



Maths- Y11H

MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 4 FEB-MAR	Week 1	Week 2	Week 3	Week 4	Week 5		
TOPIC (S)	Circle Theorems	Circle Theorems	Further Sketching Graphs	Transforming Functions	Algebraic Fractions		
Knowledge & Skills development	<p>Circle Theorems apply and prove the standard circle theorems concerning:</p> <ul style="list-style-type: none"> • angles and radii • tangents and chords use them to prove related results						
	<p>Further Sketching Graphs</p> <ul style="list-style-type: none"> • Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, and the reciprocal function $y=1/x$ with $x \neq 0$ • exponential functions $y = k^x$ for positive values of k, • and the trigonometric functions (with arguments in degrees) $y=\sin x$, $y=\cos x$ and $y=\tan x$ for angles of any size (including using the symmetry of functions) 						
	<p>Transforming Functions</p> <ul style="list-style-type: none"> • sketch translations and reflections of a given function 						
	<p>Algebraic Fractions</p> <ul style="list-style-type: none"> • 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	Exponential growth of diseases. Proving a statement with clear evidence.					
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	Circle, Theorem, Radii, Tangent, Segment, Subtend, Arc, Chord, Diameter, Proof, Graph, Sketch, Plot, Axis, Intercept, Shape, Linear, Quadratic, Reciprocal, Cubic, Exponential, Solutions, Equation, Function, Roots, Turning Points, Period, Cycle, Repeat, Asymptote, Reflect, Translate, Simplify, Solve, Manipulate, Factorise,					
Digital Literacy	DESMOS, Geogebra, DFM, MSTeams					
Careers	Architecture, Team Leader, Construction, Medicine, Engineer, Science, Finance, Chemist, Nursing, Machinists, Actuaries, Statistician					