Maths- Y10H

HALF TERM 4 FEB-MARCH	Week 1	Week 2	Week 3	Week 4	Week 5		
TOPIC (S)	Revision and Assessment	Probability	Probability	Simultaneous Equations	Simultaneous Equations		
Knowledge & Skills development	**Probability**						

Probability

- apply ideas of randomness, fairness and equally likely events to calculate expected outcomes or multiple future experiments
- relate relative expected frequencies to theoretical probability, using appropriate language and the 0 to 1 probability scale
- understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size
- enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams
- calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions
- Know when to add and when to multiply two or more probabilities
- calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams

Simultaneous Equations

- solve two simultaneous equations in two variables algebraically:
- linear/linear
- linear/quadratic
- 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
- translate simple situations or procedures into algebraic expressions or formulae
- derive two simultaneous equations, solve the equations and interpret the solution

Assessment / Feedback Opportunities	Topic assessments	Self-assessment sheets	Homework (written and online)	Formative teacher assessment - verbal	Retrieval practice	
Cultural Capital	Application of probability and relative frequency applied in real life situations Linear programming to maximise profit					
SMSC / Promoting British Values (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.					
Reading opportunities	What's the point of maths? Murderous Maths, Marvellous Maths, Launch a rocket into space, Humble Pi.					
Key Vocabulary	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.					
Digital Literacy	Desmos, DFM, MSTeams					
Careers	Engineering, Business, Architecture, Building, Gaming, Banking, Economist, Statistician, Budgeting, Market Research.					