Maths- Y11H

HALF TERM 5 April-May	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
TOPIC (S)	Gradients and Rates of Change Calculus and Area Under a Curve	Algebraic Fractions	Bespoke Revision and Exam Preparation	Bespoke Revision and Exam Preparation	Bespoke Revision and Exam Preparation	Bespoke Revision and Exam Preparation	
Knowledge & Skills development	**Gradients and Rates of Change** - Interpret the gradient at a point on a curve as the instantaneous rate of change - Apply the concepts of average and instantaneous rates of change (gradients of chords and tangents) in numerical, algebraic and graphical contexts - Interpret the gradient of a straight-line graph as a rate of change **Calculus and Area Under a Curve** - Calculate or estimate gradients of graphs and areas under graphs (including quadratic and other non-linear graphs) - Interpret the results in cases such as distance-time graphs, velocity-time graphs and graphs in financial contexts **Algebraic Fractions** - simplify and manipulate algebraic expressions involving algebraic fractions by: - expanding products of two or more binomials - factorising quadratic expressions of the form $ax^2 + bx + c$						
Assessment / Feedback Opportunities	Topic assessments	Self-assessment sheets	Homework	Formative teacher assessment - verbal		Retrieval practice	
Cultural Capital	Application of SUVAT.						
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	Mathematics in the Simpsons What's the point in Maths? Humble pi						
Key Vocabulary	Gradient, rate of change, instantaneous, average, chord, tangent, area, equation, velocity, fraction, denominator, numerator, manipulation, equivalent, simplify, expand, factorise.						

Digital Literacy	DESMOS, Geogebra, DFM, MSTeams
Careers	Architecture, Team Leader, Construction, Medicine, Engineer, Science, Finance, Chemist, Nursing, Machinists, Actuaries, Statistician.