



ASPIRE • BELIEVE • ACHIEVE



Curriculum Overview: Mathematics Year 13 A-Level course

Summer Term 1			
What are we learning?	What knowledge, understanding and skills will we gain?	What does excellence look like?	What additional resources are available?
Mechanics: Moments Forces and Friction Projectiles Applications of forces Further Kinematics	<p>Knowledge</p> <ul style="list-style-type: none"> -understand and use moments in simple static contexts. - know that a moment of a force is given by the formula force \times distance giving Nm and know what the sense of a moment is - know that $0 \leq \mu$ but that there is no theoretical upper limit for μ although for most surfaces it tends to be less than 1 and that a 'smooth' surface has a value of $\mu = 0$ <p>Understanding</p> <ul style="list-style-type: none"> - finding the position of the centre of mass of a non-uniform rod - Resolving forces in 2 dimensions - An understanding of $F \leq \mu R$ in a situation of equilibrium <p>Skills</p>	<p>Applying knowledge to exam style questions</p> <p>Ability to interpret results in the context of the given problem</p>	<p>www.mathsgenie.co.uk</p> <p>www.physicsandmathstutor.com</p> <p>www.drfrostmaths.com</p>

	<ul style="list-style-type: none">- be able to identify the forces acting on a particle and represent them in a force diagram- be able to derive and use the equation of the path- be able to find the range and maximum height of a projectile		
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