

Key Stage 3: Year 7 Maths

Overall Curriculum Goals

- To be confident with their number facts and the four operations
- To fluently recall their times tables and apply them in problems
- Understand the concepts and vocabulary of the number system including the basis of number theory (prime numbers, factors, multiples, lowest common multiples, highest common factors) and index notation and associated manipulation (powers and roots)
 - Understand negative numbers and how to order, add, subtract, multiply and divide based on a firm understanding of their manipulation
 - Be fluent in their use of fractions, decimals and percentages
 - Be confident in their multiplicative reasoning
 - Understand the concepts of perimeter, area and volume
 - To work confidently with statistics
 - Begin to generalise number into algebraic concepts and start to work on manipulation of algebraic terms.
 - To explore problem solving and resilience when tackling unfamiliar problems

Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p>Number 1 (Place value and integers)</p> <ul style="list-style-type: none"> • Place value, ordering and rounding, including decimals places and significant figures • Use and make suitable estimates • Integers and decimals • Operations with number • Factors, multiples and prime factor decomposition. • Negative umbers • Indices • Calculator methods <p>Number 2 (fractions, decimals and percentages)</p> <ul style="list-style-type: none"> • Four operations with fractions and decimals • Finding fractions of amounts. • Working with improper fractions and mixed numbers. • Introduce the idea of recurring decimals and links to fractions. 	<p>SSM1 (Perimeter, area and volume)</p> <ul style="list-style-type: none"> • Know the perimeter and area of simple shapes such as rectangle, triangle, trapezia, parallelogram. • Perimeter and area of compound shapes • Volume and surface area of cubes and cuboids • Conversion between units • To classify quadrilaterals and know of their geometrical properties 	<p>Number 3 (Ratio and Proportion)</p> <ul style="list-style-type: none"> • To understand multiplicative reasoning • To introduce proportional reasoning • To write a ratio • To simplify a ratio • To divide a given quantity into a ratio • To understand direct proportion and introduce its graphical representation • To use proportional reasoning in currency conversions • Making links with scale factors 	<p>Algebra 1&2 (Algebraic manipulation and formulae)</p> <ul style="list-style-type: none"> • To understand and use the terms of expression, equation, identity, formula, term, factor • To simplify an algebraic expression • To multiply out an expression over a bracket (distributivity) • To multiply an algebraic expression. • To factorise an expression • To substitute into an expression or formula • To rearrange a formula • To construct and solve a linear equation, involving the unknown on both sides of the equation, involving brackets 	<p>Algebra 3 (Sequences and graphs)</p> <ul style="list-style-type: none"> • Recognise sequences of odd and even numbers, and other sequences including Fibonacci • Find the nth of an arithmetic sequence • Use functions machines to find terms of a sequences • Use linear expressions to describe the nth term • Distinguish between Fibonacci, arithmetic and geometric sequences • Generate and find specific terms of a sequence given the rule. • Continue a geometric sequence • Plot graphs of linear sequences • Find the midpoint of a line segment AB when given the coordinates • Recognise the equation of $y = mx + c$ corresponds to straight line graphs • Plot the graphs of linear functions where y is given implicitly in terms of x. 	<p>Data 1 (Statistics)</p> <ul style="list-style-type: none"> • Data collection and sampling • Questionnaires • Representing data in simple charts and diagrams, such as pie charts, pictograms, bar charts, frequency tables • Representing bivariate data on a scatter diagram • Interpreting all the diagrams and charts listed above. • Finding the central measures of tendency such as mean, mode and median • Finding the measures of spread such as range and interquartile range • Looking at trends • Making comparisons between distributions to draw conclusions
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Place value, zero, place holder, tenth, hundredth, thousandth, equivalent, decimal number, decimal fraction, less than, greater than, between, order, compare, digit, most/least significant digit, use accurately these symbols: =, ≠, >, <, ≤, ≥, integer, positive, negative,	2-D, 3-D, cube, cuboid, pyramid, tetrahedron, prism, cylinder, sphere, hemisphere, face, vertex, vertices, edge, net, millimetre (mm), centimetre (cm), metre (m), kilometre (km), gram (g), kilogram (kg), millilitre (ml), centilitre (cl),	Approximate, approximately, approximately equal to (≈), between, compare, decimal number, decimal place, digit, equals (=), greater than (>), less than (<), greatest value, least value, most/least significant digit, nearest,	Algebra, brackets, commutative, equals(=), equation, expression, evaluate, prove, simplify, simplest form, solution (of an equation), solve (an equation), squared, substitute, symbol, term, therefore (∴) unknown value, variable, verify.	Sequence, consecutive, continue, finite, infinite, function, function machine, generate, increase, decrease, input, output, mapping, nth term, predict, relationship, rule, term	Average, bar chart, bar-line graph, class interval, data, grouped data, data collection sheet, database, experiment, frequency, frequency chart, frequency diagram, interpret, interval, label, mean, median, mode, modal class/group, pie chart,

plus, minus, and know that '-6' is read as 'negative six', increase, decrease, double, halve, complement, partition, guess, estimate, approximate, roughly, nearly, approximately, too many, too few, enough, not enough, know the symbol \approx , calculator, display, key enter, clear, memory. Numerator, denominator, mixed number, proper fraction, improper fraction, decimal fraction, equivalent, cancel, simplify, convert, lowest terms, simplest form, percentage, discount, increase, decrease, exchange rate, currency, convert.	litre (l), square millimetre (mm ²), square centimetre (cm ²), square metre (m ²), square kilometre (km ²), degree Celsius (°C), second (s), minute (min), hour (h), day, week, month, year, decade, century, millennium, degree (°), area, surface, surface area, perimeter, distance.	order, place value, round, tenth, hundredth, thousandth, to one decimal place (to 1 d.p.), value, zero place holder, ascending, descending, billion, index, power, add, addition, amount, brackets, calculate, calculation, calculator: clear, display, enter, key, memory, change (money), commutative, complements (in 10, 100), currency, difference, discount, divide, division, double, halve, estimate, exact, exactly, exchange rate, factor, increase, decrease, inverse, multiply, multiplication, nearly, operation, order of operations, partition, product, quotient, remainder, rough, roughly, sale price, sign, subtract, subtraction, sum, total, associative, best estimate, degree of accuracy, distributive, interest, profit, loss, service charge, sign change key, tax, value added tax, ratio, proportion	Divide, divisible, product, factor, prime, remainder, square number, triangular number, squared, square root, multiple, prime factor decomposition, coordinate, x-axis, y-axis, linear, function, straight line, table, equation, graph, formula, parallel, Algebra, brackets, commutative, equals (=), equation, expression, evaluate, prove, simplify, simplest form, solution (of an equation), solve (an equation), squared, substitute, symbol, term, therefore (), unknown, value, variable, verify.		questionnaire, range, represent, statistic, statistics, survey, table, tally, title
CIAG	CIAG	CIAG	CIAG	CIAG	CIAG
Accountant, banker, scientist, astronomer, air traffic controller.	Painter, builder, construction, engineering.	Retail or food sector, pharmacist, doctor, health staff, chef, dietitian.	Research scientist, astronomer, chemist, economist.	Business manager, financial analyst, computer programmer, research scientist	Data analyst, data scientist, logistics analyst, marketing analyst, logistics analyst. Market researcher, financial analyst, statistician, software engineer

Key Stage 3: Year 8 Maths

Overall Curriculum Goals					
<ul style="list-style-type: none"> • Understand the concepts and vocabulary of the number system including the basis of number theory (prime numbers, factors, multiples, lowest common multiples, highest common factors) and index notation and associated manipulation (powers and roots) <ul style="list-style-type: none"> • Understand negative numbers and how to order, add, subtract, multiply and divide based on a firm understanding of their manipulation <ul style="list-style-type: none"> • Be fluent in their use of fractions, decimals and percentages • To continue to be confident in their multiplicative reasoning • Understand the concepts of perimeter, area and volume <ul style="list-style-type: none"> • To work with probability • To work with confidence on algebraic manipulation, including solving equations, rearranging formulae <ul style="list-style-type: none"> • To explore problem solving and resilience when tackling unfamiliar problems <ul style="list-style-type: none"> • To do basic geometrical constructions • To develop their geometrical reasoning 					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6

<p>Number 1 (Place value and integers)</p> <ul style="list-style-type: none"> Place value, ordering and rounding, including decimals places and significant figures Use and make suitable estimates Work with numbers in standard form notation Indices Calculator methods Upper and lower bounds Introduction to surds <p>Algebra 3 (Sequences and graphs)</p> <ul style="list-style-type: none"> Recognise sequences of odd and even numbers, and other sequences including Fibonacci Find the nth of an arithmetic sequence Use functions machines to find terms of a sequences Use linear expressions to describe the nth term Distinguish between Fibonacci, arithmetic and geometric sequences Generate and find specific terms of a sequence given the rule. Generate terms of non linear sequence such as cubic and reciprocal. Continue a geometric sequence Plot graphs of linear sequences Find the midpoint of a line segment AB when given the coordinates Recognise the equation of $y = mx + c$ corresponds to straight line graphs Plot the graphs of linear functions where y is given implicitly in terms of x. Find the equation of the line through two given points, or through one point and the given gradient 	<p>Number 2 (fractions, decimals and percentages)</p> <ul style="list-style-type: none"> Four operations with fractions and decimals Working with percentages including as a multiplier and simple and compound interest. Reverse percentages Recurring decimals to fractions <p>SSM1 (Perimeter, area and volume)</p> <ul style="list-style-type: none"> Know the perimeter and area of simple shapes such as rectangle, triangle, trapezia, parallelogram Perimeter and area of compound shapes Volume and surface area of cubes and cuboids Introduce the area of circle and compound areas made from circles Introduce the volume of a prism and a cylinder Conversion between units Introduce the area and perimeter of a sector To know about Euler's formula 	<p>Data 2 (Probability)</p> <ul style="list-style-type: none"> Introduce the concept of likelihood and the probability scale To find the probability of an event To work out the experimental probability and compare with the theoretical probability To look at mutually exclusive events and exhaustive events To introduce sample space diagrams, including tree diagrams and Venn diagrams. To introduce the AND and OR rule To look at conditional probabilities 	<p>SSM 2 (Angles and Geometry)</p> <ul style="list-style-type: none"> To know and understand the basic angle facts such as angles in a triangle add up to 180, angles on a straight line add up to 360 To understand about alternate angles, corresponding angles and co-interior angles in parallel lines To understand about the interior and exterior angles of polygons, including regular polygons To be able to give detailed reasoning for angle problems Use bearings in problems <p>Number 3 (Ratio and Proportion)</p> <ul style="list-style-type: none"> To understand multiplicative reasoning To introduce proportional reasoning To write a ratio To simplify a ratio To divide a given quantity into a ratio To understand direct proportion and introduce its graphical representation To introduce inverse proportion and its graphical representation 	<p>Algebra 1&2 (Algebraic manipulation and formulae)</p> <ul style="list-style-type: none"> To understand and use the terms of expression, equation, identity, formula, term, factor To simplify an algebraic expression To multiply out an expression over a bracket (distributivity) To multiply an algebraic expression, including the product of two binomials To factorise an expression To factorise a pure quadratic To factorise an adfected quadratic To understand the difference of two squares To substitute into an expression or formula To rearrange a formula, where the subject of the formula appears twice. To construct and solve a linear equation, involving the unknown on both sides of the equation, involving brackets To solve quadratic equations 	<p>SSM3 (Constructions and geometrical reasoning)</p> <ul style="list-style-type: none"> Find the locus of a point that moves according to a simple. Extend loci and constructions to more complex problems Given the coordinates of A and B, calculate the length of AB Make simple scale drawings. To know about plans and elevations of solids.
<p>Key Vocabulary/Concepts/Ideas</p> <p>Place value, zero, place holder, tenth, hundredth, thousandth,</p>	<p>Key Vocabulary/Concepts/Ideas</p> <p>2-D, 3-D, cube, cuboid, pyramid, tetrahedron, prism, cylinder,</p>	<p>Key Vocabulary/Concepts/Ideas</p> <p>Adjacent (side), angle: acute, obtuse, right, reflex, angles at a</p>	<p>Key Vocabulary/Concepts/Ideas</p> <p>Proportion, ratio, including notation 3 : 2, simplest form, direct</p>	<p>Key Vocabulary/Concepts/Ideas</p> <p>continue, finite, infinite, generate, increase, decrease, nth term,</p>	<p>Key Vocabulary/Concepts/Ideas</p> <p>Construct, perpendicular, bisector, perpendicular bisector, locus, loci,</p>

equivalent, decimal number, decimal fraction, less than, greater than, between, order, compare, digit, most/least significant digit, use accurately these symbols: =, ≠, >, <, ≤, ≥, integer, positive, negative, plus, minus, and know that ‘-6’ is read as ‘negative six’, increase, decrease, double, halve, complement, partition, guess, estimate, approximate, roughly, nearly, approximately, too many, too few, enough, not enough, know the symbol ≈, calculator, display, key enter, clear, memory. Numerator, denominator, mixed number, proper fraction, improper fraction, decimal fraction, equivalent, cancel, simplify, convert, lowest terms, simplest form, percentage, discount, increase, decrease, exchange rate, currency, convert.	sphere, hemisphere, face, vertex, vertices, edge, net, millimetre (mm), centimetre (cm), metre (m), kilometre (km), gram (g), kilogram (kg), millilitre (ml), centilitre (cl), litre (l), square millimetre (mm ²), square centimetre (cm ²), square metre (m ²), square kilometre (km ²), degree Celsius (°C), second (s), minute (min), hour (h), day, week, month, year, decade, century, millennium, degree (°), area, surface, surface area, perimeter, distance, foot, yard, hectare, tonne, volume: cubic millimetre, cubic centimetre, cubic metre. Certain, uncertain, chance no chance, good chance, poor chance, fifty-fifty chance, even chance, dice, doubt, equally likely, fair, unfair, likelihood, likely, unlikely, outcome, possible, impossible, probability, probability scale, probable, random, risk, spin, spinner, biased, event, experimental probability, sample, sample space, theoretical probability, theory.	point, angles on a straight line, centre, circle, concave, convex, degree (°), diagonal, equal (sides, angles), horizontal, vertical, identical (shapes), intersect, intersection, line, line segment, opposite (sides, angles), parallel, perpendicular, plane, point, polygon: pentagon, hexagon, heptagon, octagon, quadrilateral: arrowhead, delta, kite, parallelogram, rectangle, rhombus, square, trapezium, regular, irregular, shape, side (of 2-D shape), triangle: equilateral, isosceles, scalene, right-angled, two-dimensional (2-D), vertex, vertices, vertically opposite, alternate angles, bisect, bisector, complementary angles, congruent, congruence, corresponding angles, elevation, equidistant, exterior angle, interior angle, mid-point, supplementary angles	proportion, unit fraction, unitary method. Algebra, brackets, commutative, equals (=), equation, expression, evaluate, prove, simply, simplest form, solution (of an equation), solve (an equation), squared, substitute, symbol, term, therefore (∴), unknown, value, variable, verify, algebraic expression, collect like terms, formula, formulae, linear equation, linear expression, multiply out (expressions), proof, transform, verify. Classify, , consecutive, integer, negative (e.g. -6), plus, minus, positive (e.g. +6), property, sign, algebra, brackets, commutative, equals (=), equation, expression, evaluate, prove, simply, simplest form, solution (of an equation), solve (an equation), squared, substitute, symbol, term, therefore (∴), unknown, value, variable, verify, algebraic expression, collect like terms, formula, formulae, linear equation, linear expression, multiply out (expressions), proof, transform, verify.	predict, relationship, rule sequence, term, arithmetic sequence, difference pattern, general term, linear relationship, linear sequence, notation T(n), quadratic sequence.	equidistant, coordinates, bearings, scale drawings, accurate
CIAG	CIAG	CIAG	CIAG	CIAG	CIAG
Scientist, business manager, financial analyst, computer programmer, research scientist.	Accountant, banker, painter, builder, construction, engineering.	Game developer, portfolio analysts, traders and financial strategists.	Artist, architecture/construction, retail or food sector, pharmacist, doctor, health staff, chef, dietitian.	Research scientist, astronomer, chemist, economist.	Artist, architecture/construction, astronomy, cartoonist, cartologist, crime scene investigators

Key Stage 3: Year 9

Overall Curriculum Goals
<ul style="list-style-type: none"> • Understand the concepts and vocabulary of the number system including the basis of number theory (prime numbers, factors, multiples, lowest common multiples, highest common factors) and index notation and associated manipulation (powers and roots) <ul style="list-style-type: none"> • Understand negative numbers and how to order, add, subtract, multiply and divide based on a firm understanding of their manipulation <ul style="list-style-type: none"> • Be fluent in their use of fractions, decimals and percentages • To continue to be confident in their multiplicative reasoning • Understand the concepts of perimeter, area and volume • To work confidently with statistics including, analysing and interpreting graphs and diagrams. • To work with confidence on algebraic manipulation, including solving equations, rearranging formulae <ul style="list-style-type: none"> • To explore problem solving and resilience when tackling unfamiliar problems <ul style="list-style-type: none"> • To do basic geometrical constructions

- To perform and describe transformations
- To use Pythagoras' Theorem and trigonometry

Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p>Number 1 (Place value and integers)</p> <ul style="list-style-type: none"> • Place value, ordering and rounding • Integers and decimals • Operations with number • Indices • Calculator methods • Limits of accuracy including upper and lower bounds • Surds (including rationalising the denominator) • Exact calculations <p>Algebra 1&2 (Algebraic manipulation and formulae)</p> <ul style="list-style-type: none"> • To understand and use the terms of expression, equation, identity, formula, term, factor • To simplify an algebraic expression • To multiply out an expression over a bracket (distributivity) • To multiply an algebraic expression, including the product of two binomials and trinomials • To factorise an expression • To factorise a pure quadratic • To factorise an affected quadratic • To understand the difference of two squares • To substitute into an expression or formula • To rearrange a formula, where the subject of the formula appears twice. • To introduce functions, and composite functions • To simplify algebraic fractions • To construct algebraic proofs. • To construct and solve a linear equation, involving the unknown on both sides of the equation, involving brackets • To solve quadratic equations • Solving a pair of linear simultaneous linear equations. 	<p>SSM1 (Perimeter, area and volume)</p> <ul style="list-style-type: none"> • Know the perimeter and area of simple shapes such as rectangle, triangle, trapezia, parallelogram • Perimeter and area of compound shapes • Volume and surface area of cubes and cuboids • Introduce the area of circle and compound areas made from circles • Introduce the volume of a prism and a cylinder • Conversion between units • Introduce the volume of a cone and a sphere • Find the volume of more complex solids • Introduce the area and perimeter of a sector • Find the volume of a pyramid • Find the area and perimeter of a sector (not including trigonometry) <p>Data 1 (Statistics)</p> <ul style="list-style-type: none"> • Data collection and sampling • Questionnaires • Representing data in simple charts and diagrams, such as pie charts, pictograms, bar charts, frequency tables • Representing bivariate data on a scatter diagram • Interpreting all the diagrams and charts listed above. • Finding the central measures of tendency such as mean, mode and median • Finding the measures of spread such as range and interquartile range • Looking at trends • Making comparisons between distributions to draw conclusions • Drawing cumulative frequency graphs, histograms 	<p>Number 2 (fractions, decimals and percentages)</p> <ul style="list-style-type: none"> • Four operations with fractions and decimals. • Working with percentages including as a multiplier and simple and compound interest. • Reverse percentages. • Convert a recurring decimal to a fraction in more complex cases. 	<p>Algebra 3 (Sequences and graphs)</p> <ul style="list-style-type: none"> • Recognise sequences of odd and even numbers, and other sequences including Fibonacci • Find the nth of an arithmetic sequence • Use functions machines to find terms of a sequences • Use linear expressions to describe the nth term • Distinguish between Fibonacci, arithmetic and geometric sequences • Generate and find specific terms of a sequence given the rule. • Generate terms of non linear sequence such as cubic and reciprocal. • Continue a geometric sequence • Continue a quadratic sequence • Finding the nth term of a quadratic sequence • Plot graphs of linear sequences • Find the midpoint of a line segment AB when given the coordinates • Recognise the equation of $y = mx + c$ corresponds to straight line graphs • Plot the graphs of linear functions where y is given implicitly in terms of x. • Find the equation of the line through two given points, or through one point and the given gradient • Find the inverse of a linear function • Investigate gradients of perpendicular lines • Know properties of quadratic functions • Identify and interpret roots, turning points and intercepts. 	<p>Number 3 (Ratio and Proportion)</p> <ul style="list-style-type: none"> • To understand multiplicative reasoning • To divide a given quantity into a ratio • To understand direct proportion and introduce its graphical representation • To understand inverse proportion and its graphical representation • To introduce the algebraic representation for direct and inverse proportion • To use proportional reasoning in currency conversions • Making links with scale factors, area scale factors and volume scale factors • To look at compound measures such as speed, distance, time and density, volume and mass. 	<p>SSM4 (Transformations, Pythagoras and trigonometry)</p> <ul style="list-style-type: none"> • Build on understanding of Pythagoras' Theorem in two dimensions, then extend to three dimensions • Introduce trigonometry • Know the exact values of sin, cos and tan for 0, 30, 45, 60 and 90 degrees. • Introduce sine and cosine rules for triangles • Calculate the area of a triangle using $0.5ab\sin C$

<ul style="list-style-type: none"> Solving a linear inequality Introducing completing the square and the quadratic formula Introducing representing inequalities graphically. 	<ul style="list-style-type: none"> and box plots, and analysing them Criticising a sampling method Finding a central measure of tendency and a measure of spread from a cumulative frequency diagram Understanding types of data such as quantitative and qualitative data, discrete and continuous and understanding which analysis is more appropriate Looking at the limitations Identifying outliers 		<ul style="list-style-type: none"> Discuss speed, distance, time graphs 		
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Place value, zero, place holder, tenth, hundredth, thousandth, equivalent, decimal number, decimal fraction, less than, greater than, between, order, compare, digit, most/least significant digit, use accurately these symbols: =, ≠, >, <, ≤, ≥, integer, positive, negative, plus, minus, and know that '-6' is read as 'negative six', increase, decrease, double, halve, complement, partition, guess, estimate, approximate, roughly, nearly, approximately, too many, too few, enough, not enough, know the symbol ≈, calculator, display, key enter, clear, memory. Axis, axes, coordinates, direction, grid, intersecting, intersection, origin, position, quadrant, row, column, x-axis, y-axis, x-coordinate, y-coordinate, area: square millimetre, square centimetre, square metre, square kilometre, capacity: millilitre, centiliter, pint, gallon, length: millimetre, centimetre, metre, kilometre; foot, yard, mile, hectare, mass: gram, kilogram; ounce, pound, tonne, volume: cubic millimetre, cubic centimetre, cubic metre, time: second, minute, hour, day, week, month, year, decade, century, millennium, temperature: degrees Celsius, degrees Fahrenheit, depth, distance, height, high, perimeter, surface area, width, density,	Numerator, denominator, mixed number, proper fraction, improper fraction, decimal fraction, equivalent, cancel, simplify, convert, lowest terms, simplest form, percentage, discount, increase, decrease, exchange rate, currency, convert. Average, bar chart, bar-line graph, class interval, data, grouped data, data collection sheet, database, experiment, frequency, frequency chart, frequency diagram, interpret, interval, label, mean, median, mode, modal class/group, pie chart, questionnaire, range, represent, statistic, statistics, survey, table, tally, title, continuous, data log, discrete, distance-time graph, distribution, interrogate, line graph, population pyramid, primary source, sample, scatter graph, secondary source, stem-and-leaf diagram, two-way table, bias, census, cumulative frequency, estimate of the mean/median, interquartile range, line of best fit, quartiles, raw data, representative (sample).		Cancel, cancellation, convert, equivalent, equivalence, lowest terms, proportion, ratio, including notation 3 :2, simplest form, direct proportion, unitary method, proportional to (α) proportionality, brackets, calculate, calculation, calculator: clear, display, enter, key, memory, complements (in 10, 100), divide, division, double halve, estimate, exact, exactly, increase, decrease, inverse, multiply, multiplication, nearly, operation, order of operations, partition, product, quotient, remainder, sign, subtract, subtraction, sum, total, associative, best estimate, degree of accuracy, sign change key, reciprocal. Adjacent (side), angle: acute, obtuse, right, reflex, angles at a point, angles on a straight line, centre, circle, concave, convex, degree (°), diagonal, equal (sides, angles), horizontal, vertical, identical (shapes), intersect, intersection, line, line segment, opposite (sides, angles), parallel, perpendicular, plane, point, polygon: pentagon, hexagon, heptagon, octagon, quadrilateral: arrowhead, delta, kite, parallelogram, rectangle, rhombus, square, trapezium, regular, irregular, shape, side (of 2-D shape, cube, cuboid, prism, triangular prism, pyramid, square-based	Sequence, consecutive, continue, finite, infinite, function, function machine, generate, increase, decrease, input, output, mapping, nth term, predict, relationship, rule, term, arithmetic sequence, difference pattern, general term, linear function, linear relationship, linear sequence, notation T(n), cubic function, curve, first/second difference, identity function, inverse function, inverse mapping, quadratic function, quadratic sequence, self-inverse	Congruent, congruence, corresponding angles, equidistant, exterior angle, interior angle, mid-point, axis symmetry, centre of rotation, line of symmetry, line symmetry, mirror line, object, image, order of rotational symmetry, reflect, reflection, reflection symmetry, rotate, rotation, rotation symmetry, symmetrical, transformation, translate, translation, centre of enlargement, enlarge, enlargement, map, plan, scale, scale factor, scale drawing, axis of symmetry, centre of rotation, congruent, line of symmetry, line symmetry, mirror line, object, image, order of rotation symmetry, reflect, reflection, reflection symmetry, rotate, rotation, rotation symmetry, symmetrical, adjacent, opposite, hypotenuse, angel of depression, angle of elevation, sine (sin), cosine (cos), tangent (tan).

pressure, speed: miles per hour, metres per second, edge (of solid), face, plane, side (of 2-D shape), solid (3-D) shape: cube, cuboid, cylinder, hemisphere, prism, pyramid, square-based pyramid, sphere, tetrahedron, triangular prism, circle, circumference, arc, sector, segment, pi (π), cross-section.			pyramid, three-dimensional (3-D), triangle: equilateral, isosceles, scalene, right-angled, two-dimensional (2-D), vertex, vertices, vertically opposite, alternate angles, bisect, bisector, complementary angles, congruent, congruence, corresponding angles, elevation, equidistant, exterior angle, interior angle, mid-point, supplementary angles, arc, chord, circumference, convention, definition, derived property, diameter, hypotenuse, projection, radius, sector, segment, tangent (to a curve).		
CIAG	CIAG	CIAG	CIAG	CIAG	CIAG
Research scientist, astronomer, chemist, economist.	Painter, builder, construction, engineering, data analyst, data scientist, logistics analyst, marketing analyst, logistics analyst. Market researcher, financial analyst, statistician, software engineer	Accountant, banker, scientist, computer scientist.	Scientist, business manager, financial analyst, computer programmer, research scientist.	Retail or food sector, pharmacist, doctor, health staff, chef, dietitian.	Artist, architecture/construction, astronomy, cartoonist, cartologist, crime scene investigators.