

Year 12 RESIT ~ Curriculum Map for Maths

What are the intended aims for this year's curriculum? To revise all of the GCSE Maths content learnt during year 9 and 10 to prepare students for their Maths GCSE exams.					
Term 1	Term 2	Resit Option	Term 3	Term 4	Term 5
Topic(s): Revision of Units 1-5	Topic(s): Revision of Units 6-10		Topic(s): Revision of Units 11-14	Topic(s): Revision of Units 15-20	Topic(s): Revision of Units 21-24
'Big idea(s)' / fundamental concepts	Number Expressions Angles Averages & Range Decimals	2D Shapes Equations Fractions Transformations Formulae	Percentages Presenting Data 3D Shapes Sequences	Ratio and Proportion Algebraic Graphs Measures Inequalities Powers and Roots Pythagoras & Trigonometry	Probability Constructions & Loci Simultaneous Equations Vectors
Knowledge to be learnt	BIDMAS, power and roots, multiplication and division, expand and factorise double and single brackets, substitution, forming expressions, angles in parallel lines and polygons, bearings, averages from a table, stem and leaf diagrams, estimation, multiplying and dividing decimals, error intervals.	Area of compound shapes, area and circumference of a circle, arc length and sector area, solving two step equations including with unknown on both sides, forming equations, four operations with fractions, convert between improper and mixed, enlargement, reflection, rotation, translation, symmetry, substitution into formulae, rearrange formulae.	Percentage increase and decrease, repeated change, interest, reverse percentages, scatter diagrams, time series, frequency polygons, pie charts, surface area and volumes of prisms/pyramids/cylinders, convert units of area/volume, find and use the nth term, function machines.	Direct and inverse proportion, recipe problems, currency conversion, best buy, draw graphs, recognise equations of parallel lines, compound measures, interpret real life graphs, solving inequalities by balancing, draw on a number line, apply laws of indices, powers and roots, standard form, Pythagoras theorem and trigonometry.	Venn diagrams, tree diagrams, construction of triangles, bisectors and loci problems, simultaneous equations graphically and algebraically, add/subtract/multiply vectors, draw vectors.
Key vocabulary	<u>Unit 1</u> Operation, factor, multiple, prime, rounding. <u>Unit 2</u> Expand, binomial, expressions, substitution, indices, bracket, negative, identity. <u>Unit 3</u> Bearing, angle, parallel, interior, exterior, triangle, quadrilateral, perpendicular <u>Unit 4</u> mean, median, mode, range, frequency, estimate, spread. <u>Unit 5</u> Bound, significant figures, rounding, place value, estimate, approximate	<u>Unit 6</u> area, perimeter, circumference, parallelogram, trapezium, circle, chord, tangent, radius, diameter. <u>Unit 7</u> Equation, solve, bracket, term, trial and improvement, expand <u>Unit 8</u> Numerator, denominator, mixed number, improper fraction, reciprocal <u>Unit 9</u> translation, reflection, rotation, enlargement, transformation, scale factor, vector, congruent, hypotenuse, similarity. <u>Unit 10</u> Formulae, expression, equation, identity, substitution, rearrange, subject,	<u>Unit 11</u> Compound interest, percentage, increase, decrease, equivalent, <u>Unit 12</u> quantitative, qualitative, questionnaire, correlation, sample, bias, frequency polygon, population, interpolate, extrapolate, outlier. <u>Unit 13</u> volume, vertices, edges, faces, plan, elevation, surface area, prism, net, cylinder, pyramid, sphere, cone <u>Unit 14</u> nth term, sequence, linear, output, geometric, arithmetic, quadratic, term-to-term, position-to-term.	<u>Unit 15</u> ratio, conversion, scale, unitary, proportion, equivalent <u>Unit 16</u> quadratic, function, coordinate, gradient, parallel, y-intercept, midpoint, roots, cubic, reciprocal. <u>Unit 17</u> metric, imperial, speed, conversion, units, mass, density, volume, velocity, proportion. <u>Unit 18</u> inequality, greater than, less than, equal, integer. <u>Unit 19</u> cubed, square root, reciprocal, power, indices, standard form, estimate, standard form <u>Unit 20</u> Pythagoras, hypotenuse, adjacent, opposite, trigonometry, sine, cosine, tangent ratios	<u>Unit 21</u> independent, experimental, theoretical, mutually exclusive, relative, frequency. <u>Unit 22</u> construct, perpendicular, bisector, region, loci, segment, equidistant. <u>Unit 23</u> simultaneous equations, elimination <u>Unit 24</u> vector, magnitude, direction, scalar
The role of reading and comprehension	Decoding exam questions that are set for homework to decide what method to use.	Decoding exam questions that are set for homework to decide what method to use.	Decoding exam questions that are set for homework to decide what method to use.	Decoding exam questions that are set for homework to decide what method to use.	Decoding exam questions that are set for homework to decide what method to use.
The role of independent extended writing	N/A	N/A	N/A	N/A	N/A
The role of maths/ numeracy	Embedded	Embedded	Embedded	Embedded	Embedded
Links to careers/ aspirations	Scout leader and D of E co-ordinator, Map reading Statistician, Engineering, Interior Design, Builders, Engineers.	Banker, Stock Broker, Town Planners, Carpenter, Carpet Fitter.	Medicine, Pharmacy, Politics Sports, Business.	Engineering, Any statistics related job, Construction.	Architect, Carpenter.
Core skills <i>A skill is a performance built on what a person knows</i>	BIDMAS, power and roots, multiplication and division, expand and factorise double and single brackets, substitution, forming expressions, angles in parallel lines and polygons, bearings, averages from a table, stem and leaf diagrams, estimation, multiplying and dividing decimals, error intervals.	Area of compound shapes, area and circumference of a circle, arc length and sector area, solving two step equations including with unknown on both sides, forming equations, four operations with fractions, convert between improper and mixed, enlargement, reflection, rotation, translation, symmetry, substitution into formulae, rearrange formulae.	Percentage increase and decrease, repeated change, interest, reverse percentages, scatter diagrams, time series, frequency polygons, pie charts, surface area and volumes of prisms/pyramids/cylinders, convert units of area/volume, find and use the nth term, function machines.	Direct and inverse proportion, recipe problems, currency conversion, best buy, draw graphs, recognise equations of parallel lines, compound measures, interpret real life graphs, solving inequalities by balancing, draw on a number line, apply laws of indices, powers and roots, standard form, Pythagoras theorem and trigonometry.	Venn diagrams, tree diagrams, construction of triangles, bisectors and loci problems, simultaneous equations graphically and algebraically, add/subtract/multiply vectors, draw vectors.
Dept. enrichment activities	Revision sessions are on every week at school. Lunch time drop in MA17 every lunch time	Revision sessions are on every week at school. Lunch time drop in MA17 every lunch time	Revision sessions are on every week at school. Lunch time drop in MA17 every lunch time	Revision sessions are on every week at school. Lunch time drop in MA17 every lunch time	Revision sessions are on every week at school. Lunch time drop in MA17 every lunch time

Opportunity to resit given in November should students wish to do this.

Home learning opportunities	Use the maths packs in the Student shared area > Maths > GCSE REVISION > REVISION PACKS to practise exam questions on the topics that have been revised this term. Repetition of questions is the only way with Mathematics.	Use the maths packs in the Student shared area > Maths > GCSE REVISION > REVISION PACKS to practise exam questions on the topics that have been revised this term. Repetition of questions is the only way with Mathematics.		Use the maths packs in the Student shared area > Maths > GCSE REVISION > REVISION PACKS to practise exam questions on the topics that have been revised this term. Repetition of questions is the only way with Mathematics.	Use the maths packs in the Student shared area > Maths > GCSE REVISION > REVISION PACKS to practise exam questions on the topics that have been revised this term. Repetition of questions is the only way with Mathematics.	Use the maths packs in the Student shared area > Maths > GCSE REVISION > REVISION PACKS to practise exam questions on the topics that have been revised this term. Repetition of questions is the only way with Mathematics.
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