

Year 11 Foundation ~ Curriculum Map for Maths

What are the intended aims for this year's curriculum? To finish the GCSE SOW and to begin preparing for the GCSE exam.															
Term 1		Term 2		Term 3		Term 4		Term 5		Term 6					
Topic(s): Equations of Straight Line Graphs Revision for practice paper		Topic(s): Revision for the mocks and then for the PPEs		Topic(s): Revision of Angles, Functions and Sequences and Shape		Topic(s): Revision of percentages, solving equations and handling data		Topic(s): Revision of ratios, proportions and probability		Topic(s):					
Aim of A&R		Aim of Mock		Aim of PPE											
'Big idea(s)' / fundamental concepts		Revision and exam practice		Revision and exam practice		Revision and exam practice		Revision and exam practice							
Knowledge to be learnt		To revise the following for the mock exams Averages Factorising HCF/LCM Four operations with decimal numbers Pie Charts Percentages Reflection Speed, distance, time Ratios Venn Diagrams Best Value Inequalities Probability Rotation Expand Double Brackets Nth Terms Revision for the PPE's will be rotate between the 6 strands of mathematics: Number, Geometry, Algebra, Statistics, Probability and Ratio and Proportion. Specific topics will be selected based on the gap analysis of the mock exams, but are likely to include a mixture of the topics listed in the next three columns		To assess what graduate students are currently able to achieve and ensure they are sitting the correct tier of entry.		To assess what graduate students are currently able to achieve and ensure they are sitting the correct tier of entry.		To identify gaps in knowledge and to be able to address these before their summer exams							
Drawing linear graphs and finding the equations of linear graphs.															
Revise drawing straight line graphs Find the equation of a straight-line graph by using $y = mx + c$ – include through two given points, through one point and the gradient given - include negative gradients <i>Find the equation of parallel lines</i> To revise the following: Bar Charts Tally Charts Money Problems Collecting Like Terms BIDMAS Powers and Roots Expanding Brackets Perimeter Rounding Substitution Translation Scatter Diagrams Index Laws Sequences Percentages Solving Equations				Draw and Measure angles Recognise acute, obtuse and reflex angles Find missing angles on a straight line or about a point Find a missing angles in a triangle (include isosceles triangles) and quadrilaterals Find vertically opposite angles Measure a bearing Enlargement by a positive scale factor Translations Rotations Reflections in a horizontal/vertical line Describing all of the above Drawing vectors Find averages and the range from a list/stem and leaf diagram and use them to make comparisons Draw a scatter diagram and draw a line of best fit Use the line of best fit to make an estimate Describe the correlation Draw a time series Draw a trend line Interpret pie charts Find the perimeter of shapes Find the area of triangles and different quadrilaterals Name 3D shapes Find the surface area and volume of triangular prisms and cuboids Draw plans and elevations				Calculate a percentage without a calculator Calculate a percentage with a calculator Calculate a percentage increase/decrease Calculate simple interest Finding HCF and LCM by listing PFD BIDMAS Four operations with decimals Simplifying fractions Converting between proper and improper fractions Four operations with fractions Understanding powers Writing numbers in standard form Rounding Solve one step equations. Solve two step equations Draw linear graphs without a calculator Draw linear graphs with a calculator Draw quadratic graphs with a calculator Expand brackets (up to two brackets) Factorise simple expressions Substitute into simple formulae, including substituting into kinematic formula Use simple compound measures Draw real life graphs				Simplify a ratio Share a quantity into a given ratio Change a recipe Best buy Exchange rates Proportion using the unitary method Find the probability of an event Complete two way tables and find a probability from it. Fill in a frequency tree Fill in a tree diagrams Fill in a simple Venn diagram			
Key vocabulary		equation, linear, intercept, gradient, parallel, intersection, table of values, coordinate.		reflection, rotation, enlargement, translation, transformation, scale factor, coordinate, vector,		function, input, output, sequence, arithmetic, geometric, term-to-term, n-th term.		percentage, increase, decrease, depreciate, interest, simple,		ratio, proportion, unitary, simplify					

	PFD, LCM, HCF, fractions, decimals. square, cube, roots, indices, integer, truncation, rounding, estimate, standard form		substitute, power, root, kinematic, speed, distance, time, force, pressure, area, mass, density, volume. acute, obtuse, reflex, quadrilateral, , bearing.		plan, elevation, perimeter, area, polygon, parallelogram, trapezium, kite, rhombus, cuboid, sphere, pyramid, prism, cone, volume		solve, equation, unknown, substitute, expand, factorise, linear, quadratic, mean, median, mode, range, frequency, sum, correlation, outlier, pie chart, time series, key.		likely, unlikely, probability, frequency, event, outcome, fair, random, impossible, equal chance, certain, AND, OR, NOT.	
The role of reading and comprehension	To understand specific maths vocabulary such as gradient and parallel		To decode questions		To decode questions		To decode questions		To decode questions	
The role of independent extended writing	N/A		N/A		N/A		N/A		N/A	
The role of maths/ numeracy	In all the above		In all the above		In all the above		In all the above		In all the above	
Links to careers/ aspirations	Construction workers, economists.		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.	
Core skills <i>A skill is a performance built on what a person knows</i>	To understand that all equations in the form $y=mx+c$ can be represented as a linear graph. To be able to find m and c from a graph in order to find the equation of a line, or parallel lines.		To be able to answers exam style questions by drawing upon a variety of different mathematical skills		To be able to answers exam style questions by drawing upon a variety of different mathematical skills		To be able to answers exam style questions by drawing upon a variety of different mathematical skills		To be able to answers exam style questions by drawing upon a variety of different mathematical skills	
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	
Home learning opportunities	Can you spot parallel lines in every day life (eg shelves are usually parallel, train tracks, steps etc What does a 10% gradient road sign mean?		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.	