MAGHULL HIGH SCHOOL – CURRICULUM MAP Year 11 Half Term 1

Unit:	Week 1 -2		Week 3-4		Week 5-6	
LESSON TOPIC QUESTION(S)	**Objective:**		**Objective:**		**Objective:**	
	FOUNDATION	HIGHER	FOUNDATION	HIGHER	FOUNDATION	HIGHER
	Equations of lines parallel to the axis	Equations of lines parallel to the axis	Equation of a straight-line graph given two points	Equation of a straight-line graph given two points	Plot and read from reciprocal graphs	Identify and interpret roots and intercepts of quadratics
	Plot straight line graphs	Plot straight line graphs	Determine whether a point is on a line	Recognise when straight lines are perpendicular	Recognise graph shapes	Understand and use exponential graphs
	Interpret y = mx + c	Interpret y = mx + c				
	Find the equation of a straight line from a graph (1)	Find the equation of a straight line from a graph (1)	Solve linear simultaneous equations graphically	Find the equations of perpendicular lines	Identify and interpret roots and intercepts of quadratics	Find and use the equation of a circle centre (0, 0)
	Equation of a straight-line graph given one point and gradient	Equation of a straight-line graph given one point and gradient	Plot and read from quadratic graphs	Plot and read from quadratic graphs	Reflect shapes in given lines	Construct and interpret other real-life straight line graphs
			Plot and read from cubic graphs	Recognise graph shapes	Construct and interpret conversion graphs	Interpret distance/time graphs
	Formative Assessment	Formative Assessment	Formative Assessment	Formative Assessment		
	Therapy	Therapy	Therapy	Therapy	Formative Assessment	Formative Assessment
					Therapy	Therapy
Knowledge & Skills development	Develop fluency in interpreting and constructing linear, quadratic, cubic, reciprocal, and exponential graphs • Strengthen conceptual understanding of gradient, intercepts, and graph-based equation solving • Apply coordinate geometry techniques to real-life graphs and conversion contexts • Extend graphical reasoning to identify roots, intersections, and transformations • Deepen understanding of perpendicular lines, midpoint, and equations of lines given coordinates					
Assessment / Feedback Opportunities	• Regular hinge questions and whiteboard tasks during graph sketching and interpretation • Mid-topic formative assessments focusing on graph plotting and equation derivation • Peer/self-assessment using mark schemes and modelled graph interpretation examples • End-of-unit summative assessments covering graphical reasoning and algebraic connections • Therapy and consolidation sessions following each formative or summative task					
Key Vocabulary	*Gradient, Intercept, Equation, Linear, Quadratic, Cubic, Reciprocal, Exponential, Midpoint, Perpendicular, Parallel, Coordinate, Root, Simultaneous, Conversion graph, Real-life graph*					

Literacy/Reading opportunities	Deconstruction of worded graph-based problems • Use of sentence starters to support explanation of graphical reasoning • Reading comprehension tasks involving real-life contexts such as speed-time and conversion graphs • Peer discussion and vocabulary quizzes to reinforce terminology
Cross Curricular Themes	• Physics – Application of motion, speed/time graphs, and graphical modelling • Geography – Use of coordinate systems and interpretation of mapped data • Business Studies – Interpreting and creating graphs from financial and data contexts • Computing – Logical reasoning and algorithms linked to coordinate mapping and geometry
Personal Development (Including British Values, RSE, Citizenship)	Reinforce resilience when tackling multi-step graph problems and simultaneous equations • Promote independent thinking and logical communication when justifying graph work • Encourage respectful discussion during graph comparisons and peer feedback • Highlight fairness and reliability in data interpretation for decision-making • Enable understanding of how graphical models apply in everyday decision making
Career Opportunities	Fundamental knowledge for careers in data science, architecture, surveying, and software development • Applications in finance, healthcare analytics, and engineering where data modelling and interpretation are essential • Supports numeracy and analytical thinking in public service and education roles