

Saffron Walden County High School Curriculum

CURRICULUM SUMMARY



SAFFRON WALDEN
COUNTY HIGH SCHOOL

Year 12		AUTUMN TERM		SPRING TERM		SUMMER TERM	
		TERM 1A	TERM 1B	TERM 2A	TERM 2B	TERM 3A	TERM 3B
Maths	KNOWLEDGE DOMAIN	Polynomials Hypothesis testing Binomial expansion Surds, indices, exponentials and logarithms	Quadratic functions Coordinate Geometry Graph transformations Probability Sequences and series Vectors Forces and Newton's laws	Differentiation Integration (Intro) Inequalities Trigonometry	Integration Kinematics Variable acceleration Binomial distribution	Kinematics Forces and Newton's law Trigonometry Exponentials and Logarithms	Algebraic manipulation Proof
	SKILLS DEVELOPED THROUGH THE KNOWLEDGE AND ENQUIRIES TAUGHT THIS HALF TERM	Sketching polynomial graphs and algebraic division Use of correlation and association Expanding Binomials Simplification of algebraic terms Change between exponential and logarithmic form	Analysis of quadratic functions with the use of the discriminant. Solving simultaneous equations Use and knowledge various geometric concepts in the context of cartesian coordinate plane Sketching more complex graphs and transformations of graphs Modelling with probability and probability calculations	Use of calculus to analyse and identify key properties of functions Intro into calculating areas underneath curves Solving inequalities and sketching areas bound by inequalities Use of trigonometric identities in algebraic proof and trigonometric graphs in solving trigonometric equations	Use of calculus to find areas under curves. Understand and use Integration as the inverse of differentiation Use of calculus in use for modelling scenarios where acceleration is not constant Use of kinematics graphs Use of the binomial distribution for calculating probabilities and use within hypothesis testing	Use of the kinematics formulae Use of Newton's three laws of motion Application of trigonometric in a variety of circumstances Conversion between degrees and radians Application and use of small angle approximation Use of e^x and $\ln x$ Use of exponentials and logarithms in	Simplification of algebraic terms Introduction of partial fractions (to be used in integration later) Use of formal proof notation and use of the different methods of proof (such as contradiction)

			Use of Sigma notation Vector proof and notation Force diagrams and equilibrium			modelling real-life situations	
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