A Level Maths Learning Journey

Year 12

Understanding and Applying Maths Skills

1: Pure Maths
$\frac{2}{3}$ of the course

2: Statistics
$\frac{1}{6}$ of the course

3: Mechanics
$\frac{1}{6}$ of the course

Year 13

A Level Exams

Revision

Revision

Mechanics: review of Y12 mechanics

Statistics: more probability

Mechanics: kinematics and calculus

Statistics: correlation

Statistics: more normal distribution

Statistics: normal hypothesis tests

Mechanics: moments

Pure Maths: domain and range

Pure Maths: Inverse and composite functions

Pure Maths: differential equations

Pure Maths: the modulus function

Pure Maths: more sequences

Pure Maths: more transformations

Pure Maths: proof

Pure Maths: small angle approximations

Pure Maths: numerical methods for solving equations

Pure Maths: Binomial expansions

Pure Maths: Newton-Rhapson

Pure Maths: Numerical integration

Pure Maths: rates of change

Pure Maths: Differentiating and integrating parametrics

Mechanics: projectiles

Pure Maths: partial fractions

Pure Maths: more trigonometric identities

Mechanics: friction

Pure Maths: Parametric equations

Pure Maths: Integration by substitution and by parts

Pure Maths: Review of differentiation

Year 13

Pure Maths: more trigonometry

Pure Maths: chain rule

Pure Maths: Product and quotient rules

Mechanics: pulleys and connected particles

Pure Maths: more differentiation

Pure Maths: more integration

Mechanics: equilibrium

Statistics: the normal distribution

Statistics: probability

Statistics: standard deviation

Statistics: binomial hypothesis testing

Statistics: the normal distribution

Pure Maths: inequalities and proportionality

Pure Maths: integration

Pure Maths: differentiation

Pure Maths: the binomial theorem

Mechanics: displacement, velocity and acceleration

Mechanics: kinematics

Pure Maths: trigonometric graphs

Pure Maths: sequences

Mechanics: SUVAT

Pure Maths: trigonometric equations

Mechanics: motion under gravity

Pure Maths: trigonometric identities

Pure Maths: sine and cosine rules

Mechanics: Newton's 1st and 3rd Law

Pure Maths: proof

Mechanics: Newton's 2nd Law

Pure Maths: mathematical modelling

Pure Maths: sketching graphs

Pure Maths: exponential equations

Pure Maths: transforming functions

Pure Maths: logarithms

Pure Maths: algebraic long division

Pure Maths: the factor theorem

Pure Maths: disguised quadratics

Pure Maths: equations of circles

Pure Maths: quadratics

Pure Maths: coordinate geometry

Pure Maths: surds

Year 12