

Shillington Lower school and Stondon Lower school (Shillington and Stondon Federation)

Curriculum map/skills progression grid

Date		Maths Skills Progression Review date					Subject Leader
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This document aims to give guidance on the progression of skills and knowledge across the year groups. It is used to support planning the year groups long term overviews that break up content into termly blocks. As children make progress through the school, it is expected that they can demonstrate a wider range of independent skills and knowledge in the 7 strands of maths across the curriculum. In maths, like in other subjects, we recognise the importance that a range of different teaching methods could be used in supporting pupils to know more, understand more and remember more. In maths we use the following approaches of small steps in learning to ensure that children build on previous learning, concrete equipment to support children to understand different processes and concepts, pictorial representations which build upon on the concrete and allow children to learn how to represent number in a variety of ways, written methods which use conceptual and procedural variation to extend children’s thinking and problem solving and reasoning to develop children’s verbal and written responses to solve different mathematical tasks. These will be evident in pupil discussion, observations and work in books in order that learning opportunities in maths are as effective as possible and that pupils make progress throughout the year and across different years.							
Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place Value							
Counting	counts an irregular arrangement of up to ten objects count reliably with numbers from 1 to 20 order number from 1 to 20 estimates how many objects he/she can see and checks by counting them finds the total number of items in two groups by counting all of them	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 steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number count backwards through zero to include negative numbers	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Count forwards and backwards with positive and negative numbers, including through zero	
Place Value	order numbers from 1 to 20	partition and combine numbers using apparatus if required e.g. partition 76 into	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	Compare numbers to at least 1 000 000 and determine the value of each digit.	Order and compare numbers up to 10 000 000 and determine the value of each digit.

		tens and ones; combine 6 tens and 4 ones	compare and order numbers from 0 up to 100; use <, > and = signs use place value and number facts to solve problems 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 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	compare and order numbers up to 1000 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.	order and compare numbers beyond 1000 round any number to the nearest 10, 100 or 1000 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-	Interpret negative numbers in context. Round any number up to 1 000 000 to the nearest: - 10 - 100 - 1000 - 10, 000 - 100, 000	Round any whole number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero.
Representing Number	recognises some numerals of personal significance recognises numerals 1 to 5 selects the correct numeral to represent 1 to 5, then 1 to 10 objects records, using marks that he/she can interpret and explain	identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 20 in numerals and words	identify, represent and estimate numbers using different representations, including the number line read and write numbers to at least 100 in numerals and in words	identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words	identify, represent and estimate numbers using different representations 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, write (order and compare) numbers to at least 1 000 000 and determine the value of each digit. Read Roman numerals to 1000 and recognize years written in Roman numerals.	Read, write (order and compare) numbers up to 10 000 000 and determine the value of each digit.

	say which number is one more or one less than a given number						
Addition and Subtraction							
Number Facts	solve problems including doubling, halving and sharing	<p>given a number, identify one more and one less</p> <p>recall at least four of the six number bonds for 10 and reason about associated facts (e.g. $6 + 4 = 10$, therefore $4 + 6 = 10$ and $10 - 6 = 4$)</p> <p>represent and use number bonds and related subtraction facts within 20</p> <p>Develop fluency in addition and subtraction facts within 10.</p>	<p>recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships</p> <p>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>recall doubles and halves to 20 e.g. knowing that double 2 is 4, double 5 is 10 and half of 18 is 9</p> <p>Secure fluency in addition and subtraction facts within 10, through continued practice.</p>	<p>Continue to use number bonds to solve problems involving three -digit numbers</p> <p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p>	Continue to use number bonds to solve problems involving four-digit numbers		
Working Mentally	<p>count on or back to find an answer</p> <p>begin to use the vocabulary involved in adding and subtracting in practical activities and discussion</p>	add and subtract one-digit and two-digit numbers to 20, including zero	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, tens, another two-digit number	add and subtract numbers mentally, including: three-digit number and ones, three-digit and tens, three-digit number and hundreds		Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	

			and 3 one digit numbers. show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot				
Written Representation	<p>records, using marks that he/she can interpret and explain</p> <p>begin to use the vocabulary involved in adding and subtracting in practical activities and discussion</p> <p>using quantities and objects, add and subtract two single-digit numbers</p>	<p>read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs</p> <p>demonstrate an understanding of the commutative law (e.g. $3 + 2 = 5$, therefore $2 + 3 = 5$)</p> <p>demonstrate an understanding of inverse relationships involving addition and subtraction (e.g. if $3 + 2 = 5$, then $5 - 2 = 3$)</p>	<p>add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, tens, another two-digit number and 3 one digit numbers.</p> <p>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods.</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p>	<p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p>
Problem Solving and Reasoning	solve problems including doubling, halving and sharing	solve one-step problems that involve addition and	solve problems with addition and subtraction, using	estimate the answer to a calculation and use inverse	estimate and use inverse operations	Solve addition and subtraction multi-step problems in contexts, deciding which	Solve addition and subtraction multi-step problems in contexts, deciding which

		subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.	concrete, pictorial and abstract representations use estimation to check that his/her answers to a calculation are reasonable e.g. knowing that $48 + 35$ will be less than 100	operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	to check answers to a calculation solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	operations and methods to use and why.
Multiplication and Division							
Number Facts	solve problems including doubling, halving and sharing	count forwards and backwards in multiples of twos, fives and tens	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers use multiplication and division facts for 2, 5 and 10 to make deductions outside known multiplication facts e.g. know that multiples of 5 have one digit of 0 or 5 and use this to reason that 18×5 cannot be 92 as it is not a multiple of 5	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).	recall multiplication and division facts for multiplication tables up to 12×12 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. Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)		
Working Mentally		count in multiples of twos, fives and tens	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times),	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers,	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	Identify multiples and factors, including finding all the factor pairs of a number, and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors and composite numbers.	Identify common factors, common multiples and prime numbers. Use estimation to check answers to calculations and determine, in the context of a problems. An appropriate degree of accuracy.

			division (\div) and equals (=) signs	using mental methods	recognise and use factor pairs and commutativity in mental calculations	Establish whether a number up to 100 is prime and recall prime numbers up to 19. Recognize and use square numbers and cube numbers, and the notation for squared and cubed.	Perform mental calculations, including with mixed operations and large numbers.
Written Representation		use concrete objects, pictorial representations and arrays with the support of the teacher.	Use arrays, repeated addition and multiplication and division sentences recognise the relationships between addition and subtraction and rewrite addition statements as simplified multiplication statements e.g. $10 + 10 + 10 + 5 + 5 = 3 \times 10 + 2 \times 5 = 4 \times 10$	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental methods	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing upon known facts. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate. Divide numbers up to 4 digits by a two-digit number using the formal written method of short division, interpreting reminders according to the context.
Problem Solving and Reasoning	solve problems including doubling, halving and sharing	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.	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,	solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Solve problems involving addition, subtraction, multiplication and division.

			including problems in contexts solve word problems involving multiplication and division with more than one step e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet				
Combined Operations						Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding of the equals sign.	Use their knowledge of the order of operations to carry out calculations involving the four operations.
Fractions							
Recognising 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 $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert from one to the other.	
Comparing and ordering fractions				compare and order unit fractions, and fractions with the same denominators recognise and show, using diagrams, equivalent fractions with small denominators	recognise and show, using diagrams, families of common equivalent fractions	Compare and order fractions whose denominators are all multiples of the same number.	Use common factors to simplify fractions. Use common multiples to express the fractions in the same denomination. Compare and order fractions, including fractions >1 .

Finding fractions of shapes and quantities		<p>recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p>	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	<p>recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p>	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number		
Written fractions			write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	add and subtract fractions with the same denominator	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</p> <p>Multiply proper fractions by whole numbers, supported by materials and diagrams.</p>	<p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form.</p>
Decimals as fractional amounts				<p>record $\frac{1}{10}$ as 0.1, $\frac{3}{10}$ as 0.3 etc.</p> <p>recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$</p> <p>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</p>	<p>recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$</p> <p>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</p>	<p>Read and write decimal numbers as fractions.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p>	

Ordering decimals					round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places	Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.	Identify the value of each digit in numbers given to three decimal numbers.
Recognise and Write Decimals				Recognise and write decimal equivalence of any number of tenths or hundredths.	Read and write decimal numbers as fractions. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	Identify the value of each digit in numbers given to three decimal places.	
Compare Decimals				Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.	Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.		
Problem solving and reasoning				solve problems using all fraction knowledge	solve simple measure and money problems involving fractions and decimals to two decimal places	Solve problems up to three decimal places.	Multiply and divide numbers by 10, 100 and 1000 giving answers up to three 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 problems which require answers to be rounded to specified degrees or accuracy.
Fractions, Decimals and Percentages						<p>Recognise the percent symbol and understand that percent relates to 'number of parts per hundred'.</p> <p>Write percentages as a fraction with the denominator 100, and as a decimal.</p> <p>Solve problems which require knowing percentage and decimal equivalents.</p>	<p>Associate a fraction with a division and calculate decimal fraction equivalents.</p> <p>Recall equivalences between simple fractions, decimals and percentages.</p>
Ratio and Proportion							<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving the calculation of percentages and the use of percentages for comparison</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>
Algebra							
Algebraic Thinking		Solve one-step problems that involve addition, using concrete objects and pictorial representations and missing number problems.	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and	Solve problems including missing number problems.			

			solve missing number problems.				
Algebraic Notation							<p>Use simple formulae.</p> <p>Generate and describe linear number sequences.</p> <p>Express missing number problems algebraically.</p> <p>Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>Enumerate possibilities of combinations of two variables.</p>
Measurement							
Measures	use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	<p>compare, describe and solve practical problems for: length/height, weight/mass, capacity/volume & time</p> <p>measure and begin to record length/height, weight/mass, capacity/volume & time</p>	<p>choose and use appropriate standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>read scales in divisions of ones, twos, fives and tens</p> <p>read scales where not all numbers on</p>	<p>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>measure the perimeter of simple 2-D shapes</p>	<p>convert between different units of measure</p> <p>estimate, compare and calculate different measures, including money in pounds and pence</p> <p>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>find the area of rectilinear shapes by counting squares</p>	<p>Convert between different units of metric measure.</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</p> <p>Use all four operations to solve problems involving measures using decimal notation, including scaling.</p>	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>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 places.</p> <p>Convert between miles and kilometers.</p>

Commented [FS1]:

			the scale are given and estimate points in between				
Money	use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	recognise and know the value of different denominations of coins and notes	<p>recognise and use symbols for pounds (£) and pence (p)</p> <p>combine amounts to make a particular value</p> <p>find different combinations of coins that equal the same amounts of money</p> <p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	add and subtract amounts of money to give change, using both £ and p in practical contexts	estimate, compare and calculate different measures, including money in pounds and pence	Use all four operation to solve problems involving measure (for example, money).	
Time	<p>use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.</p> <p>orders and sequences familiar events</p> <p>measures short periods of time in simple ways</p>	<p>compare, describe and solve practical problems for time e.g. quicker, slower, earlier, later</p> <p>sequence events in chronological order</p> <p>recognise and use language relating to dates, including days of the week, weeks, months and years</p> <p>tell the time to the hour and half past</p>	<p>compare and sequence intervals of time</p> <p>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</p> <p>know the number of minutes in an hour and the number of hours in a day</p> <p>read the time on a clock to the nearest 15 minutes</p>	<p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>estimate and read time with increasing accuracy to the nearest minute</p> <p>record and compare time in terms of seconds, minutes and hours</p>	<p>convert between different units of measure (e.g. Hours to minutes)</p> <p>read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>	Solve problems involving converting between units of time	Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa

		the hour and draw the hands on a clock face to show these times		use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events			
Geometry							
Shape vocabulary	explore characteristics of everyday objects and shapes and use mathematical language to describe them begin to use mathematical names for "solid" 3D shapes and "flat" 2D shapes, and mathematical terms to describe shapes	recognise and name common 2-D shapes (e.g. Square, circle, triangle) recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres)	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	identify horizontal and vertical lines and pairs of perpendicular and parallel lines			
Properties of 2-d shape	explore characteristics of everyday objects and shapes and use mathematical language to describe them. selects a particular named shape		identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. compare and sort common 2-D and 3-D shapes and everyday objects.	draw 2-D shapes recognise angles as a property of shape or a description of a turn identify whether angles are greater or less than right angle	compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes identify acute and obtuse angles and compare and order angles up to two right angles by size	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Use the properties of rectangles to deduce related facts and find missing lengths and angles.	Draw 2-D shapes using given dimensions and angles. Compare and classify geometric shapes based on their properties and sizes. Illustrate and name parts of a circle, including radius, diameter and circumference and know that the diameter is twice the radius.

					<p>identify lines of symmetry in 2-D shapes presented in different orientations</p> <p>complete a simple symmetric figure with respect to a specific line of symmetry.</p> <p>begin to recognise where angles are greater than two right angles. Know the term straight angle referring to two right angles together</p>		
Properties of 3-d shape	explore characteristics of everyday objects and shapes and use mathematical language to describe them.		<p>identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>identify 2-D shapes on the surface of 3-D shapes.</p> <p>compare and sort common 2-D and 3-D shapes and everyday objects.</p>	<p>make 3-D shapes using modelling materials</p> <p>recognise 3-D shapes in different orientations and describe them</p>	<p>identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p>begin to recognise where angles are greater than two right angles. Know the term straight angle referring to two right angles together</p>	Identify 3-D shapes, including cubes and other cuboids from 2-D representations.	Recognise, describe and build simple 3-D shapes, including making nets.
Position and direction	recognise, create and describe patterns can describe his/her relative position such as "behind" or "next to"	describe position, direction and movement, including whole, half, quarter and three-quarter turns	order and arrange combinations of mathematical objects in patterns and sequences Use mathematical vocabulary to describe position,	identify right angles, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn	<p>describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>describe movements between positions as translations of a given unit to the</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles, and measure them in degrees.</p>	<p>Find unknown angles in any triangles, quadrilaterals, and regular polygons.</p> <p>Recognize angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p>

			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)		left/right and up/down plot specified points and draw sides to complete a given polygon	Identify angles at a point and one whole turn, angles at a point on a straight line and half a turn, other multiples of 90° Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Describe positions on the full coordinate grid. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
Statistics							
Interpreting data			interpret and construct simple pictograms, tally charts, block diagrams and simple tables	interpret and present data using bar charts, pictograms and tables	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Complete, read and interpret information in tables, including timetables.	Interpret and construct pie charts and line graphs and use these to solve problems.
Using data			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 totalling and comparing categorical data	solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Solve comparison, sum and difference problems using information presented in a line graph.	Calculate and interpret the mean as an average.