Applied Maths

Year 13

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.

	Half Term 1	Half Term 2	Assessment
Autumn Term	**Regression, Correlation and Hypothesis Testing** ■ Exponential models ■ Measuring correlation ■ Hypothesis testing for zero correlation **Conditional probability** ■ Set notation ■ Conditional probability ■ Conditional probabilities in Venn diagrams ■ Probability formulae ■ Tree diagrams	**The normal distribution** ■ The normal distribution ■ Finding probabilities for normal distributions ■ The inverse normal distribution function ■ The standard normal distribution ■ Finding μ and σ ■ Approximating a binomial distribution ■ Hypothesis testing with the normal distribution **Mechanics** **Moments** ■ Moments ■ Resultant moments ■ Equilibrium ■ Centres of Mass ■ Tilting	At the end of November, we have our first Mock which covers all A level content covered to date (all Statistics and Year 12 Mechanics)

	Half Term 3	Half Term 4	Assessment
Spring Term	**Forces and friction** ■ Resolving Forces ■ Inclined planes ■ Friction **Projectiles** ■ Horizontal projection ■ Horizontal and vertical components ■ Projection at any angle ■ Projectile motion function	**Applications and forces** ■ Static particles ■ Modelling with statics ■ Friction and static particles ■ Static rigid bodies ■ Dynamics and inclined planes ■ Connected particles **Further kinematics** ■ Vectors in kinematics ■ Vector methods with projectiles ■ Variable acceleration in one dimension ■ Differentiating vectors ■ Integrating vectors	After the half term break, we have our second Mock which covers all A level content covered to date

	Half Term 5	Half Term 6	Assessment
Summer Term	**Vectors Might be covered by Applied Teacher** ■ 3D coordinates ■ Vectors in 3D ■ Solving geometric problems ■ Application to mechanics		

Useful Resources for Supporting Your Child at Home:	Homework:
https://integralmaths.org/ **https://padlet.com/whgsmathsdepartment/whgs-maths-department-n1hib7q69zalxwa9**	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 tests 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.