Medium Term Plans for Mathematics: Curriculum 2014 Year 1 and 2

Y1 Block A Term 1 (15 lessons) 1A1	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning **Year 1**
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
 Number and Place Value **Year 1**
• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
• Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
Year 2
• count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward
• recognise the place value of each digit in a two-digit number (tens, ones)
	Addition and subtraction
	• Represent and use number bonds and related subtraction facts within 20
	• Add and subtract one-digit and two-digit numbers to 20, including zero
	
	Measures
	• Compare, describe and solve practical problems for:
	   o Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)
	• Measure and begin to record the following:
	   o Lengths and heights
	• Recognise and know the value of different denominations of coins and notes
	
	Geometry: properties of shapes
	• recognise and name common 2-D and 3-D shapes, including:
	   o 2-D shapes (e.g. rectangles (including squares), circles and triangles)
		Addition and subtraction
		• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
		• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
		   o a two-digit number and ones
		   o a two-digit number and tens
		   o two two-digit numbers
		Measures
		• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
		• compare and order lengths, mass, volume/capacity and record the results using >, < and =
		• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
		• find different combinations of coins that equal the same amounts of money
		
		Geometry: properties of shapes
		• identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line
		
		Statistics **Pupils should be taught to:**
		• interpret and construct simple pictograms, tally charts, block diagrams and simple tables

Y1 Block B Term 1 (15 lessons) 1B1	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** **Year 1** • 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 • Read and write numbers from 1 to 20 in numerals and words. **Year 2** • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • read and write numbers to at least 100 in numerals and in words	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Fractions** • Recognise, find and name a half as one of two equal parts of an object, shape or quantity **Geometry: position and direction** • describe position, directions and movements, including half, quarter and three-quarter turns.	**Multiplication and division** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • 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** • recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. **Geometry: position and direction** • order and arrange combinations of mathematical objects in patterns **Statistics** **Pupils should be taught to:** • interpret and construct simple pictograms, tally charts, block diagrams and simple tables •

Y1 Block C Term 1 (15 lessons) 1C1	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning
Year 1
 	
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
Number and Place Value
Year 1
• Given a number, identify one more and one less
Year 2
• identify, represent and estimate numbers using different representations, including the number line
• compare and order numbers from 0 up to 100; use <, > and = signs
	Addition and subtraction
	• Represent and use number bonds and related subtraction facts within 20
	• Add and subtract one-digit and two-digit numbers to 20, including zero
	• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.
	
	Measures
	• Compare, describe and solve practical problems for:
	    o Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)
	• Measure and begin to record the following:
	    o Lengths and heights
	• Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening
	• Recognise and use language relating to dates, including days of the week, weeks, months and years
	• Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
	
	Geometry: properties of shapes
	• recognise and name common 2-D and 3-D shapes, including:
	    o 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).
		Addition and subtraction (Block A/C)
		• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
		• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
		    o a two-digit number and ones
		    o a two-digit number and tens
		    o two two-digit numbers
		    o adding three one-digit numbers
		• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
		
		Measures
		• compare and order lengths and record the results using >, < and =
		• compare and sequence intervals of time
		• tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
		• know the number of minutes in an hour and the number of hours in a day
		
		Geometry: properties of shapes
		• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

Y1 Block D Term 1 (15 lessons) 1D1	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** **Year 1** • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • 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 **Year 2** • count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward • use place value and number facts to solve problems.	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Fractions** • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity .	**Multiplication and division (Block B/D)** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. **Fractions** • recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and ¾ of a length, shape, set of objects or quantity • write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. **Geometry: position and direction** • order and arrange combinations of mathematical objects in patterns

Y1 Block A Term 2 (15 lessons) 1A2	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning
Year 1
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
Number and Place Value
Year 1
• Read and write numbers from 1 to 20 in numerals and words.
Year 2
• identify, represent and estimate numbers using different representations, including the number line
• compare and order numbers from 0 up to 100; use <, > and = signs
• read and write numbers to at least 100 in numerals and in words
• use place value and number facts to solve problems.
	Addition and subtraction
	• Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
	• Add and subtract one-digit and two-digit numbers to 20, including zero
	• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.
	
	Measures
	• Compare, describe and solve practical problems for:
	   o Mass or weight (e.g. heavy/light, heavier than, lighter than)
	• Measure and begin to record the following:
	   o Mass/weight
	• Recognise and know the value of different denominations of coins and notes
	
	Geometry: properties of shapes
	• recognise and name common 2-D and 3-D shapes, including:
	   o 2-D shapes (e.g. rectangles (including squares), circles and triangles)
	   o 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).
		Addition and subtraction
		• solve one-step problems with addition and subtraction:
		   o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
		   o applying their increasing knowledge of mental and written methods
		• fluently, and derive and use related facts up to 100
		• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
		   o a two-digit number and ones
		   o a two-digit number and tens
		   o two two-digit numbers
		   o adding three one-digit numbers
		• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
		• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
		
		Measures
		• choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
		• compare and order mass and record the results using >, < and =
		• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
		• find different combinations of coins that equal the same amounts of money
		• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
		
		Geometry: properties of shapes
		• identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line
		• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

Y1 Block B Term 2 (15 lessons) 1B2	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens **Year 2** • count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward • recognise the place value of each digit in a two-digit number (tens, ones)	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Fractions** • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **Geometry: position and direction** • describe position, directions and movements, including half, quarter and three-quarter turns.	**Multiplication and division** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs **Fractions** • recognise, find, name and write fractions $\frac{1}{3}$, ¼, $\frac{2}{4}$ and ¾ of a length, shape, set of objects or quantity • write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half. **Geometry: position and direction** • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). **Statistics** **Pupils should be taught to:** • interpret and construct simple pictograms, tally charts, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

Y1 Block C Term 2 (15 lessons) 1C2	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning
Year 1
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
Number and Place Value
Year 1
• Given a number, identify one more and one less
• 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
Year 2
• identify, represent and estimate numbers using different representations, including the number line
• compare and order numbers from 0 up to 100; use <, > and = signs
	Addition and subtraction
	• Represent and use number bonds and related subtraction facts within 20
	• Add and subtract one-digit and two-digit numbers to 20, including zero
	• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.
	
	Measures
	• Compare, describe and solve practical problems for:
	    o Capacity/volume (full/empty, more than, less than, quarter)
	    o Time (quicker, slower, earlier, later)
	• Measure and begin to record the following:
	    o Capacity and volume
	    o Time (hours, minutes, seconds)
	• Recognise and know the value of different denominations of coins and notes
	• Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening
	• Recognise and use language relating to dates, including days of the week, weeks, months and years
	• Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
		Addition and subtraction (Block A/C)
		• solve problems with addition and subtraction:
		    o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
		• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
		    o a two-digit number and ones
		    o a two-digit number and tens
		    o two two-digit numbers
		    o adding three one-digit numbers
		Measures
		• choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
		• compare and order volume/capacity and record the results using >, < and =
		• compare and sequence intervals of time
		• tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
		• know the number of minutes in an hour and the number of hours in a day

Y1 Block D Term 2 (15 lessons) 1D2	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** **Year 1** • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens **Year 2** • count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward • use place value and number facts to solve problems.	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher • **Geometry: position and direction** • Describe position, directions and movements, including half, quarter and three-quarter turns.	**Multiplication and division (Block B/D)** • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. **Fractions** • recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half. **Geometry: position and direction** • order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Y1 Block A Term 3 (15 lessons) 1A3	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning
Year 1
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
Number and Place Value
Year 1
• 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
Year 2
• recognise the place value of each digit in a two-digit number (tens, ones)
• identify, represent and estimate numbers using different representations, including the number line
• compare and order numbers from 0 up to 100; use <, > and = signs
	Addition and subtraction
	• Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
	• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.
	
	Measures
	• Compare, describe and solve practical problems for:
	    o Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)
	• Measure and begin to record the following:
	    o Lengths and heights
	• Recognise and know the value of different denominations of coins and notes
	
	Geometry: properties of shapes
	• recognise and name common 2-D and 3-D shapes, including:
	    o 2-D shapes (e.g. rectangles (including squares), circles and triangles)
	    o 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).
		Addition and subtraction
		• solve one-step problems with addition and subtraction:
		    o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
		    o applying their increasing knowledge of mental and written methods
		• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
		
		Measures
		• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); temperature (°C) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
		• compare and order lengths and record the results using >, < and =
		• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
		• find different combinations of coins that equal the same amounts of money
		• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
		
		Geometry: properties of shapes
		• identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line
		• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
		• identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid
		• compare and sort common 2-D and 3-D shapes and everyday objects

Y1 Block B Term 3 (15 lessons) 1B3	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** **Year 1** • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • Read and write numbers from 1 to 20 in numerals and words. **Year 2** • count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward • recognise the place value of each digit in a two-digit number (tens, ones) • read and write numbers to at least 100 in numerals and in words	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Fractions** • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	**Multiplication and division** • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • 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** • recognise, find, name and write fractions $\frac{1}{3}$, ¼, $\frac{2}{4}$ and ¾ of a length, shape, set of objects or quantity • write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half. **Statistics** Pupils should be taught to: • interpret and construct simple pictograms, tally charts, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totaling and comparing categorical data.

Y1 Block C Term 3 (15 lessons) 1C3	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*

Problem solving and reasoning **Year 1**
• Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'
• Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context
• Talk about methods used to solve problems and explain choices and decisions orally or using pictures
• Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties
Year 2
• select the mathematics they use in some classroom activities
• discuss their work using mathematical language
• begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions
• explain why an answer is correct
 	
Number and Place Value **Year 1**
• 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
Year 2
• recognise the place value of each digit in a two-digit
	Addition and subtraction
	• Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
	• Represent and use number bonds and related subtraction facts within 20
	• Add and subtract one-digit and two-digit numbers to 20, including zero
	• Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.
	
	Measures
	• Compare, describe and solve practical problems for:
	    ○ Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)
	    ○ Mass or weight (e.g. heavy/light, heavier than, lighter than)
	    ○ Capacity/volume (full/empty, more than, less than, quarter)
	    ○ Time (quicker, slower, earlier, later)
	• Measure and begin to record the following:
	    ○ Lengths and heights
	    ○ Mass/weight
	    ○ Capacity and volume
	    ○ Time (hours, minutes, seconds)
	• Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening
		Addition and subtraction (Block A/C)
		• 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
		• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
		• add and subtract numbers 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
		• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
		• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
		
		Measures
		• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
		• compare and order lengths, mass, volume/capacity and record the results using >, < and =
		• compare and sequence intervals of time
		• tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
		• know the number of minutes in an hour and the number hours in a day

number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and = signs
- use place value and number facts to solve problems.

- Recognise and use language relating to dates, including days of the week, weeks, months and years
- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Geometry: properties of shapes
- recognise and name common 2-D and 3-D shapes, including:
  - 2-D shapes (e.g. rectangles (including squares), circles and triangles)
  - 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).

Geometry: properties of shapes
- compare and sort common 2-D and 3-D shapes and everyday objects

Y1 Block D Term 3 (15 lessons) 1D3	Year 1 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*	Year 2 Learning Objectives : *By the end of this sequence of lessons all pupils will be able to…..*
Problem solving and reasoning **Year 1** • Solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change' • Describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context • Talk about methods used to solve problems and explain choices and decisions orally or using pictures • Talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties **Year 2** • select the mathematics they use in some classroom activities • discuss their work using mathematical language • begin to represent their work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions • explain why an answer is correct **Number and Place Value** **Year 1** • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens **Year 2** • count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward use place value and number facts to solve problems	**Multiplication and division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Fractions** • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	**Multiplication and division (Block B/D)** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals ($=$) signs • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. **Fractions** • recognise, find, name and write fractions $\frac{1}{3}$, ¼, $\frac{2}{4}$ and ¾ of a length, shape, set of objects or quantity • write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half. • **Statistics** Pupils should be taught to: • interpret and construct simple pictograms, tally charts, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totaling and comparing categorical data.