St James’ Catholic Primary School

Mathematics progression

Whole school

St James' Catholic Primary School

'Where we belong, believe and achieve'.

Reviewed April 2026

Yr	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
FS1	**Rhymes with numbers** **Count in everyday contexts** **Repeating patterns**	**Build with a range of resources** **Finger counting (to 5)**	**Explore 2D and 3D shapes** **More and less** **Solve real world mathematical problems**	**1 to 1 correspondence (up to 5)** **Compare objects (size, weight, length)**	**Subitising (up to 3)** **Cardinal principle** **Positional language**	**Reciting numbers past 5** **Link numerals and amounts** **Mark making (including some numerals)**
FS2	**Match and sort** **Compare numbers** **Representing 1, 2 & 3** **Shape, space and measure**	**Comparing 1, 2 & 3** **Composition of 1, 2 & 3** **Representing numbers to 5** **One more and less**	**Introducing zero** **Comparing numbers to 5** **Composition of 4 & 5** **6, 7 & 8** **Shape, space and measure**	**Making pairs** **Combining 2 groups** **9 & 10** **Comparing numbers to 10** **Bonds to 10**	**Building numbers** **Counting patterns beyond 10** **Adding more** **Taking away** **Shape, space and measure**	**Doubling, sharing & grouping** **Even & odd** **Deepening understanding** **Patterns and relationships**
Y1	**Place Value (within 10)** **Addition and Subtraction (within 10)**	**Addition and Subtraction (within 10)** **Shape** **Place Value (within 20)**	**Addition and Subtraction (within 20)** **Place value (within 50)**	**Length and Height** **Weight and Volume**	**Multiplication and division** **Fractions** **Position and direction**	**Place Value (within 100)** **Money** **Time**
Y2	**Place Value** **Addition and Subtraction**	**Addition and Subtraction** **Money** **Multiplication and Division**	**Multiplication and Division** **Statistics**	**Properties of Shape** **Fractions**	**Length and Height** **Position and Direction**	**Time** **Mass, Capacity and Temperature**
Y3	**Place Value** **Addition and Subtraction**	**Addition and Subtraction** **Multiplication and Division**	**Multiplication and Division** **Money** **Statistics**	**Length and Perimeter** **Fractions**	**Fractions** **Time**	**Properties of Shape** **Mass and Capacity**
Y4	**Place Value** **Addition and Subtraction**	**Length and Perimeter** **Multiplication and Division**	**Multiplication and Division** **Area**	**Fractions** **Decimals**	**Decimals** **Money** **Time**	**Statistics** **Properties of Shape** **Position and Direction**
Y5	**Place Value** **Addition and Subtraction** **Statistics**	**Multiplication and Division** **Perimeter and Area**	**Multiplication and Division** **Fractions**	**Fractions** **Decimals and Percentages**	**Decimals** **Properties of Shape** **Position and Direction**	**Converting Units** **Volume**
Y6	**Place Value** **Addition, Subtraction Multiplication and Division**	**Fractions** **Position and Direction**	**Decimals** **Percentages** **Algebra** **Converting Units**	**Perimeter, Area and Volume** **Ratio** **Statistics**	**Properties of Shape** **SATs Preparation**	**Consolidation, investigations and preparations for KS3**

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting and sequences	**Birth to Three** • Counting-like behaviour, such as making sounds, pointing, or saying some numbers in sequence. • Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.' • Notice patterns and arrange things in patterns. **Three to Four** • Recite numbers past 5. • Say one number for each item in order: 1,2,3,4,5. • Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. • Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	**Reception** • Count objects, actions, and sounds. • Count beyond ten. • Continue, copy, and create repeating patterns. **ELG** • Verbally count beyond 20, recognising the pattern of the counting system. • 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 with 0 or 1, or from any given number. • count numbers to 100 in numerals. • count in multiples of twos, fives and tens.	• 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. • 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 whole numbers, including through zero.	

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Represent	**Birth to Three** • Take part in finger rhymes with numbers. **Three to Four** • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.	**Reception** • Explore the composition of numbers to 10.	• Identify and represent numbers using objects and pictorial representations including the number line (numbers to at least 30). • Read and write numbers to 100 in numerals. • Read and write numbers from 1 to 20 in numerals and words.	• Read and write numbers to at least 100 in numerals and in words. • Identify, represent and estimate numbers using different representations, including the number line.	• 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 and write numbers to at least 10 000. • 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 (M) and recognise years written in Roman numerals.

	FS1	FS						

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Use PV and Compare	**Birth to Three** • React to changes of amount in a group of up to three items. • Compare amounts, saying 'lots', 'more' or 'same'. **Three to Four** • Fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Compare quantities using language: 'more than', 'fewer than'.	**Reception** • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • ELG • Have a deep understanding of number to 10, including the composition of each number. • Subitise (recognise quantities without counting) up to 5. • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.	• Given a number, identify one more and one less.	• Recognise the place value of each digit in a two-digit number (tens, ones). • Compare and order numbers from 0 up to 100; use <, > and = signs.	• Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Compare and order numbers up to 1000	• Find 0.1, 1, 10, 100 or 1000 more or less than a given number. • Order and compare numbers beyond 1000. • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	• Find 0.01, 0.1, 1, 10, 100, 100 and other powers of 10 more or less than a given number • Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.	• Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.

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Place Value: Problems and Rounding	**Three to Four** • Solve real world mathematical problems with numbers up to 5.			• Use place value and number facts to solve problems.	• Solve number problems and practical problems involving these ideas. • Round numbers to at least 1000 to the nearest 10 or 100.	• Round any number to the nearest 10, 100 or 1000. • Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	• Interpret negative numbers in context. • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. • Solve problems and practical problems that include all of above.	• Round any whole number to a required degree of accuracy. • Solve number and practical problems that involve all of the above.

Addition and Subtraction: Recall, Represent and Use		**Reception** • Automatically recall number bonds for numbers 0–10. **ELG** • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	• Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. • Represent and use number bonds and related subtraction facts within 20.	• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	• Estimate the answer to a calculation and use inverse operations to check answers	• Estimate and use inverse operations to check answers to a calculation	• Check answers to questions 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.

Addition and Subtraction: Calculations			• 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 • 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 hundreds • 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	• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).	• Perform mental calculations including with mixed operations and large numbers and decimals. • Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction). • Use knowledge of the order of operations to carry out calculations.

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Addition and Subtraction: solve problems			• 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 • applying their increasing knowledge of mental and written methods	• Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	• Solve addition and subtraction problems involving missing numbers. • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	• Solve addition and subtraction problems involving missing numbers. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. • Solve problems involving all four operations, including those with missing numbers.

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Multiplication and division: Recall, Represent and Use				• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	• Recall multiplication and division facts for multiplication tables up to 12 × 12 • 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 • Recognise and use factor pairs and commutativity in mental calculations	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. • 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 (2) and cube (3) numbers, and notation.	• Identify common factors, common multiples and prime numbers. • Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

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Multiplication and division: Calculations				• Calculate mathematical statements for multiplication using repeated addition) and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	• Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.	• Multiply numbers up to 4 digits by a one--digit number using a formal written method • Multiply numbers up to 4 digits by two-digit number using long multiplication. • 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/divide whole numbers and decimals by 10, 100 and 1000.	• Multiply multi-digit numbers up to 4 digits by a twodigit whole number using the formal written method of long multiplication. • Multiply one-digit numbers with up to two decimal places by whole numbers. • Divide numbers up to 4 digits by a two-digit whole number using the formal written methods of short or long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. • Use written division methods in cases where the answer has up to two decimal places.

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication and division: Solve problems				• Solve problems involving multiplication and division (including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	• 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 including multiplying and adding using the distributive law to multiply two digit numbers by one digit, inter scaling and harder correspondence problems such as objects that are connected to 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 rates.	• Solve problems involving all four operations, including those with missing numbers.
Multiplication and division: Combined operations							• Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	• Use knowledge of the order of operations to carry out calculations.

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fraction: Recognise and write			• Recognise, find and name a half as one of two equal parts of an object shape or quantity (including measure). • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity (including measure).	• Recognise, find, name and write fractions 1/3, 1/4, 2/4, and 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 • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • 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.	• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	

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Fraction: Compare				• recognise the equivalence of 2/4 and 1/2	• Recognise and show, using diagrams, equivalent fractions with small denominators • Compare and order unit fractions, and fractions with the same denominators	• Recognise and show, using diagrams, families of common equivalent fractions	• Compare and order fractions whose denominators are all multiples of the same number.	• Compare and order fractions, including fractions > 1 • Compare and order fractions, including fractions > 1

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Fraction: Calculations				• Write simple fractions for example, 1/2 of 6 = 3	• 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 the same denominator and denominators that are multiples of the same number. • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 x 1/2 = 1/8]. • Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6].

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Fraction: Solve problems					• Solve problems that involve all of the above.	• Solve simple measure and money problems involving fractions and decimals to two decimal places.	• 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 fractions.

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Decimals: Recognise and write						• Recognise and write decimal equivalents to 1/4, 1/2, ¾ • Recognise and write decimal equivalents of any number of tenths or hundredths	• Read and write decimal numbers as fractions [for example, 0.71 = 71/100]. • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	• Identify the value of each digit to three decimal places.
Decimals: Compare						• Round decimals (one decimal place) to the nearest whole number. • Order and 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 3 decimal places.	

Decimals: Calculations and problems						• Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer.	• Solve problems involving number up to three decimal places.	• Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. • Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction). • 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 of accuracy.

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Fractions, Decimals and Percentages						• Solve simple measure and money problems involving fractions and decimals 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. • 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.	• Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]. • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

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Ratio and Proportion								• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. • Solve problems involving similar shapes where the scale factor is known or can be found. • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

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Algebra								• Use simple formulae. • Generate and describe linear number sequences. • Express missing number problems algebraically. • Find pairs of numbers that satisfy an equation with two unknowns. • Enumerate possibilities of combinations of two variables.

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Measurement: Using measures	**Birth to Three** • Compare sizes, weights etc. using gesture and language - 'bigger/ little/smaller', 'high/low', 'tall', 'heavy'. **Three to Four** • Make comparisons between objects relating to size, length, weight, and capacity.	**Reception** • Compare length, weight, and 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] ○ time [for example, quicker, slower, earlier, later] • Measure and begin to record the following: ○ lengths and heights ○ mass/weight ○ capacity and volume ○ time (hours, minutes, seconds)	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • Continue to estimate and measure temperature to the nearest degree (°C) using thermometers.	• Convert between different units of measure [for example, kilometre to metre; hour to minute] • Order temperatures including those below 0°C.	• Convert between different units of metric measure (for example, kilometre 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. • Use, read and write standard units of length and mass. • Continue to order temperatures including those below 0°C. • Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	• Use, read and write standard units of length, mass, volume and time using decimal notation to three decimal places. • Convert between miles and kilometres. • Convert between standard units of length, mass, volume and time using decimal notation to three decimal places. • Calculate differences in temperature, including those that involved a positive and negative temperature. • Solve problems involving the calculation and of units of measure, using decimal notation up to three decimal places where appropriate.

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money			• Recognise and know the value of different denominations of coins and notes	• Find different combinations of coins that equal the same amounts of money.	• Recognise that ten 10p coins equal £1 and that each coin is 1/10 of £1. • Solve problems involving money and measures and simple problems involving passage of time. • Add and subtract amounts of money to give change, using both £ and p in practical contexts	• Write amounts of money using decimal notation. • Recognise that one hundred 1p coins equal £1 and that each coin is 1/100 of £1.	• Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	

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Measurement: Time			• Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]. • Recognise and use language relating to dates, including days of the week, weeks, months and years. • Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	• Compare and sequence intervals of time. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour and the number of hours in a day.	• Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; 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 [for example to calculate the time taken by particular events or tasks]. • Solve problems involving money and measures and simple problems involving passage of time.	• Read, write and convert time between anologue and digital 12- and 24-hour clocks • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	• Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks. • Solve problems involving converting between units of time.	• Convert between standard units of length, mass, volume and time using decimal notation to three decimal places.
	FS1	**FS**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**

Measurement: Perimeter, area and volume	**Three to Four** • Climb and squeezing selves into different types of spaces.				• Measure the perimeter of simple 2-D shapes	• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • Find the area of rectilinear shapes by counting squares	• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. • Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. • Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water].	• Recognise that shapes with the same areas can have different perimeters and vice versa. • Calculate the area of parallelograms and triangles. • Recognise when it is possible to use formulae for area and volume of shapes. • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units (e.g. mm3 and km3).

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2D shapes	**Three to Four** • Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles, and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.	**Reception** • Select, rotate, and manipulate shapes in order to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	• 2-D shapes [for example, rectangles (including squares), circles and triangles]	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line		• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	• 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.	• Draw 2-D shapes using given dimensions and angles.
Geometry: 3D shapes	**Birth to Three** • Build with a range of resources. **Three to Four** • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. • Combine shapes to make new ones – an arch, a bigger triangle etc.		• 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	• 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].	• Draw 2-D shapes and make 3-D shapes using modelling materials; 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.

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Geometry: Angles and lines					• Recognise angles as a property of shape or a description of a turn • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	• Identify acute and obtuse angles and compare and order angles up to two right angles by size • Identify lines of symmetry in 2-D shapes presented in different orientations • Complete a simple symmetric figure with respect to a specific line of symmetry.	• Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. • Identify angles at a point on a straight line and half a turn (total 180o). • Identify angles at a point and one whole turn (total 360o). • Draw given angles, and measure them in degrees (o). • Identify other multiples of 90o.	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. • Find unknown angles in any triangles, quadrilaterals, regular polygons.

	FS1	**FS**						

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Position and direction	**Three to Four** • Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.		• describe movement, including whole, half, quarter and three-quarter turns. • describe position and direction. • Recognise and create repeating patterns with objects and shapes.	• order and arrange combinations of mathematical objects in patterns and sequences. • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	• Describe positions on a square grid labelled with letters and numbers.	• 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 complete a given polygon.	• Describe positions on the first quadrant of a coordinate grid. • Plot specified points and complete shapes. • 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 (all four quadrants). • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Statistics: Present and interpret			• Present and interpret data in block diagrams using practical equipment.	• interpret and construct simple pictograms, tally charts, block diagrams and simple tables. •	• Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects. • 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. • Use a variety of sorting diagrams to compare and classify numbers and geometric shapes based on their properties and sizes.	• Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes). • Calculate and interpret the mode, median and range. • Complete, read and interpret information in tables, including timetables.	• Continue to complete and interpret information in a variety of sorting diagrams (including sorting properties of numbers and shapes). • Interpret and construct pie charts and line graphs and use these to solve problems. • Calculate and interpret the mean as an average.

	FS1	FS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Solve problems			• . Ask and answer simple questions by counting the number of objects in each category. • Ask and answer questions by comparing categorical 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.	• Solve comparison, sum and difference problems using information presented in all types of graph.