Maths Revision List Summer 2025

Exam information:
2 papers both 1hr 30mins each
Paper 1 – 2/3 pure, 1/3 mechanics
Paper 2 – 2/3 pure, 1/3 stats

Topic	Revised?
Pure – Paper 1 and 2	
Algebra Proof Indices Surds	
Quadratics and Cubics Factorising Solving Sketching Polynomial division	
Inequalities and Simultaneous Equations Inequalities – linear and quadratic Simultaneous Equations – linear and quadratic	
Coordinate Geometry, Graphs and Circles Equation of straight lines Parallel and perpendicular lines Proportion Curve Sketching Transformations of graphs Circles	
Binomial Expansion Binomial Expansion	
Trigonometry Sine and Cosine Rules Trig Identities Trig Graphs Solving Trig Equations	
Exponentials and Logarithms Exponentials Logarithms Laws of Logs Solving equations with Exponentials and Logarithms Modelling exponential growth and decay Using log graphs $y = ax^n \Rightarrow \log(y) = n\log(x) + \log(a)$ or $y = kb^x \Rightarrow \log(y) = x\log(b) + \log(k)$	
Differentiation From first principles Differentiating polynomials Second order derivatives Derivatives and graphs Real life problems	
Integration Indefinite integration Definite Integration	
Vectors	

Vectors Calculating with Vectors Modelling with Vectors	
Mechanics – Paper 1 ONLY	
Kinematics Motion graphs Suvats Non uniform acceleration $s = \int v\,dt$ and $v = \int a\,dt$	
Forces and Newton's Laws Understanding Units Models in Mechanics Forces Newton's Laws of Motion	
Stats – Paper 2 ONLY	
Sampling, Data Presentation and Interpretation Populations and Sampling Representing Data Location: Mean, Median and Mode Dispersion Correlation and Regression	
Probability Probability basics Solving probability problems Laws of Probability	
Statistical Distributions Probability Distributions Binomial Distributions Cumulative Binomial Distributions Modelling Real Problems	
Hypothesis Testing Hypothesis Tests Hypothesis Tests for a binomial distribution	

Revision Links

CGP Physical textbook
Kerboodle online textbook - https://www.kerboodle.com/users/login
Physics and maths tutor - https://www.physicsandmathstutor.com/maths-revision/a-level-aqa/
Maths genie - https://www.mathsgenie.co.uk/newalevel2.php
Dr Frost

Past Papers with solutions - https://www.physicsandmathstutor.com/maths-revision/a-level-aqa/papers-as/