	25	35	58	46	45	57	45
	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and place value	To understand 0						
	To be able to count to find out how many						
	To be able to count objects, actions and sounds.						
	To be able to count to 20	Count forwards to and across 100 starting from 0.				Count forwards with positive and negative whole numbers, including through zero.	
	ELG: To be able to count beyond 20	Count backwards to and across 100 ending with 0.			Count backwards through zero to include negative numbers.	Count backwards with positive and negative whole numbers, including through zero.	
	To be able to recognise patterns when counting beyond ten	Count forwards to and across 100 from any given number.					
		Count backwards to and across 100 from any given number.					
							Use negative numbers when calculating intervals across zero.
						Interpret negative numbers in context.	Use negative numbers in context.
	ELG: To be able to subitise						
	ELG: To be able to identify different representations of numbers		Recognise the place value of each digit in a two-digit number	Recognise the place value of each digit in a three-digit number	Recognise the place value of each digit in a four-digit number	Determine the value of each digit up to 1, 000, 000	Determine the place value of each digit up to 10 000 000
	To be able to match the numeral to quantity						
	Read numbers from 1 to 10 in numerals.	Read numbers from 11 to 20 in numerals.		Read numbers up to 1000 in numerals		Read numbers to at least 1 000 000	Read numbers up to 10 000 000
	Write numbers from 1 to 10 in numerals.	Write numbers from 11 to 20 in numerals.		Write numbers up to 1000 in numerals		Write numbers to at least 1 000 000	Write numbers up to 10 000 000
		Read numbers to 100 in numerals.					
		Write numbers to 100 in numerals.					
		Read numbers from 1 to 10 in words.	Read numbers to at least 100 in words	Read numbers up to 1000 in words			
		Read numbers from 11 to 20 in words.					
		Write numbers from 1 to 10 in words.	Write numbers to at least 100 in words	Write numbers up to 1000 in words			
		Write numbers from 11 to 20 in words.					
	ELG: Identify one more of a given number		Find 10 more of a given number.	Find 100 more than a given number.	Find 1000 more of a given number.		
	ELG: Identify one less of a given number		Find 10 less of a given number.	Find 100 less of a given number.	Find 1000 less of a given number.		
		Count forwards in multiples of twos from 0.	Count backwards in multiples of twos from a multiple of two.	Count from 0 in multiples of 3		Count forwards in steps of powers of 10 for any given number up to 1 000 000	
		Count forwards in multiples of fives from 0.	Count backwards in multiples of fives from a multiple of five.	Count backwards in multiples of threes from a multiple of three.	Count in multiples of 7	Count backwards in steps of powers of 10 for any given number up to 1 000 000	
		Count forwards in multiples of tens from 0.	Count backwards in multiples of tens from a multiple of ten.	Count from 0 in multiples of 8	Count in multiples of 9		
			Count forwards in steps of ten from any number up to 100	Count from 0 in multiples of 50	Count in multiples of 25		
			Count backwards in steps of ten from any number up to 100	Count from 0 in multiples of 100	Count in multiples of 1000		
			Count from 0 in multiples of 4	Count from 0 in multiples of 6			
			Count from 0 in multiples of 8				
			Recall the multiples of 10 below and above any given 2 digit number e.g. say that for 67 the multiples are 60 and 70				
		Identify numbers in different representations including the number line.	Identify numbers in different representations, including the number line.	Identify numbers using different representations.	Identify numbers using different representations including measures		
		Represent numbers using objects and pictorial representations including the number line.	Represent numbers using different representations, including the number line.	Represent numbers using different representations.	Represent numbers using different representations including measures		

Money, algebra, ratio and proportion objectives within other units

		Estimate numbers using different representations, including the number line.	Estimate numbers using different representations.	Estimate numbers using different representations including measures		
ELG: To be able to compare numbers	Use the language of: equal to, more than, less than (fewer), most, least.	Compare numbers from 0 up to 100; use <, > and = signs	Compare numbers up to 1000	Compare numbers beyond 1000.	Compare numbers to at least 1 000 000	Compare numbers up to 10 000 000
ELG: To be able to compare amounts (more, fewer, same)		Order numbers from 0 up to 100	Order numbers up to 1000	Order numbers beyond 1000.	Order numbers to at least 1 000 000	Order numbers up to 10 000 000
ELG: To understand that numbers can be made up in different ways (3 can be made up of 1 and 2, 1 and 1 and 1 or 2 and 1)	Partition numbers using apparatus if required e.g. partition 76 into tens and ones	Partition two-digit numbers into different combinations of tens and ones using apparatus if needed e.g. 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones				
	Combine numbers using apparatus if required e.g. combine 6 tens and 4 ones.					
		Use place value and number facts to solve word problems.	Solve number word problems	Solve number and practical word problems that involve all of the above and with increasingly large positive numbers.	Solve number word problems and practical word problems that involve ordering and comparing numbers to 1 000 000, counting forwards or backwards in steps, interpreting negative numbers or rounding.	Solve number and practical word problems that involve ordering and comparing numbers to 10 000 000, rounding to a required degree of accuracy, using negative numbers and calculating intervals across zero.
				Round any number to the nearest 10	Round any number up to 1 000 000 to the nearest 10	Round any whole number to a required degree of accuracy
				Round any number to the nearest 100	Round any number up to 1 000 000 to the nearest 100	
				Round any number to the nearest 1000	Round any number up to 1 000 000 to the nearest 1000	
					Round any number up to 1 000 000 to the nearest 10 000	
					Round any number up to 1 000 000 to the nearest 100 000.	
				Read Roman numerals to 100 (I to C)	Read Roman numerals to 1000 (M)	
				Know that over time, the numeral system changed to include the concept of zero and place value.	Recognise years written in Roman numerals.	
		Estimate length/height in any direction (m/cm) to the nearest appropriate unit using rulers.		Estimate different measures		
		Estimate mass (kg/g) to the nearest appropriate unit using scales.				
		Estimate capacity (litres/ml) to the nearest appropriate unit using measuring vessels				
		To estimate temperature (°C) to the nearest appropriate unit using thermometers				
	Measure and record length/height	To measure length/height in any direction (m/cm) to the nearest appropriate unit using rulers.	Measure lengths (m/cm/mm)			
	Measure and record mass/weight.	To measure mass (kg/g) to the nearest appropriate unit using scales	Measure mass (kg/g)			
	Measure and record capacity and volume.	To measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels	Measure volume/capacity (l/ml).			
		To measure temperature (°C) to the nearest appropriate unit using thermometers				
		Compare length using >, < and =.	Compare lengths (m/cm/mm)	Compare different measures		
		Compare mass using >, < and =.	Compare mass (kg/g)			
		Compare volume/capacity using >, < and =.	Compare volume/capacity (l/ml).			
		Order lengths				

			Order mass				
			Order volume/capacity				
			Read scales in divisions of ones.				
			Read scales in divisions of twos.				
			Read scales in divisions of fives.				
			Read scales in divisions of tens.				
			Read scales where not all numbers on the scale are given				
			Estimate points in between points where not all numbers on the scale are given.				
						Recognise thousandths.	
						Know decimal equivalents of any number of thousandths	
						Round decimals with two decimal places to the nearest whole number	
						Round decimals with two decimal places to one decimal place	
						Read numbers with up to three decimal places.	
			Compare intervals of time.			Write numbers with up to three decimal places.	
			Sequence intervals of time.			Order numbers with up to three decimal places.	
						Compare numbers with up to three decimal places.	
		Recognise and know the value of different denominations of coins			Compare money in pounds and pence.		
		Recognise and know the value of different denominations of notes			Identify acute angles		
					Identify obtuse angles		
					Compare angles up to two right angles by size.		
					Order angles up to two right angles by size.		
							Generate and describe linear number sequences
Addition and Subtraction	To be able to combine 2 groups to find out how many altogether	Read and understand calculations involving addition (+) and equals (=) signs					
	To be able to take items away from an amount	Read and understand calculations involving subtraction (-) and equals (=) signs					
		Write addition calculations					
		Write subtraction calculations					
		Show that addition of two numbers can be done in any order (commutative)					
		Show that subtraction of one number from another cannot be done in any order (non commutative)					
		Demonstrate an understanding of inverse relationships involving addition and subtraction (e.g. if 3 + 2 = 5, then 5 - 2 = 3).	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations.				
			Recognise and use the inverse relationship between addition and subtraction and use this to solve missing number problems.				
	ELG: Recall at least four of the six number bonds for 10	Recall all number bonds to 10	Recall all number bonds within 10				

	ELG: Recall number bonds up to 5	Recall all number bonds to 20	Recall all number bonds within 20				
	ELG: Recall subtraction facts up to 5	Represent number bonds within 20.	Use number bonds to and within 10 to reason with bonds to and within 20 (e.g. If 7 + 3 = 10, then 17 + 3 = 20; if 7 - 3 = 4, then 17 - 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 - 14 = 3 and 17 - 3 = 14).				
		Calculate number bonds within 20	Use number bonds to and within 10 to calculate bonds to and within 20				
		Represent subtraction facts within 20.	Use addition facts to 10 to derive related facts up to 100				
		Calculate subtraction facts within 20	Use subtraction facts to 10 to derive related facts up to 100				
		Add one-digit and two-digit numbers to 20, including zero.	Add a two-digit number and multiple of ten up to 100	Add numbers with up to three digits using the formal method of columnar Addition	Add numbers with up to four digits using the formal method of columnar addition.	Add whole numbers with more than 4 digits using formal written methods	Perform mental calculations with mixed operations
			Mentally add a two-digit number and multiple of ten up to 100	Mentally add a three-digit number and 1 digit number		Add numbers mentally with increasingly large numbers	
			Add a 2 digit number and a 1 digit number with no exchanging up to 100	Add numbers mentally, including a three-digit number and a multiple of ten.			
			Mentally add a 2 digit number and a 1 digit number with no exchanging up to 100	Add numbers mentally, including a three-digit number and a multiple of a hundred			
			Add 2 two-digit numbers (no exchanging) up to 100				
			Add 2 two digit numbers with an exchange up to 100				
			Add three one-digit numbers.				
			Mentally add three one digit numbers				
				Add lengths (m/cm/mm)	Calculate different measures (addition)		
				Add mass (kg/g)			
				Add volume/capacity (l/ml).			
		Subtract one-digit and two-digit numbers to 20, including zero.	Subtract a multiple of ten from a 2 digit number within 100	Subtract numbers with up to three digits using the formal method of columnar subtraction	Subtract numbers with up to four digits using the formal method of columnar subtraction	Subtract whole numbers with more than 4 digits, using formal written methods	
			Mentally subtract a multiple of ten from a 2 digit number within 100	Mentally subtract a 1 digit number from a 3 digit number		Subtract numbers mentally with increasingly large numbers	
			Mentally add 2 two digit numbers (no exchanging) within 100	Subtract numbers mentally, including a three-digit number and a multiple of ten.		Find the difference with negative numbers	
			Subtract a 1 digit number from a 2 digit number with no exchanging within 100	Subtract numbers mentally, including a three-digit number and a multiple of a hundred			
			Mentally subtract a 1 digit number from a 2 digit number with no exchanging within 100				
			Subtract 2 two-digit numbers (no exhanging) within 100				
			Mentally subtract 2 digit numbers (no exchanging) within 100				
			Subtract 2 two digit numbers with an exchange within 100				
				Subtract lengths (m/cm/mm)	Calculate different measures (subtraction)		
				Subtract mass (kg/g)			
				Subtract volume/capacity (l/ml).			
				Measure the perimeter of simple 2-D shapes.	Measure the perimeter of a rectilinear figure (including squares) in centimetres and metres		

		Recognise symbols for pounds (£) and pence (p)		Calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres		
		Select amounts of money to make a particular value	Add amounts of money, using both £ and p in practical contexts	Add different measures, including money in pounds and pence.		
		Find different combinations of coins that equal the same amounts of money.				
			Calculate change, using both £ and p in practical contexts	Subtract different measures, including money in pounds and pence.		
		Use estimation to check that his/her answers to a calculation are reasonable e.g. knowing that 48 + 35 will be less than 100	Estimate the answer to a calculation	Estimate the answers to a calculation.	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
			Use inverse operations to check answers	Use inverse operations to check answers.		
		Solve missing number problems using addition				
		Solve missing number problems using subtraction.				
	Solve one-step word problems that involve addition using concrete objects and pictorial representations.	Solve word problems with addition using concrete objects and pictorial representations, including those involving numbers, quantities and measures	Solve addition word problems, including missing number problems	Solve addition two-step word problems in contexts.	Solve addition and subtraction multi-step word problems in contexts, deciding which operations and methods to use and why.	Solve multi-step word problems in contexts, deciding which operations and methods to use and why
	Solve one-step word problems that involve subtraction using concrete objects and pictorial representations.	Solve word problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures	Solve subtraction word problems, including missing number problems	Solve word subtraction two-step problems in contexts.		
	Solve one-step word problems that involve missing numbers using concrete objects and pictorial representations					Solve addition and subtraction word problems (in the same question)
					Solve addition word problems involving converting between units of time.	
					Solve subtraction word problems involving converting between units of time	
		Solve simple word problems in a practical context involving addition of money of the same unit			Use addition to solve word problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling	Solve addition word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		Solve word simple problems in a practical context involving subtraction of money of the same unit, including giving change.			Use subtraction to word solve problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling	Solve subtraction word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
		Ask and answer simple word problems by counting the number of objects in each category and sorting the categories by quantity (statistics)				
		Ask and answer word problems about comparing categorical data (statistics)	Solve one-step word problems e.g. 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.	Solve comparison word problems using information presented in bar charts, pictograms, tables and other graphs.	Solve comparison word problems using information presented in a line graph	
			Solve two-step word problems e.g. 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.			

			Ask and answer word problems about totalling categorical data.		Solve sum word problems using information presented in bar charts, pictograms, tables and other graphs.	Solve sum word problems using information presented in a line graph	
					Solve difference word problems using information presented in bar charts, pictograms, tables and other graphs.	Solve difference word problems using information presented in a line graph	
							Find unknown angles in any triangle
							Find unknown angles in any quadrilaterals
							Find unknown angles in any regular polygons
							Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
						Know angles at a point and one whole turn (total 360°).	
						Know angles at a point on a straight line and 1/2 a turn (total 180°).	
						Use the properties of rectangles to deduce related facts and find missing lengths and angles	
							Express missing number problems algebraically.
Multiplication and division	ELG: To understand the pattern of odd and even numbers		Recognise odd and even numbers.				
	To be able to represent double patterns on tens frames	Count in twos to solve problems e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 2 by counting in twos	Recall multiplication facts for the 2 multiplication table	Recall multiplication facts for the 3 multiplication table.	Recall multiplication facts for multiplication tables up to 12 × 12.		
	To understand what twice as many means	Count in fives to solve problems e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 5 by counting in fives	Recall multiplication facts for the 5 multiplication table	Recall multiplication facts for the 6 multiplication table.			
	To be able to represent doubles	Count in tens to solve problems e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 10 by counting in tens	Recall multiplication facts for the 10 multiplication table	Recall multiplication facts for the 8 multiplication table.			
	ELG: To know some double facts		Recall multiplication facts for the 4 multiplication table.				
			Recall doubles to 20 e.g. knowing that double 2 is 4, double 5 is 10				
			Recall halves to 20 e.g. half of 18 is 9.				
	To be able to make pairs		Use multiplication facts 2 to make deductions outside known multiplication facts e.g. know that multiples of 2 end with 0, 2, 4, 6 or 8 and use this to reason that 18 × 2 cannot be 35 as it is not a multiple of 2				
			Use multiplication facts 5 to make deductions outside known multiplication facts e.g. know that multiples of 5 end with 0 or 5 and use this to reason that 18 × 5 cannot be 92 as it is not a multiple of 5				
			Use multiplication facts for 10 to make deductions outside known multiplication facts e.g. know that multiples of 10 end with 0 and use this to reason that 10x8 cannot be 92 as it is not a multiple of 10				

					Identify multiples	Identify common multiples
					Recognise and use square numbers and the notation for squared (2)	
					Recognise and use cube numbers and the notation for cubed (3)	
		Recall division facts for the 2 multiplication table	Recall division facts for the 3 multiplication table.	Recall division facts for multiplication tables up to 12 × 12		
		Recall division facts for the 5 multiplication table	Recall division facts for the 6 multiplication table.			
		Recall division facts for the 10 multiplication table	Recall division facts for the 8 multiplication table.			
		Recall division facts for the 4 multiplication table.				
				Recognise factor pairs	Identify factors	Identify common factors
				Use factor pairs and commutativity in mental calculations.	Find all factor pairs of a number	
					Identify common factors of two numbers.	
					Know what a prime number is	
					Know what composite (non-prime) numbers are	
					Establish whether a number up to 100 is prime	Identify prime numbers
					Recall prime numbers up to 19	
				Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1		
				Use place value, known and derived facts to multiply and divide mentally, including dividing by 1		
				Use place value, known and derived facts to multiply and divide mentally, including multiplying together three numbers.		
					Multiply numbers mentally drawing upon known facts.	Perform mental calculations, including with multiplication and large numbers.
		Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×) and equals (=) signs.	Write and calculate mathematical statements for multiplication using the multiplication tables that he/she knows using mental and progressing to formal written methods	Multiply two-digit numbers by a one-digit number using formal written layout.	Multiply numbers up to 4 digits by a one-digit number using a formal written method	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
		Show that multiplication of two numbers can be done in any order (commutative)	Write and calculate mathematical statements for multiplication using the multiplication tables that he/she knows, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	Multiply three-digit numbers by a one-digit number using formal written layout.	Multiply numbers up to 4 digits by a two-digit number using a formal written method (long multiplication)	
					Multiply whole numbers and those involving decimals by 10	
					Multiply whole numbers and those involving decimals by 100	
					Multiply whole numbers and those involving decimals by 1000	
					Divide numbers mentally drawing upon known facts.	Perform mental calculations, including with division and large numbers.
ELG: To be able to share objects equally		Calculate mathematical statements for division within the multiplication tables and write them using the division (÷) and equals (=) signs.	Write and calculate mathematical statements for division using the multiplication tables that he/she knows using mental and progressing to formal written methods		Divide numbers up to 4 digits by a one-digit number using the formal written method of short division	Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division

			Show that division of one number cannot be done in any order (non-commutative).	Write and calculate mathematical statements for division using the multiplication tables that he/she knows, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods		Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders as fractions or known decimal equivalent	Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as decimals, rounding as appropriate for the context
	To understand that some quantities will share equally into 2 groups and some won't					Divide whole numbers and those involving decimals by 10	Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
						Divide whole numbers and those involving decimals by 100	
						Divide whole numbers and those involving decimals by 1000	
							Use his/her knowledge of the order of operations to carry out calculations
			Recognise the relationships between repeated addition and multiplciation and rewrite addition statements as simplified multiplication statements .				
				Compare units of time			
		Solve one-step word problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays (not including x symbol)	Solve word problems involving multiplication	Solve word problems, including missing number problems, involving multiplication, including positive integer scaling problems	Solve word problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit	Solve word problems involving multiplication	Solve word problems involving multiplication and division (in the same question)
					Solve word problems involving multiplying and adding, including integer scaling problems		
					Solve word problems involving multiplying and adding, including harder correspondence problems such as n objects are connected to m objects		
				Solve word problems, including missing number problems, involving multiplication, including correspondence problems in which n objects are connected to m objects	Calculate different measures using multiplication	Solve word problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	Solve multiplication word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
						Solve word problems involving multiplication including scaling by simple fractions	Solve word problems involving the calculation of percentages e.g. of measures, and such as 15% of 360 and the use of percentages for comparison.
							Solve word problems involving similar shapes where the scale factor is known or can be found
						Solve word problems involving converting between units of time using multiplication	

					Use multiplication to solve word problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling.	
	Solve one-step word problems involving division by calculating the answer using concrete objects, pictorial representations and arrays (not including ÷ symbol)	Solve word problems involving division	Solve word problems, including missing number problems, involving division, including scaling problems	Calculate different measures using division	Solve word problems involving division	Solve division word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
			Solve word problems, including missing number problems, involving division, including correspondence problems in which n objects are connected to m objects.		Solve word problems involving division including scaling by simple fractions	Solve word problems involving unequal sharing and grouping using knowledge of fractions and multiples.
					Solve word problems involving converting between units of time using division	
					Use division to solve word problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling.	
						Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
						Know that shapes with the same areas can have different perimeters and vice versa
					Calculate the perimeter of composite rectilinear shapes in centimetres and metres.	
				Convert between different units of measure e.g. kilometre to metre; hour to minute	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).	Convert between miles and kilometres.
					Calculate the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2)	Calculate the area of parallelograms and triangles
					Compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2)	
					Estimate the area of irregular shapes.	
						Recognise when it is possible to use formulae for area of shapes
						Recognise when it is possible to use formulae for volume of shapes
					Estimate volume e.g. using 1 cm^3 blocks to build cuboids (including cubes) and capacity e.g. using water.	Estimate volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units e.g. mm^3 and km^3.
						Calculate volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units e.g. mm^3 and km^3.

							Compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units e.g. mm^3 and km^3.
						Identify other multiples of 90°	
							Illustrate and name parts of circles, including radius, diameter and circumference
							Know that the diameter is twice the radius.
							Use simple formulae e.g. perimeter of a rectangle or area of a triangle
							Express missing number problems algebraically.
							Find pairs of numbers that satisfy an equation with two unknowns
							Enumerate possibilities of combinations of two variables
Fractions		Recognise a half as one of two equal parts of an object or shape	Recognise 1/3 of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole	Recognise fractions of a discrete set of objects: unit fractions			
			Recognise 1/4 of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole	Recognise fractions of a discrete set of objects: non-unit fractions with small denominators			
			Recognise 2/4 of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole				
			Recognise 3/4 of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole				
			Find 1/3 of a length, shape, set of objects or quantity	Find fractions of a discrete set of objects: unit fractions	Find fractions of an amount (unit and non-unit fractions	Find fractions of an amount (unit and non-unit fractions	
			Find 2/3 of a length, shape, set of objects or quantity				
			Find 1/4 of a length, shape, set of objects or quantity	Find fractions of a discrete set of objects: non-unit fractions with small denominators			
			Find 2/4 of a length, shape, set of objects or quantity				
			Find 3/4 of a length, shape, set of objects or quantity				
			Find 1/2 of a length, shape, set of objects or quantity				
			Know equivalence of 2/4 and 1/2	Know equivalent fractions with small denominators	Know families of common equivalent fractions	Write equivalent fractions of a given fraction, including tenths and hundredths	
				Show equivalent fractions of small denominators using diagrams	Show families of common equivalent fractions using diagrams.		
			Write 1/3 of a length, shape, set of objects or quantity				
			Write 1/4 of a length, shape, set of objects or quantity				
			Write 2/4 of a length, shape, set of objects or quantity				

		Write 3/4 of a length, shape, set of objects or quantity				
			Count up in tenths			
			Count down in tenths			
			Know that tenths arise from dividing an object into 10 equal parts			
			Know that tenths arise from dividing one-digit numbers or quantities by 10			
			Add fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7.	Add fractions with the same denominator	Add fractions with denominators that are multiples of the same number.	Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
			Subtract fractions with the same denominator within one whole e.g. 6/7 - 1/7 = 5/7.	Subtract fractions with the same denominator	Subtract fractions with denominators that are multiples of the same number.	Subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
			Compare unit fractions		Compare fractions whose denominators are all multiples of the same number	Compare fractions, including fractions > 1.
			Compare fractions with the same denominators.			
			Order unit fractions		Order fractions whose denominators are all multiples of the same number	Order fractions, including fractions > 1.
			Order fractions with the same denominators.			
				Understand improper fractions	Convert improper fractions to mixed numbers	
					Convert mixed numbers to improper fractions	
					Multiply proper fractions by whole numbers, supported by materials and diagrams.	Multiply simple pairs of proper fractions, writing the answer in its simplest form e.g. 1/4 x 1/2 = 1/8
					Multiply mixed numbers by whole numbers, supported by materials and diagrams.	
						Use common factors to simplify fractions
						Use common multiples to express fractions in the same denomination
						Divide proper fractions by whole numbers e.g. 1/3 ÷ 2 = 1/6.
			Solve fraction word problems.	Solve word problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	Solve fraction word problems.	Solve word problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts e.g. find 7/9 of 108
To be able to describe capacity (full, empty, half full, nearly full, nearly empty)	Describe capacity and volume e.g. full/empty, more than, less than, half, half full, quarter					
	Compare capacity and volume e.g. full/empty, more than, less than, half, half full, quarter					
	Solve practical problems for capacity and volume e.g. full/empty, more than, less than, half, half full, quarter.					
	Tell the time to the hour.	Tell the time to five minutes				
	Draw the hands on a clock face to show the time to the hour.	Write the time to five minutes				
		Draw the hands on a clock face to show the time to five minutes				
	Tell the time to half past the hour.	Tell the time to quarter past				
	Draw the hands on a clock face to show the time to half past the hour.	Write the time to quarter past				

			Draw the hands on a clock to show quarter past				
			Tell the time to quarter to				
			Write the time to quarter to				
			Draw the hands on a clock to show quarter to				
				Know angles as a property of shape.			
				Know angles as a description of a turn.			
				Identify right angles			
				Idenitfy whether other angles are greater than a right angle.			
				Idenitfy whether other angles are less than a right angle.			
				Know that two right angles make a half turn.			
				Know that three right angles make three quarters of a turn			
				Know that four right angles make a complete turn			
			Use mathematical vocabulary to describe position				
			Use mathematical vocabulary to describe direction				
			Use mathematical vocabulary to describe movement				
		Identfy whole turn, half, quarter and three-quarter turns.	Use mathematical vocabulary including movement in a straight line (how many spaces are you moving?)				
			Identify rotation as a turn (in terms of right angles for quarter, half and three-quarter turns)				
			Understand the terms clockwise and anti-clockwise.				
Decimals					Know decimal equivalents of any number of tenths		Identify the value of each digit in numbers given to three decimal places
					Know decimal equivalents of any number of hundredths		
					Know decimal equivalents to 1/4, 1/2, 3/4	Relate thousandths to amount of tenths, hundredths	
					Find the effect of multiplying a one- or two-digit number by 10, identifying the value of the digits in the answer as ones, tenths and hundredths		Multiply numbers by 10, 100 and 1000 giving answers up to three decimal places.
					Find the effect of dividing a one- or two-digit number by 100, identifying the value of the digits in the answer as ones, tenths and hundredths		Divide numbers by 10, 100 and 1000 giving answers up to three decimal places.
							Associate a fraction with division e.g. know that 7 divided by 21 is the same as 7/21 and that this is equal to 1/3
						Write decimal numbers as fractions e.g. 0.71 = 71/100, 8.09 = 8 + 9/?	Calculate decimal fraction equivalents e.g. 0.375 is equivalent to 3/8
					Round decimals with one decimal place to the nearest whole number		
					Count up in hundredths		
					Count down in hundredths		
					Know that hundredths arise when dividing an object by one hundred		

					Know that hundredths arise when dividing tenths by ten.		
					Compare numbers with the same number of decimal places up to two decimal places.		
							Multiply one-digit numbers with up to two decimal places by whole numbers.
							Use written division methods in cases where the answer has up to two decimal places.
							Solve word problems which require answers to be rounded to specified degrees of accuracy.
					Solve simple measure and money word problems involving fractions and decimals to two decimal places.	Solve word problems involving number up to three decimal places.	Solve word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
							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 up to three decimal places
						Use all four operations to solve word problems involving measure e.g. length, mass, volume, money using decimal notation, including scaling	Solve word problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
Percentages						Recognise the per cent symbol (%)	
						Understand that per cent relates to 'number of parts per hundred'	
						Write percentages as a fraction with denominator 100	
						Write percentages as a decimal.	
						Solve word problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25	Use equivalences between simple fractions, decimals and percentages, including in different contexts e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake.
							Calculate and interpret the mean as an average.
Measurement:Length, height, capacity, mass, perimeter, area, volume	To be able to compare size (big, little, large, small, tall, shorter, long, wider, narrower)	Compare lengths and heights e.g. long/short, longer/shorter, tall/short, double/half					
		Describe lengths and heights e.g. long/short, tall/short, double/half					
		Solve practical problems for lengths and heights e.g. long/short, longer/shorter, tall/short, double/half					
	To be able to compare mass (heavy and light items)	Compare mass/weight e.g. heavy/light, heavier than, lighter than					
		Describe mass/weight e.g. heavy/light, heavier than, lighter than					
		Solve practical problems for mass/weight e.g. heavy/light, heavier than, lighter than					

	To be able to compare length and height (longer, shorter and taller, shorter)						
					Find the area of rectilinear shapes by counting squares		
						Use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
Time	To be able to order key events in the day	Recognise and use language relating to dates, including days of the week, weeks, months and years.					
	To be able to use language to describe events in a day (morning, afternoon, before, after, today, tomorrow)	Know the days of the week	Know the number of minutes in an hour	Know the number of seconds in a minute	Convert between different units of measure e.g. hour to minute.		
	To be able to use language to describe times in the day ('now, before, later, soon')	Know the months of the year	Know the number of hours in a day.	Know the number of days in each month			
		Compare time (quicker, slower, earlier, later)		Know the number of days in a year and leap year.			
		Sequence events in chronological order using language e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening		Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.			
		Record time using equipment (hours, minutes, seconds).		Tell the time from an analogue clock to the nearest minute (eg 26 minutes past)			
				Tell the time from an analogue clock, including using Roman numerals from I to XII			
		Solve practical problems for time		Tell the time from digital 12-hour clocks	Read the time from a digital 24-hour clock		
		Choose which unit to measure time (hours, minutes, seconds)			Convert time between analogue and digital 12-hour clocks		
					Convert time between analogue and 24-hour clocks		
Statistics			Interpret simple pictograms	Interpret bar charts	Interpret discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Complete information in tables, including timetables.	Interpret pie charts
			Interpret tally charts	Interpret pictograms		Read information in tables, including timetables.	Interpret line graphs
			Interpret block diagrams	Interpret tables.		Interpret information in tables, including timetables.	
			Interpret simple tables				
			Construct simple pictograms	Present data using bar charts	Present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs		Construct pie charts
			Construct tally charts	Present data using pictograms.			Construct line graphs
			Construct block diagrams	Present data using tables.			
			Construct simple tables				
Shape	To be able to name circles, triangles, squares and rectangles	Recognise and name common 2-D shapes e.g. rectangles (including squares), circles and triangles.	Identify the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.	Draw 2-D shapes	Identify lines of symmetry in 2 D shapes presented in different orientations	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	
		Recognise and name common 3-D shapes e.g. cuboids (including cubes), pyramids and spheres	Identify the properties of 3-D shapes, including the number of edges, vertices and faces	Recognise 3-D shapes in different orientations and describe them		Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	Recognise, describe and build simple 3-D shapes, including making nets.
				Make 3-D shapes using modelling materials			

	To understand which shapes roll and stack						
	To be able to identify curved and straight sides in shapes				Compare geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.		Compare geometric shapes based on their properties and sizes
					Classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.		Classify geometric shapes based on their properties and sizes
	To be able to combine and separate shapes to make different shapes		Identify 2-D shapes on the surface of 3-D shapes e.g. a circle on a cylinder and a triangle on a pyramid		Complete a simple symmetric figure with respect to a specific line of symmetry		
			Compare common 2-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them.				
			Sort common 2-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them.				
			Compare common 3-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them.				
			Sort common 3-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them.				

					Recognise where angles are greater than two right angles.	Know angles are measured in degrees	
					Know the term straight angle referring to two right angles together	Estimate acute, obtuse and reflex angles	
						Compare acute, obtuse and reflex angles	
						Draw given angles, and measure them in degrees (°).	Draw 2-D shapes using given dimensions and angles.
			Order combinations of mathematical objects in patterns and sequences				
	To be able to sort objects		Arrange combinations of mathematical objects in patterns and sequences				
	To be able to match objects						
				Identify vertical lines			
				Identify horizontal lines			
				Identify pairs of perpendicular lines.			
				Identify pairs of parallel lines.			
Position and Direction	To be able to describe where are objects are	Describe position (above and below)			Describe positions on a 2-D grid as coordinates in the first quadrant.	Describe the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Describe positions on the full coordinate grid (all four quadrants
	To be able to use positional language to describe where objects are in relation to other items	Describe direction (left, right, forwards, backwards)					
	To be able to place objects in different positions				Describe movements between positions as translations of a given unit to the left/right and up/down.	Identify the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	
						Represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Translate simple shapes on the coordinate plane
					Plot specified points and draw sides to complete a given polygon		Draw simple shapes on the coordinate plane
							Reflect simple shapes in the axis
	To be able to copy and continue simple patterns (number, shape, measure)						
	To be able to create simple patterns (number, shape, measure)						