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. -To ask and answer simple questions by counting the number of object in each category and sorting the categories by quantity. -To ask and answer questions about totalling and compare categorical data. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: estimating, counting and comparing quantities	<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 2-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. 		
		Addition and subtraction: using recall of addition and subtraction facts and mental calculation strategies	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: 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 2-digit number and tens; two 2-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. 		
		Addition and subtraction: using partitioning and counting on strategies	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: -Using concrete objects and pictorial representations, including those involving numbers, quantities and measures -Applying their increasing knowledge of mental and written methods. -To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. -To show that addition is commutative and subtraction is not. -To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. 		
		Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<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 problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. 		
		Geometry: properties of 3D and 2D shape	<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. 		
		Measures: length, mass, capacity and money	<ul style="list-style-type: none"> -To choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm/mm); mass (kg/g); temperature ($^{\circ}\text{C}$); volume and capacity (litres/ml) 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 $=$. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: estimating, counting, comparing and ordering quantities	<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 2-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. 		
		Addition and subtraction: using mental calculation strategies	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: <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 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. To show that addition is commutative and subtraction is not. - To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. 		
		Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<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 (x), division (÷) and equals (=) signs. -To recognise and use the inverse relationship between multiplication and division in calculations. - To show that multiplication of two numbers is commutative and division isn't. -To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. 		
		Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> -To recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. -To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. 		
		Geometry: position and direction Measures: time	<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 terms of right angles for quarter half and three quarter turns (clockwise and anti-clockwise) and movement in a straight line. -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. 		
		Statistics: solving problems that involve collecting data in tallies, tables and pictograms	<ul style="list-style-type: none"> -To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. - To ask and answer simple questions by counting the number of object in each category and sorting the categories by quantity. -To ask and answer questions about totalling and comparing categorical data. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: estimating, counting, comparing and ordering quantities	<ul style="list-style-type: none"> -To recognise the place value of each digit in a 2-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. 		
		Addition and subtraction: using mental calculation strategies	<ul style="list-style-type: none"> -To solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods. -To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. -To show that addition is commutative and subtraction is not. -To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. 		
		Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<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 (x), division (r) and equals (=) signs. -To recognise and use the inverse relationship between multiplication and division in calculations. - To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. 		
		Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> -To recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. -To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. 		
		Geometry: properties of 3D and 2D shape	<ul style="list-style-type: none"> - To identify and describe the properties of 2D and 3D shapes, including the number of sides, symmetry in a vertical line, 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. -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. 		
		Measures: length, mass (weight), capacity and money	<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 =. -To recognise and use symbols (£) (p): combine amounts to make particular value. -To find different combinations of coins to 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. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 2 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number and place value: estimating, counting, comparing and ordering quantities	<ul style="list-style-type: none"> -To recognise the place value of each digit in a 2-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. 		
		Addition and subtraction: using partitioning and sequencing	<ul style="list-style-type: none"> -To solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods. -To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. -To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. 		
		Fractions: finding fractions of quantities, shapes and sets of objects	<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 (x), division (÷) and equals (=) signs. - To recognise and use the inverse relationship between multiplication and division in calculations. - To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. 		
		Finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> -To recognise, find, name and write fractions $1/3$, $\frac{1}{4}$, $\frac{1}{2}$, $2/4$, $\frac{3}{4}$, -To write simple fractions for example, $1/2$ of 6 = 3 and recognise the equivalence of two quarters and one half. 		
		Geometry: position and direction Measures: time	<ul style="list-style-type: none"> -To order and arrange combinations of mathematical objects in patterns. -To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise) and movement in a straight line. -To compare and sequence intervals of time. -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. 		
		Solving problems by gathering data, representing in tallies, tables, pictograms, block diagrams	<ul style="list-style-type: none"> -To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. -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. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Reading, writing and ordering two- and three-digit numbers	-To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). -To compare and order numbers up to 1000. -To read and write numbers up to 1000 in numerals and in words.		
		Counting and estimating	-To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. -To identify, represent +estimate numbers using different representations.		
		Number facts to 20 and to 100 Addition and Subtraction of 1 and 2-digit numbers	-To add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds. -To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.		
		Multiplication and division facts	-To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -To 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. -To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.		
		Measuring using mm, cm and metres	-To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). -To measure the perimeter of simple 2D shapes.		
		Recognising, describing and making 2D and 3D shapes	-To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy. -To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines.		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Counting and estimating	<p>-To add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds. <p>-To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>		
		Addition and subtraction of two- and three-digit numbers, using a number line and columns	<p>-To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction.</p> <p>-To estimate the answer to a calculation and use inverse operations to check answers.</p> <p>-To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>		
		Multiplication and division: doubling, halving and $TU \times U$	<p>-To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p> <p>-To 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.</p> <p>-To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>		
		Fractions: representing, comparing and ordering unit fractions of shapes and numbers	<p>-To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p> <p>-To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</p> <p>-To compare and order unit fractions, and fractions with the same denominators.</p> <p>-To solve problems involving all of the above.</p>		
		Read and write time to 5 minute intervals	<p>-To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p>-To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight.</p> <p>- To know the number of seconds in a minute and the number of days in each month, year and leap year.</p> <p>- To compare durations of events, for example to calculate the time taken by particular events or tasks.</p>		
		Read, present and interpret pictograms and tables	<p>- To interpret and present data using bar charts, pictograms and tables</p> <p>-To 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.</p>		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number; place value and rounding	<ul style="list-style-type: none"> -To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. -To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). -To compare and order numbers up to 1000. -To identify, represent and estimate numbers using different representations. -To read and write numbers up to 1000 in numerals and in words. -To solve number problems and practical problems involving these ideas. 		
		Use partitioning to add and subtract two-digit numbers	<ul style="list-style-type: none"> -To add and subtract numbers mentally, including: <ul style="list-style-type: none"> • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds. -To estimate the answer to a calculation and use inverse operations to check answers. -To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Multiplication and division: multiplying one-digit numbers by multiples of 10	<ul style="list-style-type: none"> - To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. - To 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. -To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Multiplication and division: practical and informal written methods	<ul style="list-style-type: none"> - To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. - To 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. - To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Measures: adding and subtracting money	<ul style="list-style-type: none"> -To add and subtract amounts of money to give change, using both £ and p in practical contexts. 		
		Recognising and drawing right angles in 2D shapes	<ul style="list-style-type: none"> - To recognise angles as a property of shape and associate angles with turning. - To 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. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Addition and subtraction of two-digit numbers using columns	<ul style="list-style-type: none"> -To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. -To estimate the answer to a calculation and use inverse operations to check answers. -To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Multiplication and division: multiplying by multiples of 10, and dividing with remainders	<ul style="list-style-type: none"> -To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -To 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. - To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Multiplication and division: multiplying and dividing larger numbers	<ul style="list-style-type: none"> -To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -To 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. - To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Measuring using grams and kilograms	<ul style="list-style-type: none"> -To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). 		
		Fractions: representing, comparing and ordering unit and non-unit fractions of shapes and numbers	<ul style="list-style-type: none"> To 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. -To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. - To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. - To recognise and show, using diagrams, equivalent fractions with small denominators. - To compare and order unit fractions, and fractions with the same denominators. - To solve problems involving all of the above. 		
		Read and interpret bar charts, using scales	<ul style="list-style-type: none"> - To interpret and present data using bar charts, pictograms and tables. - To 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. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Read, write and order and round two- and three- digit numbers	<ul style="list-style-type: none"> -To count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number. -To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). -To compare and order numbers up to 1000. -To identify, represent and estimate numbers using different representations. -To read and write numbers up to 1000 in numerals and in words. -To solve number problems and practical problems involving these ideas. 		
		Multiplication and division problems	<ul style="list-style-type: none"> -To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -To 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. -To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Addition and subtraction of three-digit numbers and 1s, 10s and 100s	<p>To add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds. <ul style="list-style-type: none"> -To estimate the answer to a calculation and use inverse operations to check answers. -To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Addition and subtraction of two- and three-digit numbers using columns	<ul style="list-style-type: none"> -To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. -To estimate the answer to a calculation and use inverse operations to check answers. -To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Shape: identifying horizontal, vertical, and curved lines	<ul style="list-style-type: none"> - To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy. - To recognise angles as a property of shape and associate angles with turning. - To 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. -To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines. 		
		Measuring using millilitres and litres	<ul style="list-style-type: none"> -To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 3 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Addition and subtraction of two- and three-digit numbers using and columns	<ul style="list-style-type: none"> -To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. - To estimate the answer to a calculation and use inverse operations to check answers. - To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Multiplication and division problems: written methods	<ul style="list-style-type: none"> -To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. -To 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. -To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Short multiplication and division	<ul style="list-style-type: none"> -To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. - To 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. -To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 		
		Fractions: equivalence, addition and subtraction within 1, finding tenths	<ul style="list-style-type: none"> -To 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. -To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. -To recognise and show, using diagrams, equivalent fractions with small denominators. -To add and subtract fractions with the same denominator within one whole ($\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$). -To solve problems involving all of the above. 		
		Read and write time using 12 and 24 our	<ul style="list-style-type: none"> -To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. - To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight. -To know the number of seconds in a minute and the number of days in each month, year and leap year. -To compare durations of events, for example to calculate the time taken by particular events or tasks. 		
		Construct and interpret bar charts using scales	<ul style="list-style-type: none"> - To interpret and present data using bar charts, pictograms and tables. -To 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. 		
		Addition and subtraction of two- and three-digit numbers using and columns	<ul style="list-style-type: none"> - To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. - To estimate the answer to a calculation and use inverse operations to check answers. - To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number, place value and rounding	<ul style="list-style-type: none"> -To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). -To identify, represent and estimate numbers using different representations. -To order and compare numbers beyond 1000. -To round any number to the nearest 10, 100 or 1000. -To count in multiples of 6, 7, 9, 25, 1000. -To find 1000 more or less than a given number. 		
		Mental addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Multiplication	<ul style="list-style-type: none"> -To recall multiplication facts for multiplication tables up to 12 x 12. -To 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. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as those in which n objects are connected to m objects. 		
		Multiplication and division	<ul style="list-style-type: none"> -To recall multiplication facts for multiplication tables up to 12 x 12. -To 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. 		
		Geometry: properties of shapes	<ul style="list-style-type: none"> -To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. -To identify lines of symmetry in 2D shapes presented in different orientations. -To complete a simple symmetric figure with respect to a specific line of symmetry. 		
		Measures	<ul style="list-style-type: none"> -To convert between different units of measure (for example, kilometre to metre; hour to minute). -To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. -To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. - To estimate, compare and calculate different measures, including money in pounds and pence. 		
		Number, place value and rounding	<ul style="list-style-type: none"> - To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). -To identify, represent and estimate numbers using different representations. -To order and compare numbers beyond 1000. -To round any number to the nearest 10, 100 or 1000. -To count in multiples of 6, 7, 9, 25, 1000. -To find 1000 more or less than a given number. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Mental and written addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Multiplication	<ul style="list-style-type: none"> -To recall multiplication facts for multiplication tables up to 12 x 12. -To 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. -To recognise and use factor pairs and commutativity in mental calculations. -To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Multiplication and division	<ul style="list-style-type: none"> - To recall multiplication facts for multiplication tables up to 12 x 12. -To 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. - To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Fractions	<ul style="list-style-type: none"> -To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. -To 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. -To recognise and show, using diagrams, families of common equivalent fractions. 		
		Geometry	<ul style="list-style-type: none"> -To describe positions on a 2D grid as coordinates in the first quadrant. -To plot specified points and draw sides to complete a given polygon. -To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. -To identify acute and obtuse angles and compare and order angles up to two right angles by size. 		
		Data handling and time	<ul style="list-style-type: none"> -To read, write and convert time between analogue and digital 12- and 24-hour clocks. -To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. - To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. -To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs. 		
		Mental and written addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Number; place value and rounding	<ul style="list-style-type: none"> -To find 1000 more or less than a given number. -To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). -To order and compare numbers beyond 1000. -To identify, represent and estimate numbers using different representations. -To round any number to the nearest 10, 100 or 1000. -To solve number and practical problems that involve all of the above and with increasingly large positive numbers. -To read Roman numerals to 100 (I to C) and understand how, over time, the numeral system changed to include the concept of zero and place value. 		
		Mental and written addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. -To estimate, compare and calculate different measures, including money in pounds and pence. 		
		Mental and written multiplication	<ul style="list-style-type: none"> -To recall multiplication and division facts for multiplication tables up to 12×12. -To 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. -To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Mental and written division	<ul style="list-style-type: none"> -To recall multiplication and division facts for multiplication tables up to 12×12. -To 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. 		
		Fractions	<ul style="list-style-type: none"> -To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. -To 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. -To recognise and show, using diagrams, families of common equivalent fractions. 		
		Fractions and decimals	<ul style="list-style-type: none"> -To recognise and write decimal equivalents of any number of tenths or hundredths. -To recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$ -To 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 units, tenths and hundredths. -To round decimals with one decimal place to the nearest whole number. -To compare numbers with the same number of decimal places up to two decimal places. -To solve simple measure and money problems involving fractions and decimals to two decimal places. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Mental calculation	<ul style="list-style-type: none"> -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. -To recall multiplication and division facts for multiplication tables up to 12×12. -To recognise and use factor pairs and commutativity in mental calculations. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Written addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Time	<ul style="list-style-type: none"> - To read, write and convert time between analogue and digital 12- and 24-hour clocks. -To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. 		
		Written multiplication and division	<ul style="list-style-type: none"> -To recall multiplication and division facts for multiplication tables up to 12×12. -To 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. -To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. - To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Geometry	<ul style="list-style-type: none"> -To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. -To identify acute and obtuse angles and compare and order angles up to two right angles by size. -To describe positions on a 2D grid as coordinates in the first quadrant. -To describe movements between positions as translations of a given unit to the left/right and up/down. -To plot specified points and draw sides to complete a given polygon. 		
		Data handling and measurement	<ul style="list-style-type: none"> -To interpret and present discrete data using bar charts and continuous data using time graphs. -To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs. -To convert between different units of measure (kilometre to metre; hour to minute). -To estimate, compare and calculate different measures, including money in pounds and pence. 		
		Mental calculation	<ul style="list-style-type: none"> -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. - To recall multiplication and division facts for multiplication tables up to 12×12. -To recognise and use factor pairs and commutativity in mental calculations. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Place value ideas	<ul style="list-style-type: none"> -To count in multiples of 6, 7, 9, 25 and 1000. -To find 1000 more or less than a given number. -To count backwards through zero to include negative numbers. -To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). -To order and compare numbers beyond 1000. -To identify, represent and estimate numbers using different representations. -To round any number to the nearest 10, 100 or 1000. -To solve number and practical problems that involve all of the above and with increasingly large positive numbers. 		
		Mental addition and subtraction and measures (use measures as a context for problems)	<ul style="list-style-type: none"> -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. -To estimate, compare and calculate different measures, including money in pounds and pence. 		
		Written addition and subtraction and measures	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Mental and written multiplication and division	<ul style="list-style-type: none"> -To recall multiplication and division facts for multiplication tables up to 12 x 12. -To 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. -To recognise and use factor pairs and commutativity in mental calculations. -To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Fractions	<ul style="list-style-type: none"> -To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. -To 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. -To recognise and show, using diagrams, families of common equivalent fractions. -To add and subtract fractions with the same denominator. 		
		Area and perimeter of rectilinear shapes and capacity	<ul style="list-style-type: none"> -To convert between different units of measure (kilometre to metre; hour to minute). -To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. -To find the area of rectilinear shapes by counting. -To estimate, compare and calculate different measures, including money in pounds and pence. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 4 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Mental calculations	<ul style="list-style-type: none"> -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. -To recall multiplication and division facts for multiplication tables up to 12 x 12. -To recognise and use factor pairs and commutativity in mental calculations. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		Measures	<ul style="list-style-type: none"> -To convert between different units of measure (kilometre to metre; hour to minute). -To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. -To find the area of rectilinear shapes by counting. -To estimate, compare and calculate different measures, including money in pounds and pence. -To read, write and convert time between analogue and digital 12- and 24-hour clocks. -To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. 		
		Written addition and subtraction	<ul style="list-style-type: none"> -To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate. -To estimate and use inverse operations to check answers to a calculation. -To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. 		
		Mental and written multiplication and division	<ul style="list-style-type: none"> -To recall multiplication and division facts for multiplication tables up to 12 x 12. -To 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. -To recognise and use factor pairs and commutativity in mental calculations. -To multiply two-digit and three-digit numbers by a one-digit number using formal written layout. -To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as where n objects are connected to m objects. 		
		2D shape, angles and coordinates	<ul style="list-style-type: none"> -To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. -To identify acute and obtuse angles and compare and order angles up to two right angles by size. -To identify lines of symmetry in 2D shapes presented in different orientations. -To describe positions on a 2D grid as coordinates in the first quadrant. -To describe movements between positions as translations of a given unit to the left/right and up/down. -To plot specified points and draw sides to complete a given polygon. 		
		Statistics	<ul style="list-style-type: none"> -To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. -To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Place value to 1,000,000	<ul style="list-style-type: none"> -To read, write, order and compare numbers at least to 1,000,000 and determine the value of each digit. -To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. 		
		Mental addition and subtraction	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. 		
		Factors of numbers and prime numbers	<ul style="list-style-type: none"> -To identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. -To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. -To solve problems involving multiplication and division where larger numbers are used by decomposing them into factors. -To know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. -To establish whether a number up to 100 is prime and recall prime numbers up to 19. 		
		Using multiplication and division facts	<ul style="list-style-type: none"> -To multiply and divide numbers mentally drawing upon known facts. -To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. -To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 		
		Angles	<ul style="list-style-type: none"> -To know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles -To draw given angles, and measure them in degrees ($^{\circ}$). -To identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°. 		
		Length, perimeter and area	<ul style="list-style-type: none"> -To convert between different units of measure (for example, kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre). -To understand and use equivalences between metric units and common imperial units such as inches, pounds and pints. -To use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. -To measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. -To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Written methods for multiplication	<ul style="list-style-type: none"> -To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. -To multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers. -To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 		
		Divide 4-digit numbers	<ul style="list-style-type: none"> - To divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context. -To multiply and divide numbers mentally drawing upon known facts. -To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 		
		Fractions and decimals: tenths and hundredths	<ul style="list-style-type: none"> -To compare and order fractions whose denominators are all multiples of the same number. -To identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. -To read and write decimal numbers as fractions (for example, $0.71 = \frac{71}{100}$). 		
		Decimals: tenths, hundredths, thousandths	<ul style="list-style-type: none"> -To read, write, order and compare numbers with up to three decimal places. -To read and write decimal numbers as fractions (for example, $0.71 = \frac{71}{100}$). -To round decimals with two decimal places to the nearest whole numbers and to one decimal place. -To recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents. -To solve problems involving number up to three decimal places. 		
		2D and 3D shapes	<ul style="list-style-type: none"> -To distinguish between regular and irregular polygons based on reasoning about equal sides and angles. -To use the properties of rectangles to deduce related facts and find missing lengths and angles. -To identify 3D shapes including cubes and cuboids from 2D representations. 		
		Tables and bar charts	<ul style="list-style-type: none"> -To complete, read and interpret information in tables, including timetables. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Negative numbers, and solving problems involving numbers	<ul style="list-style-type: none"> -To read, write, order and compare numbers at least to 1,000,000 and determine the value of each digit. -To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. -To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero. -To round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. -To solve number and practical problems involving all of the above. 		
		Addition and subtraction of large numbers and money	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. -To solve problems involving numbers up to three decimal places. 		
		Long multiplication, square numbers and cube numbers	<ul style="list-style-type: none"> -To multiply and divide numbers mentally drawing upon known facts. -To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. -To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. -To multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers. -To recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). -To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes. 		
		Adding and subtracting fractions	<ul style="list-style-type: none"> -To recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number: $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$. -To add and subtract fractions with the same denominator and multiples of the same number. 		
		Reflections and translations	<ul style="list-style-type: none"> -To 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. 		
		Mass	<ul style="list-style-type: none"> -To convert between different units of measure (kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre). -To understand and use basic equivalences between metric units and common imperial units such as inches, pounds and pints. -To use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Addition and subtraction: mental and written methods for large numbers	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Multiplication and division: written methods	<ul style="list-style-type: none"> -To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. -To multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers. -To divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context. -To solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. 		
		Calculating with fractions	<ul style="list-style-type: none"> - To recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number: $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$. -To add and subtract fractions with the same denominator and multiples of the same number. -To multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 		
		Percentages	<ul style="list-style-type: none"> -To recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator hundred, and as a decimal fraction. 		
		Capacity	<ul style="list-style-type: none"> -To convert between different units of measure (kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre). -To understand and use basic equivalences between metric units and common imperial units such as inches, pounds and pints. -To estimate volume and capacity To use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling 		
		Line graphs/ comparative graphs	<ul style="list-style-type: none"> -To solve comparison, sum and difference problems using information presented in a line graph. 		
		Addition and subtraction: mental and written methods for large numbers	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Negative numbers and Roman numerals	<ul style="list-style-type: none"> -To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. -To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero. -To round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. -To solve number and practical problems involving all of the above. -To read numerals to 1000 (M) and recognise years written in Roman numerals. 		
		Adding and subtracting large and small numbers	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. -To solve problems involving numbers up to three decimal places. 		
		Long multiplication and division with remainders	<ul style="list-style-type: none"> -To multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers. -To divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context. -To solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. 		
		Working with fractions	<ul style="list-style-type: none"> -To recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number: $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$. -To add and subtract fractions with the same denominator and multiples of the same number. 		
		Diagonals and problems involving angles	<ul style="list-style-type: none"> -To know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles -To draw given angles, and measure them in degrees ($^{\circ}$). -To identify: <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°. -To use the properties of a rectangle to deduce related facts and find missing lengths and angles. -To distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 		
		Negative numbers and Roman numerals	<ul style="list-style-type: none"> -To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. -To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero. -To round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. -To solve number and practical problems involving all of the above. -To read numerals to 1000 (M) and recognise years written in Roman numerals. 		
		Adding and subtracting large and small numbers	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. -To solve problems involving numbers up to three decimal places. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 5 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Addition and subtraction of money	<ul style="list-style-type: none"> -To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction). -To add and subtract numbers mentally with increasingly large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. 		
		Multiplication and division of money	<ul style="list-style-type: none"> -To multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers. -To multiply and divide numbers mentally drawing upon known facts. -To identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. -To solve problems involving multiplication and division where larger numbers are used by decomposing them into factors. -To solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. 		
		Decimals and fractions	<ul style="list-style-type: none"> -To read, write, order and compare numbers with up to three decimal places. -To read and write decimal numbers as fractions (for example, $0.71 = \frac{71}{100}$). -To recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents. -To round decimals with two decimal places to the nearest whole numbers and to one decimal place. 		
		Problems involving percentages	<ul style="list-style-type: none"> -To recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator hundred, and as a decimal fraction. -To solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25. 		
		Perimeter; area and scale drawing	<ul style="list-style-type: none"> -To measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. -To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes. -To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 		
		Using tables, and line graphs	<ul style="list-style-type: none"> -To complete, read and interpret information in tables, including timetables. -To solve comparison, sum and difference problems using information presented in a line graph. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Autumn 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Place value and rounding off	<ul style="list-style-type: none"> -To read, write, order and compare numbers at least to 10,000,000 and determine the value of each digit. -To round any whole number to a required degree of accuracy. -To solve number and practical problems involving all of the above. 		Holes - problem solving
		Mental and written addition and subtraction of large numbers	<ul style="list-style-type: none"> -To perform mental calculations, including with mixed operations and large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. 		
		Multiples, factors and prime numbers	<ul style="list-style-type: none"> -To perform mental calculations, including with mixed operations and large numbers. -To identify common factors, common multiples and prime numbers. -To solve problems involving addition, subtraction, multiplication and division. 		
		Written methods for multiplication and division: HTU x TU and HTU x U	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. -To divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context. -To solve problems involving addition, subtraction, multiplication and division. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Circles and angles	<ul style="list-style-type: none"> -To illustrate and name parts of circles, including radius, diameter and circumference. -To recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. 		
		Units of measure	<ul style="list-style-type: none"> -To solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. -To use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa using decimal notation to three decimal places. -To convert between miles and kilometres. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Autumn 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Written methods for multiplication and division	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. -To divide numbers up to 4 digits by a two-digit whole number using efficient written methods of long division and interpret remainders as whole numbers, remainders, fractions or by rounding as appropriate in the context. 		
		Comparing, ordering and simplifying fractions	<ul style="list-style-type: none"> -To compare and order fractions, including fractions >1. -To use common factors to simplify fractions; use common multiples to express fractions in the same denomination. 		
		Multiplying decimals by 10, 100 and 1000	<ul style="list-style-type: none"> -To identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100, 1000 where the answers are up to three decimal places. -To solve problems which require answers to be rounded to specified degrees of accuracy. 		
		Order of operations	<ul style="list-style-type: none"> - To perform mental calculations, including with mixed operations and large numbers. -To use their knowledge of the order of operations to carry out calculations involving the four operations. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To solve problems involving addition, subtraction, multiplication and division. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		2D and 3D shapes	<ul style="list-style-type: none"> -To draw 2D shapes using given dimensions and angles. -To compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons. -To recognise, describe and build simple 3D shapes, including making nets. 		
		Pie charts	<ul style="list-style-type: none"> -To interpret and construct pie charts and line graphs and use these to solve problems. 		
		Written methods for multiplication and division	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. -To divide numbers up to 4 digits by a two-digit whole number using efficient written methods of long division and interpret remainders as whole numbers, remainders, fractions or by rounding as appropriate in the context. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Spring 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Negative numbers, and solving problems involving numbers	<ul style="list-style-type: none"> -To read, write, order and compare numbers at least to 10,000,000 and determine the value of each digit. -To round any whole number to a required degree of accuracy. -To use negative numbers in context, and calculate intervals across zero. -To solve number and practical problems that involve all of the above. 		
		Mental and written addition and subtraction of decimals and money	<ul style="list-style-type: none"> -To perform mental calculations, including with mixed operations and large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Mental and written multiplication and division	<ul style="list-style-type: none"> -To perform mental calculations, including with mixed operation and large numbers. -To identify common factors, common multiples and prime numbers (Children could practise using mental methods that involve using factors, for example.) -To use their knowledge of the order of operations to carry out calculations involving the four operations. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Calculating with fractions	<ul style="list-style-type: none"> -To add and subtract fractions with different denominators, using the concept of equivalent fractions. - To associate a fraction with division to calculate decimal fraction equivalents (0.375) for a simple fraction ($\frac{3}{8}$). - To multiply simple pairs of proper fractions, writing the answer in its simplest form ($\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$). -To divide proper fractions by whole numbers $\frac{1}{3} \div 2 = \frac{1}{6}$. 		
		Reflections and translations on coordinate axes	<ul style="list-style-type: none"> -To describe positions on the full co-ordinate grid (all four quadrants). -To draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes. 		
		Perimeter; area and volume	<ul style="list-style-type: none"> -To recognise that shapes with the same area can have different perimeters and vice versa. -To calculate the area of parallelograms and triangles. -To recognise when it is necessary to use the formulae for area and volume of shapes. -To calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3) and extending to other units such as mm^3 and km^3. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Spring 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Calculating with large numbers	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. -To divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. -To perform mental calculations, including with mixed operations and large numbers. -To use their knowledge of the order of operations to carry out calculations involving the four operations. -To solve problems involving addition, subtraction, multiplication and division. 		Holes - volume
		Multiplying and dividing decimals	<ul style="list-style-type: none"> -To multiply one-digit numbers with up to two decimal places by whole numbers. -To use written division methods in cases where the answer has up to two decimal places. -To solve problems which require answers to be rounded to specified degrees of accuracy. 		
		Percentages, decimals and fractions	<ul style="list-style-type: none"> -To solve problems involving the calculation of percentages of whole numbers or measures and the use of percentages for comparison. -To recall and use equivalences between simple fractions, decimals and percentages, including different contexts. 		
		Simple formulae	<ul style="list-style-type: none"> -To express missing number problems algebraically. -To use simple formulae expressed in words. -To find pairs of numbers that satisfy number sentences involving two unknowns. -To enumerate all possibilities of combinations of two variables. 		
		Area and volume	<ul style="list-style-type: none"> -To solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places, where appropriate. -To use read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa, using decimal notation to three decimal places. -To calculate the area of parallelograms and triangles. -To recognise when it is necessary to use the formulae for area and volume of shapes. 		
		Line graphs	<ul style="list-style-type: none"> -To interpret and construct pie charts and line graphs and use these to solve problems. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Summer 1

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Problems involving number	<ul style="list-style-type: none"> -To read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. -To round any whole number to a required degree of accuracy. -To use negative numbers in context and calculate intervals across zero. -To solve number and practical problems that involve all the above. 		
		Adding and subtracting large and small numbers	<ul style="list-style-type: none"> -To perform mental calculations, including with mixed operations and large numbers. -To solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Long multiplication and division	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written methods of long multiplication. -To divide numbers up to 4 digits by two digit whole numbers using the efficient written method of long division and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Working with fractions	<ul style="list-style-type: none"> -To add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. -To multiply simple pairs of proper fractions, writing the answer in its simplest form. -To divide proper fractions by whole numbers. 		
		Problems involving percentages, fractions and decimals	<ul style="list-style-type: none"> -To solve problems involving the calculation of percentages of whole numbers or measures and the use of percentages for comparison. -To recall and use equivalences between simple fractions, decimals and percentages including in different contexts. 		
		Ratio and proportion	<ul style="list-style-type: none"> -To solve problems involving the relative size of two quantities where missing values can be found by using integer multiplication and division facts. -To solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. -To solve problems involving similar shapes where the scale factor is known or can be found. 		
		Assess and review	To assess the half-term's work		

Medium Term Plan - Year 6 Summer 2

week	date	Topic	Curriculum Objective	Ideas for activities	Texts/stories to support learning
		Solving problems involving money	<ul style="list-style-type: none"> -To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication. -To divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. -To perform mental calculations, including with mixed operations and large numbers. -To use their knowledge of the order of operations to carry out calculations involving the four operations. -To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. -To solve problems involving addition, subtraction, multiplication and division. -To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
		Number puzzles	<ul style="list-style-type: none"> -To express missing number problems algebraically. -To use simple formulae expressed in words. -To generate and describe linear number sequences. -To find pairs of numbers that satisfy number sentences involving two unknowns. -To enumerate all possibilities of combinations of two variables. 		
		Fractions with different denominators	<ul style="list-style-type: none"> -To multiply simple pairs of proper fractions, writing the answer in its simplest form ($\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$). -To use common factors to simplify fractions; use common multiples to express fractions in the same denomination. -To add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions. 		
		Problems involving percentages and decimals	<ul style="list-style-type: none"> -To solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360 and the use of percentages for comparison. -To recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. 		
		Problems involving measures	<ul style="list-style-type: none"> -To solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate. -To use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a large unit and vice versa, using decimal notation to three decimal places. 		
		Using data	<ul style="list-style-type: none"> -To interpret and construct pie charts and line-graphs and use these to solve problems. -To calculate and interpret the mean as an average. 		
		Assess and review	To assess the half-term's work		

APPENDIX 1

THIS IS THE OLD YEAR 2 CURRICULUM WHICH IS STILL STATUTORY FOR THEM UNTIL SEPTEMBER 2015

A1: Counting, partitioning and calculating. (2 weeks).

- Present solutions to puzzles and problems in an organised way; explain decisions, methods and results in pictorial, spoken or written form, using mathematical language and number sentences
- Read and write two digit and three-digit numbers in figures and words; describe and extend number sequences and recognise odd and even numbers
- Count up to 100 objects by grouping them and counting in tens, fives or twos; explain what each digit in a two-digit number represents, including numbers where 0 is a place holder; partition two digit numbers in different ways, including into multiples of 10 and 1
- Order two-digit numbers and position them on a number line; use the greater than (>) and less than (<) signs
- Estimate a number of objects; round two digit numbers to the nearest 10
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two digit number; use practical and informal written methods to add and subtract two-digit numbers
- Understand that subtraction is the inverse of addition and vice versa; use this to derive and record related addition and subtraction number sentences
- Speak with clarity and intonation when reading and reciting.

B1: Securing number facts, understanding shape (3 weeks)

- Describe patterns and relationships involving numbers or shapes, make predictions and test these with examples
- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Derive and recall all addition and subtraction facts for each number to at least 10, all pairs with totals to 20 and all pairs of multiples of 10 with totals up to 100
- Derive and recall multiplication facts for the 2, 5 and 10 timestables and the related division facts; recognise multiples of 2, 5 and 10
- Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20, and the corresponding halves
- Use knowledge of number facts and operations to estimate and check answers to calculations
- Visualise common 2-D shapes and 3-D solids; identify shapes from pictures of them in different positions and orientations; sort, make and describe shapes, referring to their properties
- Listen to others in class, ask relevant questions and follow instructions.

C1: C Handling data and measures. (2 weeks)

- Follow a line of enquiry; answer questions by choosing and using suitable equipment and selecting, organising and presenting information in lists, tables and simple diagrams
- Answer a question by collecting and recording data in lists and tables; represent the data as block graphs or pictograms to show results; use ICT to organise and present data
- Use lists, tables and diagrams to sort objects; explain choices using appropriate language, including 'not'
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments

- Read the numbered divisions on a scale and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre
- Listen to others in class, ask relevant questions and follow instructions

D1: Calculating, measuring and understanding shape. (2 weeks)

- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two-digit number; use practical and informal written methods to add and subtract two-digit numbers
- Read the numbered divisions on a scale, and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments
- Use units of time (seconds, minutes, hours, days) and know the relationships between them; read the time to the quarter hour; identify time intervals, including those that cross the hour
- Follow and give instructions involving position, direction and movement.
- Listen to others in class, ask relevant questions and follow instructions

E1: Securing number facts, relationships and calculating. (3 weeks).

- Identify and record the information or calculation needed to solve a puzzle or problem; carry out the steps or calculations and check the solution in the context of the problem
- Represent repeated addition and arrays as multiplication, and sharing and repeated subtraction (grouping) as division; use practical and informal written methods and related vocabulary to support multiplication and division, including calculations with remainders
- Use the symbols +, -, x, ÷ and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence (e.g. $\square \div 2 = 6$, $30 - \square = 24$)
- Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20, and the corresponding halves
- Derive and recall multiplication facts for the 2, 5 and 10 timestables and the related division facts; recognise multiples of 2, 5 and 10
- Find one half, one quarter and three quarters of shapes and sets of objects
- Listen to a talk by an adult, remember some specific points and identify what they have learned.

A2: Counting, partitioning and calculating. (2 weeks).

- Present solutions to puzzles and problems in an organised way; explain decisions, methods and results in pictorial, spoken or written form, using mathematical language and number sentences
- Read and write two-digit and three-digit numbers in figures and words; describe and extend number sequences and recognise odd and even numbers
- Count up to 100 objects by grouping them and counting in tens, fives or twos; explain what each digit in a two-digit number represents, including numbers where 0 is a place holder; partition two-digit numbers in different ways, including into multiples of 10 and 1
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two-digit number; use practical and informal written methods to add and subtract two-digit numbers

- Use the symbols + , - , x, ÷ and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence (e.g. $\square \div 2 = 6$, $30 - \square = 24$)
- Speak with clarity and intonation when reading and reciting

B2: Securing number facts, understanding shape (3 weeks)

- Describe patterns and relationships involving numbers or shapes, make predictions and test these with examples
- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Derive and recall all addition and subtraction facts for each number to at least 10, all pairs with totals to 20 and all pairs of multiples of 10 with totals up to 100
- Derive and recall multiplication facts for the 2, 5 and 10 timestables and the related division facts; recognise multiples of 2,5 and 10
- Read and write two-digit and three-digit numbers in figures and words; describe and extend number sequences and recognise odd and even numbers
- Visualise common 2-D shapes and 3-D solids; identify shapes from pictures of them in different positions and orientations; sort, make and describe shapes, referring to their properties
- Identify reflective symmetry in patterns and 2-D shapes and draw lines of symmetry in shapes
- Use language and gesture to support the use of models, diagrams or displays when explaining

C2: Handling data and measures (2 weeks)

- Follow a line of enquiry; answer questions by choosing and using suitable equipment and selecting, organising and presenting information in lists, tables and simple diagrams
- Answer a question by collecting and recording data in lists and tables; represent the data as block graphs or pictograms to show results; use ICT to organise and present data
- Use lists, tables and diagrams to sort objects; explain choices using appropriate language, including 'not'
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments
- Read the numbered divisions on a scale and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre
- Ensure everyone contributes, allocate tasks, consider alternatives and reach agreement

D2: Calculating, measuring and understanding shape. (2 weeks)

- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Add or subtract mentally a one digit number or a multiple of 10 to or from any two-digit number; use practical and informal written methods to add and subtract two-digit numbers
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments
- Read the numbered divisions on a scale and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre

- Use units of time (seconds, minutes, hours, days) and know the relationships between them; read the time to the quarter hour; identify time intervals, including those that cross the hour
- Recognise and use whole, half and quarter turns, both clockwise and anticlockwise; know that a right angle represents a quarter turn
- Follow and give instructions involving position, direction and movement. Listen to others in class, ask relevant questions and follow instructions

E2: Securing number facts, relationships and calculating. (3 weeks)

- Identify and record the information or calculation needed to solve a puzzle or problem; carry out the steps or calculations and check the solution in the context of the problem
- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Represent repeated addition and arrays as multiplication, and sharing and repeated subtraction (grouping) as division; use practical and informal written methods and related vocabulary to support multiplication and division, including calculations with remainders
- Use the symbols +, -, \times , \div and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence (for example $\square \div 2 = 6$, $30 - \square = 24$)
- Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20, and the corresponding halves
- Derive and recall multiplication facts for the 2, 5 and 10 times-tables and the related division facts; recognise multiples of 2, 5 and 10
- Find one half, one quarter and three quarters of shapes and sets of objects
- Listen to a talk by an adult, remember some specific points and identify what they have learned.

A3: Counting, partitioning and calculating. (2 weeks)

- Present solutions to puzzles and problems in an organised way; explain decisions, methods and results in pictorial, spoken or written form, using mathematical language and number sentences
- Read and write two digit and three-digit numbers in figures and words; describe and extend number sequences and recognise odd and even numbers
- Count up to 100 objects by grouping them and counting in tens, fives or twos; explain what each digit in a two-digit number represents, including numbers where 0 is a place holder; partition two-digit numbers in different ways, including into multiples of 10 and 1
- Order two-digit numbers and position them on a number line; use the greater than ($>$) and less than ($<$) signs
- Estimate a number of objects; round two digit numbers to the nearest 10
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two-digit number; use practical and informal written methods to add and subtract two digit numbers
- Understand that subtraction is the inverse of addition and vice versa; use this to derive and record related addition and subtraction number sentences
- Use the symbols +, -, \times , \div and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence (e.g. $\square \div 2 = 6$, $30 - \square = 24$)
- Respond to presentations by describing characters, repeating some highlights and commenting constructively.

B3: Securing number facts, understanding shape. (3 weeks)

- Describe patterns and relationships involving numbers or shapes, make predictions and test these with examples

- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Derive and recall all addition and subtraction facts for each number to at least 10, all pairs with totals to 20 and all pairs of multiples of 10 with totals up to 100
- Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20, and the corresponding halves
- Derive and recall multiplication facts for the 2, 5 and 10 times-tables and the related division facts; recognise multiples of 2, 5 and 10
- Use knowledge of number facts and operations to estimate and check answers to calculations
- Visualise common 2-D shapes and 3-D solids; identify shapes from pictures of them in different positions and orientations; sort, make and describe shapes, referring to their properties
- Tell real or imagined stories (using conventions of familiar story language)

C3: Handling data and measures. (2 weeks).

- Follow a line of enquiry; answer questions by choosing and using suitable equipment and selecting, organising and presenting information in lists, tables and simple diagrams
- Answer a question by collecting and recording data in lists and tables; represent the data as block graphs or pictograms to show results; use ICT to organise and present data
- Use lists, tables and diagrams to sort objects; explain choices using appropriate language, including 'not'
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments
- Read the numbered divisions on a scale, and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre
- Explain their views to others in a small group; decide how to report the group's views to the class

D3: Calculating, measuring and understanding shape. (2weeks)

- Solve problems involving addition, subtraction, multiplication or division in contexts of numbers, measures or pounds and pence
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two-digit number; use practical and informal written methods to add and subtract two-digit numbers
- Estimate, compare and measure lengths, weights and capacities, choosing and using standard units (m, cm, kg, litre) and suitable measuring instruments
- Read the numbered divisions on a scale, and interpret the divisions between them (e.g. on a scale from 0 to 25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered); use a ruler to draw and measure lines to the nearest centimetre
- Use units of time (seconds, minutes, hours, days) and know the relationships between them; read the time to the quarter hour; identify time intervals, including those that cross the hour
- Recognise and use whole, half and quarter turns, both clockwise and anticlockwise; know that a right angle represents a quarter turn
- Listen to others in class, ask relevant questions and follow instructions

E3: Securing number facts, relationships and calculating. (3 weeks).

- Identify and record the information or calculation needed to solve a puzzle or problem; carry out the steps or calculations and check the solution in the context of the problem
- Present solutions to puzzles and problems in an organised way; explain decisions, methods and results in pictorial, spoken or written form, using mathematical language and number sentences
- Represent repeated addition and arrays as multiplication, and sharing and repeated subtraction (grouping) as division; use practical and informal written methods and related vocabulary to support multiplication and division, including calculations with remainders
- Use the symbols +, -, x, ÷ and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence (e.g. $\square \div 2 = 6$, $30 - \square = 24$)
- Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20, and the corresponding halves
- Derive and recall multiplication facts for the 2, 5 and 10 timestables and the related division facts; recognise multiples of 2, 5 and 10
- Find one half, one quarter and three quarters of shapes and sets of objects
- Adopt appropriate roles in small or large groups and consider alternative courses of action