

# 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	
Topic(s): Equations of Straight Line Graphs  Revisie for practice paper		Topic(s): Revision for mocks and 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	
		Aim of Mock		Aim of PPE					
'Big idea(s)' / fundamental concepts		Revision		Revision		Revision		Revision	
Knowledge to be learnt		<p>To revise</p> <ul style="list-style-type: none"> <li>Ratios</li> <li>Averages and range</li> <li>Nth Term Rule</li> <li>Inequalities</li> <li>Tree Diagrams</li> <li>Reverse Percentages</li> <li>Mean from a Table</li> <li>Standard Form</li> <li>Fractions</li> <li>£ part Ratios</li> <li>Congruent Shapes</li> <li>Solving Quadratics</li> <li>Rotation</li> <li>Circumference</li> <li>Loci</li> <li>Simultaneous Equations</li> <li>Index Lawsa</li> <li>Best Value</li> </ul> <p>Revision for the PPE's will be rotate between the 6 strands of mathematics: Number, Geometry, Algebra, Statistics, Probability and Ratio and Proportion.</p> <p>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</p>		<p>Angles in Parallel Lines</p> <p>Interior and exterior angles</p> <p>Bearings</p> <p>Proof of congruence</p> <p>Nth term of linear sequences</p> <p>Nth term of quadratic sequences</p> <p>Area and Circumference of Circles (including parts of circles)</p> <p>Area of Compound Shapes</p> <p>Surface Area and Volume of prisms</p> <p>Using PFD to find HCF and LCM</p> <p>BIDMAS</p> <p>Four operations with fractions</p> <p>Calculations in standard form</p> <p>Using negative indices</p> <p>Estimating answers</p>		<p>Percentage increase and decrease</p> <p>Compound interest</p> <p>Reverse percentages</p> <p>Expand brackets (up to triple)</p> <p>Factorise expressions</p> <p>Solve two steps equations</p> <p>Solve quadratics</p> <p>Rearrange equations</p> <p>Averages from a table</p> <p>Pie charts</p> <p>Scatter diagrams</p> <p>Drawing and describing rotations</p> <p>Drawing and describing reflections (including in the line <math>y = x</math> and <math>y = -x</math>)</p> <p>Drawing and describing enlargements (Including fractional scale factors)</p> <p>Drawing and describing translations</p> <p>Drawing vectors and carry out vector calculations</p> <p>Substitution into kinematic formulae</p> <p>Compound Measures</p> <p>Real life graphs</p>		<p>Similar shapes</p> <p>Direct and indirect proportion algebraically</p> <p>Ratio problems such as A:B, B:C find A:C</p> <p>Tree diagrams</p> <p>Venn diagrams</p>	
Key vocabulary		<p>reflection, rotation, enlargement, translation, transformation, scale factor, coordinate, vector, scalar</p> <p>substitute, power, root, kinematic, speed, distance, time, force, pressure, area, mass, density, volume.</p>		<p>acute, obtuse, reflex, quadrilateral, polygon, co-interior, alternate, corresponding, congruent, interior, exterior, regular, sum, bearing.</p> <p>function, input, output, sequence, arithmetic, geometric, quadratic, term-to-term, n-th term.</p>		<p>percentage, increase, decrease, depreciate, interest, simple, compound, annum.</p> <p>solve, equation, unknown, substitute, expand, factorise, linear, point of intersection, quadratic, reciprocal, root.</p> <p>mean, median, mode, range, frequency, sum, correlation, interpolate, extrapolate, outlier, pie chart, time series, key.</p>		<p>ratio, proportion, unitary, simplify, similar, direct, inverse</p> <p>likely, unlikely, probability, frequency, event, outcome, fair, random, impossible, equal chance, certain, AND, OR, NO</p>	

			plan, elevation, perimeter, area, polygon, parallelogram, trapezium, kite, rhombus, tangent, arc, sector, segment, arc length, circumference, radius, diameter, cuboid, sphere, pyramid, prism, cone, volume				
The role of reading and comprehension	To understand specific maths vocabulary such as gradient and parallel						
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	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.	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	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	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.	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.	