

Pathway 1 - (Access to Foundation GCSE 1 - 9 course)		Pathway 2 - Foundation GCSE 1 - 9		Pathway 3 - Higher GCSE 1 - 9)	
Unit	Topic	Unit	Topic	Unit	Topic
1N. Integers (Number)	Read, write order integers	1. Calculations (Number)	Place value with decimals	1. Calculations (Number)	Order +ve and -ve integers and decimals
	Add subtract positive integers		Negative numbers		Round to decimal places
2N. Order of operations (Number)	Multiply and divide powers of 10	2. Expressions (Algebra)	Rounding to decimal places	2. Expressions (Algebra)	Round to significant figures
	Multiplication and division facts		Rounding to significant figures		Mental methods, 4 operations
2G. Data (Statistics and Probability)	Multiply and divide by a single digit	3. Angles and Polygons (Geometry and Measures)	Calculations, the four operations	3. Angles and Polygons (Geometry and Measures)	BIDMAS
	Round to nearest 10, 100 and 1000		Chapter 1 Test KAO		Chapter 1 Test KAO
3N. Decimals (Number)	Multiples, factors and primes	4. Handling Data 1 (Statistics and Probability)	Using algebraic notation	4. Handling Data 1 (Statistics and Probability)	Using algebraic notation
	Understand and use negative numbers		Substitution		Simplify by collecting like terms
4N. Approximations (Number)	Unit 1N Checkup KAO	5. Fractions Decimals and Percentages (Number)	Simplify by collecting like terms	5. Fractions Decimals and Percentages (Number)	Expand a single bracket
	Calculations, the four operations		Laws of indices		Factorise using common factors
5N. Fractions 1 (Number)	Order of operations	6. Formulae and Functions (Algebra)	Multiply a single bracket	6. Formulae and Functions (Algebra)	Simplify algebraic fractions
	Unit 2N Check up		Factorise using common factor		Arithmetic with algebraic fractions
6N. Percentages (Number)	Types of Data	7. Working in 2D (Geometry and Measures)	Chapter 2 Test KAO	7. Working in 2D (Geometry and Measures)	Chapter 2 Test KAO
	Data collection		Angle rules		Angle rules in parallel lines
7G. Angles (Geometry and Measures)	Unit 1G Checkup KAO	8. Probability (Statistics and Probability)	Angles in parallel lines	8. Probability (Statistics and Probability)	Bearings
	Read write and order decimals		Angles in triangles		Properties of triangles and quadrilaterals
8G. Constructions (Geometry and Measures)	Add and subtract decimals	9. Measures and Accuracy (Number)	Properties of triangles and quadrilaterals	9. Measures and Accuracy (Number)	Congruence and similarity
	Multiply and divide decimals		Angles in quadrilaterals		Use congruency to prove geometric results
9N. Integers 2 (Number)	Rounding decimal places	10. Equations & Inequalities (Algebra)	Congruence and similarity	10. Equations & Inequalities (Algebra)	Use similarity to find lengths, areas & volumes
	Unit 3N Check up KAO		Angles in polygons		Angles in polygons
10N. Function Machines (Algebra)	Angles and turning	11. Circles and Constructions (Geometry and Measures)	Chapter 3 Test KAO	11. Circles and Constructions (Geometry and Measures)	Chapter 3 Test KAO
	Measuring angles		Bar charts and line graphs		Two way tables, bar charts and pie charts
11N. Decimals 2 (Number)	Drawing angles	12. Ratio and Proportion (Number)	Two way tables	12. Ratio and Proportion (Number)	Averages
	Unit 7G Checkup KAO		Draw and interpret graphs and charts		Range and interquartile range
12N. Approximations 2 (Number)	Rounding to significant figures	13. Factors Powers and Roots (Number)	Draw pie charts	13. Factors Powers and Roots (Number)	Use averages and spread compare data sets
	Estimation calculations by rounding		Interpret pie charts		Frequency tables to represent grouped data
13G. Perimeter Area & Volume (Geometry and Measures)	Checking solutions	14. Graphs 1 (Algebra)	Averages	14. Graphs 1 (Algebra)	Histograms equal class intervals
	Unit 4N Checkup KAO		Compare distributions using averages		Histograms unequal class intervals
14G. Interpreting Data (Statistics and Probability)	Pictograms	15. Working in 3D (Geometry and Measures)	Chapter 4 Test KAO	15. Working in 3D (Geometry and Measures)	Chapter 4 Test KAO
	Bar charts		Convert between fractions and decimals		Convert between frac, dec & %
15N. Fractions 2 (Number)	Line graphs	16. Handling Data 2 (Statistics and Probability)	Convert decimals and fractions	16. Handling Data 2 (Statistics and Probability)	Fraction of an amount
	Dual bar charts		Compare decimals and fractions		Percentage of an amount
16N. Algebra (Algebra)	Two way tables	17. Calculations 2 (Number)	Fraction of an amount	17. Calculations 2 (Number)	Fraction arithmetic
	Draw and interpret pie charts		Add and subtract fractions		Mixed number arithmetic
17G. Circles & Quadrilaterals (Geometry and Measures)	Unit 2G Check up KAO	18. Calculations with Roots (Number)	Multiply and divide fractions	18. Calculations with Roots (Number)	Mixed number arithmetic
	Term Test MAO		Mixed number arithmetic		Convert recurring decimals to fractions
18G. Constructions (Geometry and Measures)	Read write and order decimals	19. Working in 3D (Geometry and Measures)	Convert fractions, decimals and percentages	19. Working in 3D (Geometry and Measures)	Order fractions decimals and percentages
	Add and subtract decimals		Substitute into formula		Convert recurring decimals to fractions
19N. Integers 1 (Number)	Multiply and divide decimals	20. Equations & Inequalities 2 (Algebra)	Chapter 5 Test KAO	20. Equations & Inequalities 2 (Algebra)	Chapter 5 Test KAO
	Rounding decimal places		Substitute into expressions		Substitute into expressions
20G. Transformations (Geometry and Measures)	Unit 5N Checkup KAO	21. Circles and Constructions 2 (Geometry and Measures)	Change the subject of formula	21. Circles and Constructions 2 (Geometry and Measures)	Change the subject of formula
	Read write and order decimals		Identify equations, formula & identities		Write and equations to represent a function
21G. Angles (Geometry and Measures)	Convert between fractions and decimals	22. Ratio and Proportion 2 (Number)	Expand double brackets	22. Ratio and Proportion 2 (Number)	Find the inverse of a function
	Add and subtract fractions		Factorise quadratic expressions		Construct and use composite functions
22G. Transformations (Geometry and Measures)	Find fractions of quantities	23. Working in 3D (Geometry and Measures)	Factorise by a difference of 2 squares	23. Working in 3D (Geometry and Measures)	Construct and use composite functions
	Unit 4N Checkup KAO		Chapter 6 Test KAO		Proof
23G. Angles (Geometry and Measures)	Reflections	24. Graphs 2 (Algebra)	Chapter 6 Test KAO	24. Graphs 2 (Algebra)	Expand quadratics
	Enlargement		Draw and measure lines and angles		Factorise all types of quadratics
24G. Interpreting Data (Statistics and Probability)	Congruent shapes	25. Working in 3D (Geometry and Measures)	Use standard units for length and area	25. Working in 3D (Geometry and Measures)	Chapter 6 Test KAO
	Similar shapes		Use bearings		Measure line-segments and angles
25G. Probability (Statistics and Probability)	Unit 10G Checkup KAO	26. Handling Data 2 (Statistics and Probability)	Interpret maps and scale drawings	26. Handling Data 2 (Statistics and Probability)	Chapter 7 Test KAO
	Calculate input, function machines		Calculate area of triangles and quadrilaterals		Calculate area of triangles and quadrilaterals
26G. Transformations (Geometry and Measures)	Calculate output, function machines	27. Working in 3D (Geometry and Measures)	Identify and construct reflections	27. Working in 3D (Geometry and Measures)	Describe transformations
	Inverse operations		Identify and construct rotations		Construct transformations
27G. Angles (Geometry and Measures)	Unit 10N Checkup KAO	28. Ratio and Proportion 2 (Number)	Identify and construct translations	28. Ratio and Proportion 2 (Number)	Enlargement, fractional and negative SF
	Decimals fractions and percentages		Identify and construct enlargements		Combined transformations
28G. Transformations (Geometry and Measures)	Order and compare fractions	29. Working in 3D (Geometry and Measures)	Chapter 7 Test KAO	29. Working in 3D (Geometry and Measures)	Chapter 7 Test KAO
	Find percentages of quantities		Experimental probability		Experimental probability
29G. Angles (Geometry and Measures)	Unit 6N Checkup KAO	30. Equations & Inequalities 2 (Algebra)	Expected frequencies	30. Equations & Inequalities 2 (Algebra)	Expected frequencies
	Using the probability scale		Theoretical probability		Theoretical probability
30G. Transformations (Geometry and Measures)	Theoretical probability	31. Circles and Constructions 2 (Geometry and Measures)	Equally likely events	31. Circles and Constructions 2 (Geometry and Measures)	Equally likely events
	Experimental probability		Mutually exclusive and exhaustive events		Mutually exclusive and exhaustive events
31G. Angles (Geometry and Measures)	Listing outcomes	32. Ratio and Proportion 2 (Number)	Chapter 8 Test KAO	32. Ratio and Proportion 2 (Number)	Chapter 8 Test KAO
	Unit 5G Checkup KAO		Term Test MAO		Term Test MAO
32G. Transformations (Geometry and Measures)	Term Test MAO	33. Factors Powers and Roots (Number)	Round to an appropriate degree of accuracy	33. Factors Powers and Roots (Number)	Round to an appropriate degree of accuracy
	Read and order amount of money		Use approximations to make estimates		Use approximations to make estimates
33G. Angles (Geometry and Measures)	Calculations with money	34. Graphs 2 (Algebra)	Check calculations using approximations	34. Graphs 2 (Algebra)	Check calculations using approximations
	Read, record and measure time		Interpret limits of accuracy		Speed and density problems
34G. Interpreting Data (Statistics and Probability)	Units of time	35. Working in 3D (Geometry and Measures)	Units of length, mass, volume, capacity	35. Working in 3D (Geometry and Measures)	Upper and lower bounds
	Convert between units of time		Chapter 9 Test KAO		Chapter 9 Test KAO
35G. Probability (Statistics and Probability)	Use calendars	36. Handling Data 2 (Statistics and Probability)	Solving simple linear equations	36. Handling Data 2 (Statistics and Probability)	Solve linear equations
	Unit 78N Checkup KAO		Setting up linear equations		Solve quadratic equations by factorising
36G. Transformations (Geometry and Measures)	Angles along a line	37. Working in 3D (Geometry and Measures)	Solve quadratic equations	37. Working in 3D (Geometry and Measures)	Solve by completing the square
	Angles around a point		Graphical simultaneous equations		Solve using quadratic formula
37G. Angles (Geometry and Measures)	Angles in triangles	38. Ratio and Proportion 2 (Number)	Linear simultaneous equations	38. Ratio and Proportion 2 (Number)	Linear simultaneous equations
	Triangle properties		Area of circles		Non linear simultaneous equations
38G. Transformations (Geometry and Measures)	Unit 7G Checkup KAO	39. Working in 3D (Geometry and Measures)	Area of circles	39. Working in 3D (Geometry and Measures)	Iterative processes to approximate solutions
	Read write order and compare integers		Circumference of circles		Solve inequalities
39G. Angles (Geometry and Measures)	Add and subtract integers	40. Equations & Inequalities 2 (Algebra)	Arc length	40. Equations & Inequalities 2 (Algebra)	Represent inequalities graphically
	Multiply and divide integers		Sector area		Chapter 10 Test KAO
40G. Transformations (Geometry and Measures)	Multiply and divide negatives	41. Circles and Constructions 2 (Geometry and Measures)	Chapter 11 Test KAO	41. Circles and Constructions 2 (Geometry and Measures)	Area and circumference
	Read write and use squares, cubes & roots		Construct triangles		Arc lengths and sector areas
41G. Angles (Geometry and Measures)	Use index notation	42. Ratio and Proportion 2 (Number)	Chapter 11 Test KAO	42. Ratio and Proportion 2 (Number)	Circle theorems
	Unit 9N Checkup KAO		Simple proportion		Constructions and loci
42G. Transformations (Geometry and Measures)	Accurate drawings	43. Factors Powers and Roots (Number)	Simplify ratios	43. Factors Powers and Roots (Number)	Chapter 11 Test KAO
	Construct triangles SSS		Divide into a given ratio		Express proportion as fraction & %
43G. Angles (Geometry and Measures)	Construct triangles SAS	44. Graphs 2 (Algebra)	Scale factors, diagrams and maps	44. Graphs 2 (Algebra)	Divide into a given ratio
	Construct triangle ASA		Percentage change		Scale factors diagrams and maps
44G. Interpreting Data (Statistics and Probability)	Unit 8G Checkup KAO	45. Working in 3D (Geometry and Measures)	Chapter 12 Test KAO	45. Working in 3D (Geometry and Measures)	Repeated % increase/decrease
	Multiply and divide decimals		Factors multiples and roots		Percentage change
45G. Probability (Statistics and Probability)	Round to decimal places	46. Handling Data 2 (Statistics and Probability)	Prime factor decomposition	46. Handling Data 2 (Statistics and Probability)	Chapter 12 Test KAO
	Add and subtract decimals		HCF and LCM		Primes, factors and multiples
46G. Transformations (Geometry and Measures)	Problem solving with decimals	47. Working in 3D (Geometry and Measures)	Powers and roots +ve integers	47. Working in 3D (Geometry and Measures)	HCF and LCM
	Unit 11N Checkup KAO		Chapter 12 Test KAO		Estimate square and cube roots
47G. Angles (Geometry and Measures)	Unit 16N Checkup KAO	48. Ratio and Proportion 2 (Number)	Coordinates in 4 quadrants	48. Ratio and Proportion 2 (Number)	Laws of indices
	Simplify expressions		Straight line graphs		Surd including rationalising the denominators
48G. Transformations (Geometry and Measures)	Use formula given in words	49. Working in 3D (Geometry and Measures)	Gradient and intercept	49. Working in 3D (Geometry and Measures)	Chapter 13 Test KAO
	Use algebraic formula		$y = mx + c$		Straight line graphs
49G. Angles (Geometry and Measures)	Unit 16N Checkup KAO	50. Equations & Inequalities 2 (Algebra)	Finding the equation given the line	50. Equations & Inequalities 2 (Algebra)	$y = mx + c$
	Read write and use squares, cubes & roots		Area of circles		Parallel and perpendicular lines
50G. Transformations (Geometry and Measures)	Use index notation	51. Circles and Constructions 2 (Geometry and Measures)	Interpret gradient as rate of change	51. Circles and Constructions 2 (Geometry and Measures)	Draw linear and quadratic graphs
	Unit 9N Checkup KAO		Chapter 14 Test KAO		Speed distance time graphs
51G. Angles (Geometry and Measures)	Accurate drawings	52. Ratio and Proportion 2 (Number)	Chapter 14 Test KAO	52. Ratio and Proportion 2 (Number)	Roots and intercepts quadratic graphs
	Construct triangles SSS		Simple proportion		Graphs for speed, distance and acceleration
52G. Transformations (Geometry and Measures)	Construct triangles SAS	53. Factors Powers and Roots (Number)	Chapter 15 Test KAO	53. Factors Powers and Roots (Number)	Chapter 14 Test KAO
	Construct triangle ASA		Factors multiples and roots		Primes, factors and multiples
53G. Angles (Geometry and Measures)	Unit 8G Checkup KAO	54. Graphs 2 (Algebra)	Prime factor decomposition	54. Graphs 2 (Algebra)	Prime factor decomposition
	Multiply and divide decimals		Powers and roots +ve integers		HCF and LCM
54G. Transformations (Geometry and Measures)	Round to decimal places	55. Working in 3D (Geometry and Measures)	Chapter 15 Test KAO	55. Working in 3D (Geometry and Measures)	Estimate square and cube roots
	Add and subtract decimals		Planes and elevations		Laws of indices
55G. Probability (Statistics and Probability)	Problem solving with decimals	56. Handling Data 2 (Statistics and Probability)	Volume of cuboids	56. Handling Data 2 (Statistics and Probability)	Surds including rationalising the denominators
	Unit 11N Checkup KAO		Surface area pyramids and cones		Chapter 15 Test KAO
56G. Transformations (Geometry and Measures)	Unit 16N Checkup KAO	57. Working in 3D (Geometry and Measures)	Chapter 15 Test KAO	57. Working in 3D (Geometry and Measures)	Chapter 15 Test KAO
	Simplify expressions		Volume of cylinders and prisms		Averages from grouped frequency tables
57G. Angles (Geometry and Measures)	Use formula given in words	58. Ratio and Proportion 2 (Number)	Interpret & construct tables graphs & charts	58. Ratio and Proportion 2 (Number)	Box plots
	Use algebraic formula		Use averages to compare distributions		Cumulative frequency
58G. Transformations (Geometry and Measures)	Unit 16N Checkup KAO	59. Working in 3D (Geometry and Measures)	Draw and interpret scatter graphs	59. Working in 3D (Geometry and Measures)	Scatter graphs and correlation
	Read write and use squares, cubes & roots		Correlation and line of best fit		Time series graphs, construct and interpret
59G. Angles (Geometry and Measures)	Use index notation	60. Equations & Inequalities 2 (Algebra)	Time series graph, construct and interpret	60. Equations & Inequalities 2 (Algebra)	Chapter 16 Test KAO
	Unit 9N Checkup KAO		Calculations with roots		Chapter 16 Test KAO
60G. Transformations (Geometry and Measures)	Accurate drawings	61. Circles and Constructions 2 (Geometry and Measures)	Chapter 16 Test KAO	61. Circles and Constructions 2 (Geometry and Measures)	Chapter 16 Test KAO
	Construct triangles SSS		Calculations with integer indices		Calculations with roots and indices
61G. Angles (Geometry and Measures)	Construct triangles SAS	62. Ratio and Proportion 2 (Number)	Calculations with fractions and multiples of n	62. Ratio and Proportion 2 (Number)	Negative and fractional indices
	Construct triangle ASA		Read and write numbers in standard form		Exact calculations fractions, surds and n
62G. Transformations (Geometry and Measures)	Unit 8G Checkup KAO	63. Factors Powers and Roots (Number)	Calculations involving standard form	63. Factors Powers and Roots (Number)	Calculations in standard form
	Multiply and divide decimals		Chapter 17 Test KAO		Chapter 17 Test KAO
63G. Angles (Geometry and Measures)	Round to decimal places	64. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO	64. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO
	Add and subtract decimals		Interpret & construct tables graphs & charts		Term Test MAO
64G. Interpreting Data (Statistics and Probability)	Problem solving with decimals	65. Working in 3D (Geometry and Measures)	Use averages to compare distributions	65. Working in 3D (Geometry and Measures)	Term Test MAO
	Unit 11N Checkup KAO		Draw and interpret scatter graphs		Chapter 17 Test KAO
65G. Probability (Statistics and Probability)	Unit 16N Checkup KAO	66. Handling Data 2 (Statistics and Probability)	Correlation and line of best fit	66. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO
	Simplify expressions		Time series graph, construct and interpret		Term Test MAO
66G. Transformations (Geometry and Measures)	Use formula given in words	67. Working in 3D (Geometry and Measures)	Chapter 17 Test KAO	67. Working in 3D (Geometry and Measures)	Term Test MAO
	Use algebraic formula		Planes and elevations		Chapter 17 Test KAO
67G. Angles (Geometry and Measures)	Unit 16N Checkup KAO	68. Ratio and Proportion 2 (Number)	Chapter 17 Test KAO	68. Ratio and Proportion 2 (Number)	Chapter 17 Test KAO
	Read write and use squares, cubes & roots		Volume of cuboids		Term Test MAO
68G. Transformations (Geometry and Measures)	Use index notation	69. Working in 3D (Geometry and Measures)	Volume of cylinders and prisms	69. Working in 3D (Geometry and Measures)	Term Test MAO
	Unit 9N Checkup KAO		Surface area pyramids and cones		Surface area pyramids and cones and spheres
69G. Angles (Geometry and Measures)	Accurate drawings	70. Handling Data 2 (Statistics and Probability)	Chapter 15 Test KAO	70. Handling Data 2 (Statistics and Probability)	Chapter 15 Test KAO
	Construct triangles SSS		Interpret & construct tables graphs & charts		Averages from grouped frequency tables
70G. Transformations (Geometry and Measures)	Construct triangles SAS	71. Circles and Constructions 2 (Geometry and Measures)	Draw and interpret scatter graphs	71. Circles and Constructions 2 (Geometry and Measures)	Box plots
	Construct triangle ASA		Correlation and line of best fit		Cumulative frequency
71G. Angles (Geometry and Measures)	Unit 8G Checkup KAO	72. Ratio and Proportion 2 (Number)	Time series graph, construct and interpret	72. Ratio and Proportion 2 (Number)	Scatter graphs and correlation
	Multiply and divide decimals		Calculations with roots		Time series graphs, construct and interpret
72G. Transformations (Geometry and Measures)	Round to decimal places	73. Factors Powers and Roots (Number)	Chapter 16 Test KAO	73. Factors Powers and Roots (Number)	Chapter 16 Test KAO
	Add and subtract decimals		Calculations with integer indices		Calculations with roots and indices
73G. Angles (Geometry and Measures)	Problem solving with decimals	74. Handling Data 2 (Statistics and Probability)	Calculations with fractions and multiples of n	74. Handling Data 2 (Statistics and Probability)	Negative and fractional indices
	Unit 11N Checkup KAO		Read and write numbers in standard form		Exact calculations fractions, surds and n
74G. Interpreting Data (Statistics and Probability)	Unit 16N Checkup KAO	75. Working in 3D (Geometry and Measures)	Calculations involving standard form	75. Working in 3D (Geometry and Measures)	Calculations in standard form
	Simplify expressions		Chapter 17 Test KAO		Chapter 17 Test KAO
75G. Probability (Statistics and Probability)	Use formula given in words	76. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO	76. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO
	Use algebraic formula		Interpret & construct tables graphs & charts		Term Test MAO
76G. Transformations (Geometry and Measures)	Unit 16N Checkup KAO	77. Working in 3D (Geometry and Measures)	Use averages to compare distributions	77. Working in 3D (Geometry and Measures)	Term Test MAO
	Read write and use squares, cubes & roots		Draw and interpret scatter graphs		Chapter 17 Test KAO
77G. Angles (Geometry and Measures)	Use index notation	78. Ratio and Proportion 2 (Number)	Correlation and line of best fit	78. Ratio and Proportion 2 (Number)	Chapter 17 Test KAO
	Unit 9N Checkup KAO		Time series graph, construct and interpret		Term Test MAO
78G. Transformations (Geometry and Measures)	Accurate drawings	79. Working in 3D (Geometry and Measures)	Chapter 17 Test KAO	79. Working in 3D (Geometry and Measures)	Term Test MAO
	Construct triangles SSS		Planes and elevations		Chapter 17 Test KAO
79G. Angles (Geometry and Measures)	Construct triangles SAS	80. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO	80. Handling Data 2 (Statistics and Probability)	Chapter 17 Test KAO
	Construct triangle ASA		Use averages to compare distributions		Term Test MAO
80G. Transformations (Geometry and Measures)	Unit 8G Checkup KAO	81. Circles and Constructions 2 (Geometry and Measures)	Draw and interpret scatter graphs	81. Circles and Constructions 2 (Geometry and Measures)	Chapter 17 Test KAO
	Multiply and divide decimals		Correlation and line of best fit		Term Test MAO
81G. Angles (Geometry and Measures)	Round to decimal places	82. Ratio and Proportion 2 (Number)	Time series graph, construct and interpret	82. Ratio and Proportion 2 (Number)	Chapter 17 Test KAO
	Add and subtract decimals		Calculations with roots		Chapter 17 Test KAO
82G. Transformations (Geometry and Measures)	Problem solving with decimals	83. Factors Powers and Roots (Number)	Chapter 16 Test KAO	83. Factors Powers and Roots (Number)	Chapter 16 Test KAO
	Unit 11N Checkup KAO		Calculations with integer indices		Calculations with roots and indices
83G. Angles (Geometry and Measures)	Unit 16N Checkup KAO	84. Handling Data 2 (Statistics and Probability)	Calculations with fractions and multiples of n	84. Handling Data 2 (Statistics and Probability)	Negative and fractional indices
	Simplify expressions		Read and write numbers in standard form		Exact calculations fractions, surds and n
84G. Interpreting Data (Statistics and Probability)	Use formula given in words	85. Working in 3D (Geometry and Measures)	Calculations involving standard form	85. Working in 3D (Geometry and Measures)	Calculations in standard form
	Use algebraic formula		Chapter 17 Test KAO		Chapter 17 Test KAO
85G. Probability (Statistics and Probability)	Unit 16N Checkup KAO	86. Handling Data 2 (Statistics and Probability)	Chapter		

Year 10 - GCSE Course - Key objectives in blue, support objectives in red, extension objectives in green.

Pathway 1

Term 1-3 - Skills focus Foundation GCSE (Topics only to be covered as extension)

Pathway 2 & 3

Term 1 - SKILLS FOCUS (Each topic will take between 1 - 3 lessons depending on the starting points of the class.)

Term 2 & 3 - Applications Focus (Review skills at check in. Lesson focus application)

KAO Chapter tests will be completed as homeworks

In class KAO will be 1/2 a GCSE paper completed every 3 weeks

Pathway 1 - Foundation 1 - 9 (Skills Focus)		Pathway 2 - Foundation 1 - 9 (Skills and Application)		Pathway 2 - Higher 1 - 9 (Skills and Application)	
Unit	Topic	Unit	Topic	Unit	Topic
1. Calculations (number)	Place value with decimals	18. Graphs 2 (Algebra)	Draw and interpret graphic graphs	18. Graphs 2 (Algebra)	Recognise and draw reciprocal and cubic functions
	Negative numbers		Solve quadratic equations graphically		Recognise and draw exponential functions
	Rounding to decimal places		Sketch linear, quadratic, cubic & reciprocal graphs		Recognise and sketch trigonometrical functions
	Rounding to significant figures		Plot and interpret real life graphs		Translate and reflect graphs
Calculations, the four operations		Chapter 18 Test KAO		Real life graphs	
Bidmas				Gradient at a point and area under a curve	
Chapter 1 Test KAO				Circular graphs	
2. Expressions (algebra)	Using algebraic notation	19. Pythagoras Trig and Vectors (Geometry and Measures)	Pythagoras theorem	19. Pythagoras Trig and Vectors (Geometry and Measures)	Pythagoras theorem
	Substitution		SOH CAH TOA to find side length		SOH CAH TOA
	Simplify by collecting like terms		SOH CAH TOA to find angles		Exact trig values
	Laws of indices		Exact trig values		Intro to vectors
Multiply a single bracket		Chapter 19 Test KAO		Sine and Cosine rule	
Factorise using common factor				Sine for area of a triangle	
Chapter 2 Test KAO				Vectors in geometric proof	
3. Angles and Polygons (Geometry and Measures)	Angle rules	20. Probability of Combined Events (Statistics and Probability)	Venn diagrams (sets)	20. Probability of Combined Events (Statistics and Probability)	Venn Diagrams (set theory)
	Angles in parallel lines		Possibility spaces to calculate probabilities		Possibility spaces to calculate probabilities
	Angles in triangles		Tree diagrams independent events		Tree diagrams independent events
	Properties of triangles and quadrilaterals		Tree diagrams dependent events		Tree diagrams dependent events
Angles in quadrilaterals		Chapter 20 Test KAO		Chapter 20 Test KAO	
Congruence and similarity					
Angles in polygons					
Chapter 3 Test KAO					
4. Handling Data 1 (Statistics and Probability)	Bar charts and line graphs	22. Units and Proportionality (Number)	Standard and compound units	22. Units and Proportionality (Number)	Standard and compound units
	Two way tables		Similar shapes, lengths areas and volumes		Similar shapes, lengths areas and volumes
	Draw and interpret graphs and charts		Direct proportion		Direct and inverse proportion
	Draw pie charts		Inverse proportion		Direct and inverse proportion graphically
Interpret pie charts		Rates of change from straight line graphs		Equations for inverse and direct proportion	
Averages		Proportion graphically		Direct and inverse proportion graphically	
Compare distributions using averages		Growth and decay problems		Instantaneous and average rate of change	
Chapter 4 Test KAO		Chapter 22 Test KAO		Repeated proportional change	
		Term Test MAO		Chapter 22 Test KAO	
5. Fractions Decimals and Percentages (Number)	Convert between fractions and decimals	1. Calculations (number)	Place value with decimals	1. Calculations (Number)	Order +ve and -ve integers and decimals
	Compare decimals and fractions		Negative numbers		Round to decimal places
	Fraction of an amount		Rounding to decimal places		Round to significant figures
	Percentage of an amount		Rounding to significant figures		Mental methods, 4 operations
Add and subtract fractions		Calculations, the four operations		BIDMAS	
Mixed number arithmetic		Bidmas		Chapter 1 Test KAO	
Convert fractions, decimals and percentages		Chapter 1 Test KAO			
Chapter 5 Test KAO					
6. Formulae and Functions (Algebra)	Substitute into formula	2. Expressions (algebra)	Using algebraic notation	2. Expressions (Algebra)	Using algebraic notation
	Substitute into expressions		Substitution		Simplify by collecting like terms
	Change the subject of formula		Simplify by collecting like terms		Laws of indices
	Identify equations, formula & identities		Laws of indices		Multiply a single bracket
Expand double brackets		Factorise using common factor		Expand a single bracket	
Factorise quadratic expressions		Chapter 2 Test KAO		Factorise using common factors	
Factorise by a difference of 2 squares				Simplify algebraic fractions	
Chapter 6 Test KAO				Arithmetic with algebraic fractions	
TERM TEST MAO				Chapter 2 Test KAO	
7. Working in 2D (Geometry and Measures)	Draw and measure lines and angles	3. Angles and Polygons (Geometry and Measures)	Angle rules	3. Angles and Polygons (Geometry and Measures)	Angle rules in parallel lines
	Use standard units for length and area		Angles in parallel lines		Bearings
	Use bearings		Angles in triangles		Properties of triangles and quadrilaterals
	Interpret maps and scale drawings		Properties of triangles and quadrilaterals		Congruence and similarity
Calculate area of triangles and quadrilaterals		Angles in quadrilaterals		Use congruency to prove geometric results	
Identify and construct reflections		Congruence and similarity		Use similarity to find lengths areas & volumes	
Identify and construct rotations		Angles in polygons		Angles in polygons	
Identify and construct enlargements		Chapter 3 Test KAO		Chapter 3 Test KAO	
Chapter 7 Test KAO					
8. Probability (Statistics and Probability)	Experimental probability	4. Handling Data 1 (Statistics and Probability)	Bar charts and line graphs	4. Handling Data 1 (Statistics and Probability)	Two way tables, bar charts and pie charts
	Expected frequencies		Two way tables		Averages
	Theoretical probability		Draw and interpret graphs and charts		Range and interquartile range
	Equally likely events		Draw pie charts		Use averages and spread compare data sets
Mutually exclusive and exhaustive events		Interpret pie charts		Frequency tables to represent grouped data	
Chapter 8 Test KAO		Averages		Histograms equal class intervals	
Term Test MAO		Chapter 4 Test KAO		Histograms unequal class intervals	
9. Measures and Accuracy (Number)	Round to an appropriate degree of accuracy	5. Fractions Decimals and Percentages (Number)	Convert between fractions and decimals	5. Fractions Decimals and Percentages (Number)	Fraction of an amount
	Use approximations to make estimates		Compare decimals and fractions		Percentage of an amount
	Check calculations using approximations		Fraction of an amount		Add and subtract fractions
	Interpret limits of accuracy		Percentage of an amount		Multiply and divide fractions
Units of length, mass, volume, capacity.		Mixed number arithmetic		Mixed number arithmetic	
Chapter 9 Test KAO		Convert fractions, decimals and percentages		Convert between frac, dec & %	
		Chapter 5 Test KAO		Convert recurring decimals to fractions	
10. Equations & Inequalities (Algebra)	Solving simple linear equations	6. Formulae and Functions (Algebra)	Substitute into formula	6. Formulae and Functions (Algebra)	Substitute into formula
	Setting up linear equations		Substitute into expressions		Substitute into expressions
	Save quadratic equations		Change the subject of formula		Change the subject of formula
	Linear simultaneous equations		Identify equations, formula & identities		Write and equations to represent a function
Graphical simultaneous equations		Expand double brackets		Find the inverse of a function	
Solve linear inequalities		Factorise quadratic expressions		Construct and use composite functions	
Chapter 10 Test KAO		Factorise by a difference of 2 squares		Proof	
		Chapter 6 Test KAO		Expand quadratics	
		TERM TEST MAO		Factorise all types of quadratics	
11. Circles and Constructions (Geometry and measures)	Area of circles	7. Working in 2D (Geometry and Measures)	Draw and measure lines and angles	7. Working in 2D (Geometry and Measures)	Measure line segments and angles
	Circumference of circles		Use standard units for length and area		Use bearings
	Arc length		Interpret maps and scale drawings		Interpret maps and scale drawings
	Sector area		Calculate area of triangles and quadrilaterals		Calculate area of triangles and quadrilaterals
Construct triangles		Identify and construct reflections		Describe transformations	
Loci		Identify and construct rotations		Construct transformations	
Chapter 11 Test KAO		Identify and construct enlargements		Enlargement, fractional and negative SF	
		Chapter 7 Test KAO		Combined transformations	
				Chapter 7 Test KAO	
12. Ratio and Proportion (Number)	Simple proportion	8. Probability (Statistics and Probability)	Experimental probability	8. Probability (Statistics and Probability)	Experimental probability
	Simplify ratios		Expected frequencies		Expected frequencies
	Divide into a given ratio		Theoretical probability		Theoretical probability
	Scale factors, diagrams and maps		Equally likely events		Equally likely events
Percentage change		Mutually exclusive and exhaustive events		Mutually exclusive and exhaustive events	
Chapter 12 Test KAO		Chapter 8 Test KAO		Chapter 8 Test KAO	
TERM TEST MAO		Term Test MAO		Term Test MAO	
13. Factors Powers and Roots (Number)	Factors multiples and roots	9. Measures and Accuracy (Number)	Round to an appropriate degree of accuracy	9. Measures and Accuracy (Number)	Round to an appropriate degree of accuracy
	Prime factor decomposition		Use approximations to make estimates		Use approximations to make estimates
	HCF and LCM		Check calculations using approximations		Check calculations using approximations
	Powers and roots +ve integers		Interpret limits of accuracy		Interpret limits of accuracy
Chapter 13 Test KAO		Units of length, mass, volume, capacity.		Units of length, mass, volume, capacity.	
		Chapter 9 Test KAO		Chapter 9 Test KAO	
14. Graphs 1 (Algebra)	Coordinates in 4 quadrants	10. Equations & Inequalities (Algebra)	Solving simple linear equations	10. Equations & Inequalities (Algebra)	Solving simple linear equations
	Straight line graphs		Setting up linear equations		Setting up linear equations
	Gradient and intercept		Solve quadratic equations		Solve quadratic equations
	$y = mx + c$		Linear simultaneous equations		Linear simultaneous equations
Finding the equation given the line		Chapter 14 Test KAO		Chapter 14 Test KAO	
Interpret gradient as rate of change					
Speed distance time graphs					
Chapter 14 Test KAO					
Faces, edges and vertices 3D shapes					

15. Working in 3D (Geometry and Measures)	Plans and elevations		Graphical simultaneous equations		Chapter 9 Test KAO
	Volume of cuboids		Solve linear inequalities		Solve linear equations
	Volume of cylinders and prisms		Chapter 10 Test KAO	10. Equations & Inequalities (Algebra)	Solve quadratic equations by factorising
	Surface area pyramids and cones				Solve by completing the square
Chapter 15 Test KAO	11. Circles and Constructions (Geometry and measures)	Area of circles	Solve using quadratic formula		
Interpret & construct tables graphs & charts		Circumference of circles	Linear simultaneous equations		
Use averages to compare distributions		Arc length	Non linear simultaneous equations		
Draw and interpret scatter graphs		Sector area	Iterative processes to approximate solutions		
16. Handling Data 2 (Statistics and Probability)	Correlation and line of best fit		Construct triangles		Solve inequalities
	Time series graph, construct and interpret		LocI		Represent inequalities graphically
	Chapter 16 Test KAO		Chapter 11 Test KAO		Chapter 10 Test KAO
17. Calculations 2 (Number)	Calculations with roots	12. Ratio and Proportion (Number)	Simple proportion	11. Circles and Constructions (Geometry and Measures)	Area and circumference
	Calculations with integer indices		Simplify ratios		Arc lengths and sector areas
	Calculations with fractions and multiples of π		Divide into a given ratio		Circle theorems
	Read and write numbers in standard form		Scale factors, diagrams and maps		Constructions and loci
	Calculations involving standard form		Percentage change		Chapter 11 Test KAO
	Chapter 17 Test KAO		Chapter 12 Test KAO		Express proportion as fraction & %
	Term Test MAO		TERM TEST MAO		Divide into a given ratio
				12. Ratio and Proportion (Number)	Scale factors diagrams and maps
					Repeated % increase/decrease
					Percentage change
					Chapter 12 Test KAO
					Term Test MAO

Year 11 - GCSE Course - Key objectives in blue, support objectives in red, extension objectives in green.

Pathway 1

Term 1 & 2 - Skills/Application Focus Foundation GCSE (Topics only to be covered as extension)
 Term 3 - Exam Preparation and Revision: GCSE assessment/full gap analysis/therapy lessons to address areas of weakness

KAO Chapter tests will be completed as homeworks

In class KAO will be 1 GCSE paper completed every 3 weeks

Pathway 2 & 3

Term 1 & 2 - Applications Focus (Review skills at check in. Lesson focus application)

Term 3 - Exam Preparation and Revision: GCSE assessment/full gap analysis/therapy lessons to address areas of weakness

Pathway 1 - Foundation -1 - 9		Pathway 2 - Foundation 1 - 9 (Application)		Pathway 2 - Higher 1 - 9 (Application)	
Unit	Topic	Unit	Topic	Unit	Topic
18. Graphs 2 (Algebra)	Draw and interpret quadratic graphs	13. Factors Powers and Roots (Number)	Factors multiples and roots	13. Factors Powers and Roots (Number)	Primes, Factors and multiples
	Solve quadratic equations graphically		Prime factor decomposition		Prime factor decomposition
	<i>Sketch linear, quadratic, cubic & reciprocal graphs</i>		HCF and LCM		HCF and LCM
	Plot and interpret real life graphs		Powers and roots +ve integers		Estimate square and cube roots
	Chapter 18 Test KAO		Chapter 12 Test KAO		Laws of indices
19. Pythagoras Trig and Vectors (Geometry and Measures)	Pythagoras theorem	14. Graphs 1 (Algebra)	Coordinates in 4 quadrants	14. Graphs 1 (Algebra)	Surd including rationalising the denominators
	<i>SOH CAH TOA to find side length</i>		Straight line graphs		Chapter 13 Test KAO
	<i>SOH CAH TOA to find angles</i>		Gradient and intercept		
	<i>Exact trig values</i>		$y = mx + c$		
	Intro to vectors		Finding the equation given the line		Parallel and perpendicular lines
	<i>Add subtract & multiply vectors</i>		Interpret gradient as rate of change		Draw linear and quadratic graphs
	Chapter 19 Test KAO		Speed distance time graphs		Roots and intercepts quadratic graphs
			Chapter 14 Test KAO		Graphs for speed, distance and acceleration
20. Probability of Combined Events (Statistics and Probability)	<i>Venn diagrams (sets)</i>	15. Working in 3D (Geometry and Measures)	Faces, edges and vertices 3D shapes	15. Working in 3D (Geometry and Measures)	Plans and elevations
	Possibility spaces to calculate probabilities		Planes and elevations		Volume of cuboids
	Tree diagrams independent events		Volume of cylinders and prisms		Volume of cylinders and prisms
	<i>Tree diagrams dependent events</i>		Surface area pyramids and cones		Surface area pyramids and cones and spheres
	Chapter 20 Test KAO		Chapter 15 Test KAO		Length area and volume similar shapes
21. Sequences (Algebra)	Term to term sequences	16. Handling Data 2 (Statistics and Probability)	Interpret & construct tables graphs & charts	16. Handling Data 2 (Statistics and Probability)	Averages from grouped frequency tables
	Position to term sequences		Use averages to compare distributions		Box plots
	<i>Special types of sequences</i>		Draw and interpret scatter graphs		Cumulative frequency
	<i>Quadratic sequences</i>		Correlation and line of best fit		Scatter graphs and correlation
	Chapter 21 Test KAO		Time series graph, construct and interpret		Time series graph, construct and interpret
22. Units and Proportionality (Number)	Standard and compound units	17. Calculations 2 (Number)	Calculations with roots	17. Calculations 2 (Number)	Calculations with roots and indices
	Similar shapes, lengths areas and volumes		Calculations with integer indices		Negative and fractional indices
	Direct proportion		Calculations with fractions and multiples of π		Exact calculations fractions, surds and π
	<i>Inverse proportion</i>		Read and write numbers in standard form		Calculations in standard form
	<i>Rates of change from straight line graphs</i>		Chapter 17 Test KAO		Chapter 17 Test KAO
	<i>Proportion graphically</i>		Term Test MAO		Term Test MAO
	<i>Growth and decay problems</i>		Chapter 16 Test KAO		Chapter 16 Test KAO
	Chapter 22 Test KAO		Calculations involving standard form		Chapter 16 Test KAO
2. Expressions (algebra)	Using algebraic notation	18. Graphs 2 (Algebra)	Draw and interpret quadratic graphs	18. Graphs 2 (Algebra)	Recognise and draw reciprocal and cubic functions
	Substitution		Solve quadratic equations graphically		Recognise and draw exponential functions
	Simplify by collecting like terms		<i>Sketch linear, quadratic, cubic & reciprocal graphs</i>		Recognise and sketch trigonometrical functions
	Laws of indices		Plot and interpret real life graphs		Translate and reflect graphs
	Multiply a single bracket		Chapter 18 Test KAO		Real life graphs
	Factorise using common factor		Pythagoras theorem		Gradient: at a point and area under a curve
	Chapter 2 Test KAO		<i>SOH CAH TOA to find side length</i>		Circular graphs
3. Angles and Polygons (Geometry and Measures)	Angle rules	19. Pythagoras Trig and Vectors (Geometry and Measures)	<i>SOH CAH TOA to find angles</i>	19. Pythagoras Trig and Vectors (Geometry and Measures)	Pythagoras theorem
	Angles in parallel lines		Exact trig values		<i>SOH CAH TOA</i>
	Angles in triangles		Intro to vectors		Exact trig values
	Properties of triangles and quadrilaterals		<i>Add subtract & multiply vectors</i>		Sine and Cosine rule
	Angles in quadrilaterals		Chapter 19 Test KAO		Sine for area of a triangle
	Congruence and similarity		Venn diagrams (sets)		Vectors in geometric proof
	Angles in polygons		Possibility spaces to calculate probabilities		Chapter 19 Test KAO
	Chapter 3 Test KAO		Tree diagrams independent events		Chapter 19 Test KAO
4. Handling Data 1 (Statistics and Probability)	Bar charts and line graphs	20. Probability of Combined Events (Statistics and Probability)	Tree diagrams dependent events	20. Probability of Combined Events (Statistics and Probability)	Venn Diagrams (set theory)
	Two way tables		Chapter 20 Test KAO		Possibility spaces to calculate probabilities
	Draw and interpret graphs and charts				Tree diagrams independent events
	Draw pie charts				Tree diagrams dependent events
	Interpret pie charts		Chapter 20 Test KAO		Chapter 20 Test KAO
	Averages		Term to term sequences		Position to term sequences
	Compare distributions using averages		Special types of sequences		Special types of sequences
	Chapter 4 Test KAO		Quadratic sequences		term to term & position to term quadratic sequences
5. Fractions Decimals and Percentages (Number)	Convert between fractions and decimals	22. Units and Proportionality (Number)	Standard and compound units	22. Units and Proportionality (Number)	Standard and compound units
	Compare decimals and fractions		Similar shapes, lengths areas and volumes		Compound measures
	Fraction of an amount		Direct proportion		Similar shapes, lengths areas and volumes
	Percentage of an amount		Inverse proportion		Direct and inverse proportion
	Add and subtract fractions		Rates of change from straight line graphs		Equations for inverse and direct proportion
	Multiply and divide fractions		Proportion graphically		Direct and inverse proportion graphically
	Mixed number arithmetic		Growth and decay problems		Instantaneous and average rate of change
	Convert fractions, decimals and percentages		Chapter 22 Test KAO		Repeated proportional change
	Chapter 5 Test KAO		Term Test MAO		Chapter 22 Test KAO
8. Probability (Statistics and Probability)	Experimental probability	EXAM PREPARATION	TEST	EXAM PREPARATION	TEST
	Expected frequencies		GAP ANALYSIS		GAP ANALYSIS
	Theoretical probability		THERAPY		THERAPY
	Equally likely events		REPEAT		REPEAT
	Mutually exclusive and exhaustive events				
	Chapter 8 Test KAO				
12. Ratio and Proportion (Number)	Simple proportion	EXAM PREPARATION	TEST	EXAM PREPARATION	TEST
	Simplify ratios		GAP ANALYSIS		GAP ANALYSIS
	Divide into a given ratio		THERAPY		THERAPY
	Scale factors, diagrams and maps		REPEAT		REPEAT
	<i>Percentage change</i>				
	Chapter 12 Test KAO				
13. Factors Powers and Roots (Number)	Factors multiples and roots				
	Prime factor decomposition				
	HCF and LCM				
	Powers and roots +ve integers				
	Chapter 12 Test KAO				
	Term Test MAO				
EXAM PREPARATION	TEST				
	GAP ANALYSIS				
	THERAPY				
	REPEAT				