



# Maths- Y10H

## MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 4 FEB-MARCH	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
TOPIC (S)	Probability	Probability	Revision and Assessment	Simultaneous Equations	Simultaneous Equations	Number Review	
Knowledge & Skills development	<p><b><u>Probability</u></b></p> <ul style="list-style-type: none"> <li>• apply ideas of randomness, fairness and equally likely events to calculate expected outcomes or multiple future experiments</li> <li>• relate relative expected frequencies to theoretical probability, using appropriate language and the 0 to 1 probability scale</li> <li>• understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size</li> <li>• enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams</li> <li>• calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions</li> <li>• Know when to add and when to multiply two or more probabilities</li> <li>• calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams</li> </ul> <p><b><u>Simultaneous Equations</u></b></p> <ul style="list-style-type: none"> <li>• solve two simultaneous equations in two variables algebraically:               <ul style="list-style-type: none"> <li>• linear/linear</li> <li>• linear/quadratic</li> </ul> </li> <li>• find approximate solutions using a graph, including the approximate solution of a quadratic equation by drawing a straight line to intersect with another quadratic equation</li> <li>• translate simple situations or procedures into algebraic expressions or formulae</li> <li>• derive two simultaneous equations, solve the equations and interpret the solution</li> </ul>						

<b>Assessment / Feedback Opportunities</b>	Topic assessments	Self-assessment sheets	Homework (written and online)	Formative teacher assessment - verbal	Retrieval practice	
<b>Cultural Capital</b>	Application of probability and relative frequency applied in real life situations Linear programming to maximise profit					
<b>SMSC / Promoting British Values</b> (Democracy, Liberty, Rule of Law, Tolerance & Respect)	Willingness to participate in, and respond to mathematical opportunities. Use of social skills in different contexts, including working and socialising with pupils from different religious, ethnic and socio-economic backgrounds.					
<b>Reading opportunities</b>	What's the point of maths? Murderous Maths, Marvellous Maths, Launch a rocket into space, Humble Pi.					
<b>Key Vocabulary</b>	Probability, Chance, Likelihood, Relative Frequency, Conditional, Dependent, Independent, Events, Experimental, Fraction, Sample Space, Tree Diagram, Simultaneous, Equations, Linear, Variable, Unknown, Substitution, Approximate, Intersect, Quadratic, Tangent.					
<b>Digital Literacy</b>	Desmos, DFM, MSTeams					
<b>Careers</b>	Engineering, Business, Architecture, Building, Gaming, Banking, Economist, Statistician, Budgeting, Market Research.					