

Year 11 Foundation ~ Curriculum Map for Maths

What are the intended aims for this year's curriculum? To start the GCSE Scheme of Work to build on topics learnt in year 9 and extend idea's further.											
Term 1		Term 2		Term 3		Term 4		Term 5		Term 6	
Topic(s): Pythagoras Inequalities Equations of Lines		Topic(s): Proof and Algebraic Fractions Vectors Preparation for Mocks		Topic(s): Number Geometry Statistics Algebra Ratio Probability		Topic(s): Number Geometry Statistics Algebra Ratio Probability		Topic(s): Number Geometry Statistics Algebra Ratio Probability		Topic(s):	
Aim of A&R		Aim of A&R		Aim of A&R		Aim of A&R		Aim of A&R		Aim of EoY exam	
'Big idea(s)' / fundamental concepts		Using algebra to prove a concept. Simplifying algebraic fractions		Students will rotate between all six strands of maths so that they are regularly revising each strand. The specific topics covered will be driven by the gap analysis from the mocks and PPE's but are likely to cover topics from the lists in the term 3/4/5 columns.		Students will rotate between all six strands of maths so that they are regularly revising each strand. The specific topics covered will be driven by the gap analysis from the mocks and PPE's but are likely to cover topics from the lists in the term 3/4/5 columns.		Students will rotate between all six strands of maths so that they are regularly revising each strand. The specific topics covered will be driven by the gap analysis from the mocks and PPE's but are likely to cover topics from the lists in the term 3/4/5 columns.			
Knowledge to be learnt		Simplify and manipulate algebraic fractions Use algebra to construct proofs and arguments		<p><u>Number</u> Finding HCF and LCM using PFD Writing numbers in standard form Index laws BIDMAS Four operations with fractions Fraction of an amount Four operations with decimals Estimation Percentage increase/decrease Simple/Compound Interest Reverse Percentage</p> <p><u>Geometry</u> Angles in polygons and in parallel lines Bearing Area of Triangles/Parallelograms/Trapeziums Area/Circumference of Circles Surface Area/Volume of Prisms Plans and Elevations Convert units of volume/area Angles in Polygons Angles in Parallel Lines Bearings Draw and Describe Transformations Construct a Triangle Line/Angle bisector Loci</p> <p>Writing simple vectors 2D Pythagoras Distance between two points 2D Trigonometry</p>		<p><u>Algebra</u> Expand single/double brackets Factorise into single/double brackets Collect like terms Draw linear graphs Midpoint of a line Equation of a line Simultaneous Equations Compound Measures Nth term rule Rearranging formula Substitution Draw Quadratic Graphs Distance time graphs Writing inequalities in a list or on line Solving inequalities by balancing Simple Composite Functions Simple iteration</p> <p><u>Statistics</u> Averages in a table Time Series Scatter Diagrams Box Plots Stem and Leaf diagrams Frequency polygons Pie charts</p>		<p><u>Ratio and proportion</u> Share a ratio Unitary Method Best buy Change a recipe Currency conversion Similar Shapes</p> <p><u>Probability</u> Tree diagrams Two way tables Frequency trees Simple Venn diagrams</p>			
		Mock Exams		PPE Exams							

Key vocabulary			HCF, LCM, PDF, Standard form, indices. Estimate, interest, parallel, polygon, area, perimeter, circumference, bearing, prism, volume, surface area, loci, bisector, perpendicular, Pythagoras, trigonometry, transformation		Expand, factorise, equation, like terms, quadratic, linear, nth term, midpoint, substitute, composite function, inequality, iteration Averages, time series,, scatter diagram, box plot, stem and leaf, frequency polygon, pie chart		Ratio, proportion, unitary method, best vale, similar, congruent, tree diagram, Venn diagram.	
The role of reading and comprehension		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	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	In all the above
Links to careers/ aspirations		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 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		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.	