Subject: Maths Applied Curriculum

Year 12

William Hulme's Grammar School
The best in everyone™
Part of United Learning

Overview	
	Maths A' Level (Edexcel) Designed to advance learners' skills while developing knowledge, Edexcel's qualifications help learners either progress to higher education or go directly into employment. They are grounded in the quality and traditions of the British education system made relevant for today's UK and international learner.

Autumn Term	Half Term 1	Half Term 2	Assessment
	Statistics **Introduction to Statistics** ■ Large data set link summary statistics into large data set e.g. find the mean, median and standard deviation of data from each set. **Measures of Location and Spread** ■ Measures of Central Tendency ■ Other Measures of Location ■ Measures of Spread ■ Variance and Standard Deviation ■ Coding **Representations of Data** ■ Outliers	**Representations of Data continued** ■ Boxplots ■ Cumulative Frequency ■ Histograms ■ Comparing Data **Correlation** ■ Correlation ■ Linear Regression **Probability** ■ Calculating Probabilities ■ Venn Diagrams ■ Mutually Exclusive and Independent Events ■ Tree Diagrams	Our first assessment in Applied Maths takes place at the end of HT2

Spring Term	Half Term 3	Half Term 4	Assessment
	Data Collection ■ Populations and Samples ■ Sampling ■ Non-random Sampling ■ Types of Data **Statistical Distributions** ■ Probability Distributions ■ The Binomial Distribution ■ Cumulative Probabilities	**Hypothesis Testing** ■ Hypothesis Testing ■ Finding Critical Values ■ One-tailed Tests ■ Two-tailed Tests **Mechanics** **Modelling in Mechanics** ■ Constructing a Model ■ Modelling Assumptions ■ Quantities and Units ■ Working with Vectors **Constant Acceleration** ■ Displacement-time Graphs	We do two assessments in Applied Maths. One towards the end of each half term

Summer Term	Half Term 5	Half Term 6	Assessment
	Constant Acceleration continued ■ Velocity-time Graphs ■ Constant Acceleration formulae 1 ■ Constant Acceleration formulae 2 ■ Vertical Motion Under Gravity **Forces and Motion** ■ Force Diagrams ■ Forces as Vectors ■ Forces and Acceleration ■ Motion in 2 Dimensions	**Variable Acceleration** ■ Functions of Time ■ Using Differentiation ■ Maxima and Minima Problems ■ Using Integration ■ Constant Acceleration Formulae	The main assessment in HT5 & 6 take place shortly after half term and are a full set of Summer exams.

	■ Connected Particles ■ Pulleys		

Useful Resources for Supporting Your Child at Home:	Homework:
https://integralmaths.org/ https://padlet.com/andrewharrison6/ks5-resources-uej0gwybac1nnc9f	Homework is much more extensive, and we expect students to take control of their own work and spend longer on It (a minimum of 300 mins per week). Minimum Expectations are: ■ All questions especially "P" & "E" questions from exercises in the textbooks are to be completed self-marked and corrected. ■ All MEI Section test to be completed online this is marked by the online program ■ When requested Topic Assessment tests and exam practice questions might be set by teachers. Other Topic specific questions are available in Class Material in Teams.