

Knowledge and skills progression in Maths

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Number & Place Value	Can count to 20 in a range of situations and using a range of strategies, including forwards and backwards, starting at different points. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	Count to and across 100, forwards and backwards, beginning from 0, 1 or any given number Count in multiples of 2, 5 and 10 Count forwards and backwards through the odd numbers	Count in steps of 2, 3 and 5 from 0 Count in tens from any number, forward and backward	Count from 0 in multiples of 4, 8, 50 and 100	Count in multiples of 6, 7, 9, 25 and 100	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
					Count backwards through zero to include negative numbers	Interpret negative numbers in context Count forwards and backwards with positive and negative whole numbers, including through zero	Use negative numbers in context and calculate intervals across 0

	Read and write numbers to 100 in numerals Read and write numbers to 20 in words	Read and write numbers to at least 100 in numerals and words	Read and write numbers up to 1000 in numerals and words	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	Read and write numbers to 1 000 000 Read Roman numerals to 1000 (M) and recognise years written in Roman numerals	Read and write numbers up to 10 000 000
		Recognise the place value of each digit in two-digit numbers	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Recognise the place value of each digit in numbers with up to 2 decimal places. Determine the value of each digit in numbers to 1 000 000	Determine the value of each digit in numbers to 10 000 000, including decimal fractions
			Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.	Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.	Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).

		Compose and decompose two-digit numbers using standard and nonstandard partitioning.	Compose and decompose three-digit numbers using standard and non-standard partitioning.	Compose and decompose four-digit numbers using standard and nonstandard partitioning.	Compose and decompose numbers to 1 000 000 using standard and nonstandard partitioning	Compose and decompose numbers up to 10 million using standard and nonstandard partitioning
	Given a number, identify one more and one less		Find 10 more or less than a given number Find 100 more or less than a given number	Find 1000 more or less than a given number		
	Identify and represent numbers using objects and pictorial representations, including the number line.	Identify, represent and estimate numbers using objects and pictorial representations, including the number line.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using a wide range of representations.		
			Divide 100 into 2, 4, 5 and 10 equal parts, and read number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.	Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.

	Can understand sequence and order of numbers 0-10	Reason about the location of numbers to 20 within the linear number system	Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.	Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.	Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100	Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1	Reason about the location of any number up to 10 million in the linear number system
					Round any number to the nearest 10, 100 or 1000	Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	Round any whole number to a required degree of accuracy
	Begin to use the language of more than, fewer than	Use the language of: equal to, more than, less than (fewer), most, least	Compare and order numbers from 0 up to 100; use <, > and = signs	Compare and order numbers up to 1000	Compare and order numbers beyond 1000	Compare and order numbers to 1 000 000	Compare and order numbers up to 10 000 000
			Use place value and number facts to solve problems	Solve number problems and practical problems involving these ideas	Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Solve number problems and practical problems that involve all of the above	Solve number and practical problems that involve all of the above
Addition & Subtraction		Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more?".	Add and subtract numbers with up to three digits using columnar methods	Add and subtract numbers with up to 4 digits using columnar methods	Add and subtract whole numbers with more than 4 digits using columnar methods	Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.

	Can independently subitise all numbers 0-10 Can show understanding of cardinality and composition of 0-10 in their work and play.	Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	Add and subtract across 10	Calculate complements to 100		Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).
	Can show understanding of cardinality and composition of 0-10 in their work and play. Can begin to use a tens frame to explore numbers 0-10	Develop fluency in addition and subtraction facts within 10.	Secure fluency in addition and subtraction facts within 10, through continued practice.	Secure fluency in addition and subtraction facts that bridge 10, through continued practice.		
		Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently			

	Add and subtract one-digit and two-digit numbers to 20, including zero	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	Add and subtract numbers mentally, including: -A three-digit number and ones -A three-digit number and tens -A three-digit number and tens		Add and subtract numbers mentally with increasingly large numbers	
		Recognise and use the inverse relationship between addition and subtraction and use this to check calculations	Estimate the answer to a calculation Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure Use inverse operations to check answers	Estimate to check answers to a calculation Use inverse operations to check 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

		Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	Understand and use the commutative property of addition, and understand the related property for subtraction.			
	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = [] – 9	Solve problems with addition and subtraction: -Using concrete objects and pictorial representations, including those involving numbers, quantities and measures -By applying their increasing knowledge of mental and written methods Solve missing number problems	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Solve addition and subtraction multistep problems in contexts, deciding which methods to use and why	Solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division
Multiplication & Division		Calculate mathematical statements for multiplication and division within the	Write and calculate mathematical statements for multiplication and division using the			Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and

	multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs	multiplication tables that they know, including for two- digit numbers times one-digit numbers, using mental and progressing to formal written methods			multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.
	Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). Show that multiplication of two numbers can be done in any order		Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. Recognise and use factor pairs and commutativity in mental calculations	Identify multiples Identify factors Find all factors pairs of a number and common factors of two numbers Express a given number as a product of 2 or 3 factors.	

	(commutative) and division of one number by another cannot			
			Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19	
			Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	
		Understand and apply the distributive law to multiply 2-digit numbers by 1 digit Multiply two-digit numbers by a one-	Multiply numbers up to 4 digits by a one-digit number using a formal written method Multiply numbers up to 4 digits by a two-	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication

			digit number using formal written layout Multiply three-digit numbers by a one-digit number using formal written layout	digit number using long multiplication	
			Solve division problems, with two-digit dividends and one-digit divisors	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 number using the formal written method of short division where appropriate Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division
			Interpret remainders appropriately according to the context.	Interpret remainders appropriately for the context	Interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
	Recall and use multiplication and division facts for the	Recall and use multiplication and division facts for the	Recall multiplication and division facts for multiplication tables up to 12 × 12	Secure fluency in multiplication table facts, and corresponding	

		2, 5 and 10 times tables	3, 4 and 8 times tables		division facts, through continued practice.	
		Recognise odd and even numbers		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	Multiply and divide numbers mentally drawing upon known facts	Perform mental calculations, including with mixed operations and large numbers
		Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.	Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	Multiply and divide whole numbers by 10, 100 and 1000, understand this is equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.	Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).
			Apply place value knowledge to known additive and multiplicative facts (scaling by 10)	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).	

	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	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Solve missing number problems involving multiplication and division		Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	Solve problems involving addition, subtraction, multiplication and division Use their knowledge of the order of operations to carry out calculations involving the four operations
			Solve positive integer scaling problems	Solve integer scaling problems	Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	
			Solve correspondence problems in which n objects are	Solve correspondence problems such as n objects are		

			connected to m objects	connected to m objects		
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	Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity	Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.			Use common factors to simplify fractions
			Find unit fractions of quantities using known division facts (multiplication tables fluency).		Find non-unit fractions of quantities	Use common multiples to express fractions in the same denomination
		Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.	Recognise and show, using diagrams, equivalent fractions with small denominators	Recognise and show, using diagrams, families of common equivalent fractions	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
			Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Count up and down in hundredths Recognise that hundredths arise when dividing an object by one		

			hundred and dividing tenths by ten		
		Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]		Add and subtract fractions with the same denominator Add and subtract fractions with denominators that are multiples of the same number Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers. Recall decimal fraction equivalents for a half, quarter, fifth and tenth, and for multiples of these proper fractions	Add and subtract fractions with different denominators Add and subtract mixed numbers
				Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8]

					Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]
		Reason about the location of any fraction within 1 in the linear number system.		Reason about the location of mixed numbers in the linear number system.	Compare and order fractions, including fractions > 1
			Convert mixed numbers to improper fractions and vice versa.	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example,2/5 + 4/5 = 6/5 = 1 1/5]	
		Compare and order unit fractions Compare and order fractions with the same denominators		Compare and order fractions whose denominators are all multiples of the same number	
		Solve problems that involve all of the above			
Decimals & Percentages			Recognise and write decimal equivalents of any number of tenths or hundredths	Read and write numbers with up to three decimal places	Associate a fraction with division and calculate decimal fraction equivalents

				[for example, 0.375] for a simple fraction [for example, 3/8]
			Recognise the place value of each digit in numbers with up to 2 decimal places	Identify the value of each digit in numbers given to three decimal places
			Compose and decompose numbers with up to 3 decimal places using standard and nonstandard partitioning	
			Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100	
			hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10	
			hundredths are equivalent to 1 tenth, and that 0.1 is 10 times	

			the size of 0.01.	
		Recognise and write decimal equivalents to 1/4, 1/2, 3/4	Read and write decimal numbers as fractions [for example, 0.71 = 71/100]	
		Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Multiply decimal numbers by 10, 100 and 1000 Divide numbers involving decimals by 10, 100 and 1000	Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
			Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1	
		Round decimals with one decimal place to the nearest whole number	Round decimals with two decimal places to the nearest whole number Round decimals with two decimal places to one decimal place.	Solve problems which require answers to be rounded to specified degrees of accuracy

		Compare numbers with the same number of decimal places up to two decimal places	Compare and order numbers with up to three decimal places	
			Add and subtract numbers with up to 3 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
			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 100, and as a decimal	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
			Solve 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 Solve problems involving numbers up to three decimal places	
Measure	Can show an awareness of standard units of measure. Can begin to compare and order by capacity, length, height and size	Measure and begin to record lengths and heights Measure and begin to record mass and weight Measure and begin to record capacity and volume	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) using rulers Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels	Measure, compare, add and subtract - Lengths (m/cm/mm) Mass (kg/g) Volume/capacity (I/mI)			
					Convert between different units of measure: for	Convert between different units of metric measure (for example, kilometre	Use, read, write and convert between standard units

			example, kilometre to metre	and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Solve problems involving converting between units of time	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate Convert 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 Convert between miles and kilometres
		Measure the perimeter of simple 2-D shapes	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
			Find the area of rectilinear shapes by counting squares	Calculate the area of rectangles (including squares) and including standard units, square	Recognise that shapes with the same areas can have different perimeters and vice versa

			centimetres (cm2) and square metres (m2) Compare the area of rectangles (including squares) Estimate the area of irregular shapes	Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms Calculate the area of triangles Compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.
			Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]	Calculate volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3] Estimate volume of cubes and cuboids

		Compare and order			Compare volume of cubes and cuboids
		Compare and order lengths Compare and order mass Compare and order volume/capacity			
	Compare, describe and solve practical problems for: -Lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] -Mass/weight [for example, heavy/light, heavier than, lighter than] -Capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]			Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	

Can understand the purpose of money – recognising coins and understanding about how change is given	Recognise and know the value of different denominations of coins and notes.	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	Add and subtract amounts of money to give change, using both £ and p in practical contexts	Solve simple measure and money problems involving fractions and decimals to two decimal places Estimate, compare and calculate different measures, including money in pounds and pence	
Can confidently talk about events in the past, present and future – showing an awareness of the	Measure and begin to record time in seconds, minutes and hours		Record and compare time in terms of seconds, minutes and hours		
progress of time. To be able to sequence the days of the week.	Sequence events in chronological order using language [for example, before and after, next, first,	Know the number of minutes in an hour and the number of hours in a day	Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight		

Can sequence simple events in their day.	today, yesterday, tomorrow, morning, afternoon and evening] Recognise and use language relating to dates, including days of the week, weeks, months and years	Compare and sequence intervals of time	Know the number of seconds in a minute and the number of days in each month, year and leap year Compare durations of events [for example to calculate the time taken by particular events or tasks]		
	Tell the time to the hour Tell the time to half past the hour Draw hands on a clock face to show these times	Tell and write the time to five minutes, including quarter past/to the hour Draw the hands on a clock face to show these times	Tell and write the time from an analogue clock Tell and write the time from an analogue clock using Roman numerals from I to XII Tell and write the time from 12-hour and 24-hour clocks Estimate and read time with increasing accuracy to the nearest minute	Read and write time using an analogue clock Read and write time using digital 12- and 24-hour clocks Convert time between analogue and digital 12- and 24-hour clocks	
	Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]			Solve problems involving converting from hours to minutes; minutes to seconds; years to	

					months; weeks to days		
and 3D shape Can use simpl mathematical vocabulary to	Can name some 2D and 3D shapes. Can use simple	Recognise and name common 2-D shapes presented in different orientations, including: rectangles (including squares), circles and triangles Compose 2D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line				
	mathematical vocabulary to describes shapes.	Recognise and name common 3-D shapes presented in different orientations, including: cuboids (including cubes), pyramids and spheres] Compose 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in	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]	Recognise 3-D shapes in different orientations and describe them		Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	

	particular				
	orientations.				
				Compare and classify	
		Camanana and aant		geometric shapes,	
		Compare and sort		including	
		common 2-D and 3-D		quadrilaterals and	
		shapes and everyday		triangles, based on	
		objects		their properties and	
				sizes	
			Draw 2-D shapes		
			Make 3-D shapes		
			using modelling		
			materials		
			materials		
			Recognise angles as a		Know that angles are
					_
			property of shape or	Identify acute and	measured in degrees
			a description of a	obtuse angles	
			turn		Estimate acute,
				Compare and order	obtuse and reflex
			Identify right angles	angles up to two right	angles
				angles by size	
			Recognise that two	Ç ,	Compare acute,
			right angles make a	Identify lines of	obtuse and reflex
			half-turn, three make	symmetry in 2-D	angles
					aligies
			three quarters of a	shapes presented in	
			turn and four a	different orientations	Draw given angles,
			complete turn		and measure them in
				Complete a simple	degrees (o)
			Identify whether	symmetric figure with	
			angles are greater	respect to a specific	Identify angles at a
			than or less than a	line of symmetry	point and one whole
			right angle		turn (total 360o)
					(2011)

			Identify horizontal and vertical lines Identify pairs of perpendicular and parallel lines		Identify angles at a point on a straight line and 1/2 a turn (total 1800) Identify other multiples of 900 Use the properties of rectangles to deduce related facts and find missing lengths and angles Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
	Describe position, direction and movement, including whole, half, quarter and three-quarter turns	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 anticlockwise)		Describe positions on a 2-D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down Plot specified points and draw sides to	Identify and describe the position of a shape following a translation, using the appropriate language, and know that the shape has not changed Represent the position of a shape following a translation, using the appropriate language, and know

			complete a given polygon	that the shape has not changed Identify and describe the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed Represent the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed	
		Order and arrange combinations of mathematical objects in patterns and sequences			