

KAA Curriculum Overview		PHYSICS		YEAR 13		EOY Exam	Sequencing and Progression	
<b>Rationale</b> Give an overview of what students are studying this year and why. Link directly to your overall curriculum intent. Ideal gases Fields Nuclear Astrophysics These topics could not have been studied earlier (apart from Ideal gases) because students did not have the required knowledge learnt in Y12.				What content and skills will be assessed in the EOY exam? Ideal gases Fields Nuclear Astrophysics Skills assessed: Knowledge recall, experimental techniques, explanation and multi-step calculations of unfamiliar scenarios  <a href="https://www.physicsandmathstutor.com/past-papers/a-level-physics/">Link to model exam papers here.</a>		How does this year build on what they've learnt last year? Students should be able to rearrange equations, manipulate numbers between decimals / percentages / standard form, draw and interpret graphs.  Students should have good understanding of AS content. This year is an extension of what they have learnt so far, apart from Particles & Quantum which are completely new topics. They should have a good understanding of basic principles in Physics and be able to confidently apply them to different scenarios.		How will it benefit them as they move forward next year?  N/A
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Sum 1	Sum 2		
<a href="#">Link to MTP Overview</a>								
<b>Topic studied &amp; Fertile Question</b>	Ideal gases & Capacitance and Gravitational fields	Astrophysics and Electric & Magnetic fields	Astrophysics and Nuclear	Revision and Nuclear	Revision	A LEVEL EXAMS		
<b>Adjustments following last assessments / evaluation.</b>								
<b>Key knowledge and skills students need to have gained by the end of the unit</b>	Ideal gases & Capacitance <ul style="list-style-type: none"> <li>- Ideal gas laws</li> <li>- Capacitors</li> <li>- Charging and discharging</li> <li>- Required practical</li> </ul> Gravitational fields <ul style="list-style-type: none"> <li>- Gravitational field strength, potential</li> <li>- Newton's law of gravitation</li> <li>- Satellite motion</li> </ul>	Astrophysics <ul style="list-style-type: none"> <li>- Telescopes</li> <li>- Classification of stars</li> </ul> Electric & Magnetic fields <ul style="list-style-type: none"> <li>- Electric field strength, potential</li> <li>- Coulomb's law</li> <li>- Magnetic fields</li> <li>- EM induction</li> <li>- AC generator</li> <li>- Transformers</li> </ul>	Astrophysics <ul style="list-style-type: none"> <li>- Cosmology</li> </ul> Nuclear <ul style="list-style-type: none"> <li>- Discovery of nucleus</li> <li>- Alpha, beta and gamma radiation</li> <li>- Uses and dangers</li> <li>- Exponential decay</li> <li>- Nuclear radius</li> <li>- Required practical</li> </ul>	Nuclear <ul style="list-style-type: none"> <li>- <math>E=mc^2</math></li> <li>- Binding energy</li> <li>- Fission &amp; fusion</li> <li>- Nuclear reactor</li> </ul>				
<b>How is understanding assessed at the end of the unit?</b>	End of topic tests AP4	End of topic tests	End of topic tests AP5	End of topic tests AP6				