

**FURTHER MATHS PAL CURRICULUM CONTENT OVERVIEW**

<b>Autumn Term 1 - Pure</b> • Algebraic Expressions • Quadratics • Equations and Inequalities • Graphs and Transformations • Straight Line Graphs • Circles	<b>Spring Term 1 - Pure</b> • Integration 1 • Exponentials and Logarithms • Mid year exam • Algebraic Methods • Functions and Graphs	<b>Summer Term 1 - Pure</b> • Proof by Contradiction • Differentiation 2 • Integration 2 • Numerical Methods
<b>Autumn Term 1 - Applied</b> • Modelling in Mechanics • Graphs in Mechanics • Constant acceleration • Vectors	<b>Spring Term 1 - Applied</b> • Application of Forces • Mid year exam • Data collection • Measures of Location and Spread • Representations of Data and Spread	<b>Summer Term 1 - Applied</b> • Correlation • Normal distribution • Large Data Set
<b>Autumn Term 2 - Pure</b> • Algebraic Methods • Binomial Distribution • Trigonometry 1 • Differentiation 1	<b>Spring Term 2 - Pure</b> • Sequences and Series • Binomial Expansion • Trigonometry 2 • Parametric Equations	<b>Summer Term 2 - Pure</b> • Revision and End of Year Exams • Work experience • Extension work • Presentations
<b>Autumn Term 2 - Applied</b> • Projectiles • Variable acceleration • Forces and Friction	<b>Spring Term 2 - Applied</b> • Probability • Binomial Distribution • Hypothesis Testing	<b>Summer Term 2 - Applied</b> • Revision and End of Year Exams • Work experience • Extension work

**FURTHER MATHS TAL CURRICULUM CONTENT OVERVIEW**

<b>Autumn Term 1 - Pure</b> • Complex Numbers 1 • Argand Diagrams • Roots of Polynomials • Volumes of Revolution 1 • Volumes of Revolution 2	<b>Spring Term 1 - Pure</b> • Series 1 • Proof by induction • Series 2 • Complex Numbers 2	<b>Summer Term 1 - Pure</b> • Revision
<b>Autumn Term 1 - Applied</b> • Discrete Probability Distributions • Poisson Distributions • Geometric and Negative Binomial Distributions • <b>Hypothesis Testing</b>	<b>Spring Term 1 - Applied</b> • Momentum and Impulse • Work, Energy, and Power • Elastic Collisions in One Dimension • Elastic Strings and Springs	<b>Summer Term 1 - Applied</b> • Revision
<b>Autumn Term 2 - Pure</b> • Methods in Calculus • Matrices • Linear Transformations • Vectors	<b>Spring Term 2 - Pure</b> • Polar coordinates • Hyperbolic Functions • Differential Equations	<b>Summer Term 2 - Pure</b> • Exams
<b>Autumn Term 2 - Applied</b> • Chi-squared Tests	<b>Spring Term 2 - Applied</b> • Elastic Collisions in Two Dimension	<b>Summer Term 2 - Applied</b> • Exams

• Central Limit Theorem	• FM1 Revision	
• Probability Generating Functions	• FM1 Mock	
• Quality of Tests		