

Science Department

Curriculum Overview - Year 10 - Triple Science Physics

The Big Picture:

Year 11 will study: Forces and their uses, Electromagnetic waves & their applications, Nuclear Physics and its current and potential uses, along with the pros-&-cons raging around this contentious topic. They will also study the physics of space – which applies the concepts previously learned in both circular motion and the evidence underpinning the Big Theories. There will be a focus on calculation skills development along with the development and refinement of extended writing skills.

AO1: Demonstrate knowledge and understanding of the topic.

AO2: Apply your knowledge and understanding of the topic and use your scientific ideas.

AO3: Analyse information in a scientific context and use your understanding to make predictions and evaluations.

<https://www.aqa.org.uk/subjects/science/gcse/physics-8463>

<p>Term 1: Infrared radiation (triple) (26-29) Particles at Work:</p> <ul style="list-style-type: none"> • Electric Circuits (50-63) • Electricity in the Home (64-75) <p>Green Task:</p> <ul style="list-style-type: none"> • CAP: Resistance (x2) • CAP: I-V characteristics • Extended Response Skills: <ul style="list-style-type: none"> ○ Using static electricity ○ Mains electricity & the amazing three-pin plug! <p>Assessment Objectives covered - AO1, AO2, AO3</p>	<p>Term 4: Sound Waves (182-189)</p> <ul style="list-style-type: none"> • Use of Ultrasound • Seismic Waves <p>Light (202-213) Space, including Circular Motion (232-243)</p> <p>Green Task:</p> <ul style="list-style-type: none"> • Assessment: Forces, Sound, & Light • Extended Response Skills: <ul style="list-style-type: none"> ○ Orbiting the Earth ○ Evidence for the Big Bang Theory (thinking backwards!) ○ Glasses for the third-world • March PPE (2nd of 2) <p>Assessment Objectives covered - AO1, AO2, AO3</p>
<p>Term 2: Electrical Charges & Fields (50-52) Molecules & Matter (76-91)</p> <p>Green Task:</p> <ul style="list-style-type: none"> • Assessment: Electricity • Assessment: Particle model of matter <p>Assessment Objectives covered - AO1, AO2, AO3</p>	<p>Term 5: Examination Preparation & Practice</p> <p>Assessment Objectives covered - AO1, AO2, AO3</p>
<p>Term 3: Electrical charges & fields (50-52) Nuclear Radiation in medicine, fission, fusion, & issues (102-111) Moments at work, levers & gears, moments & equilibrium (120-127)</p> <p>Green Task:</p> <p>Extended Response Skills:</p> <ul style="list-style-type: none"> • Nuclear Power • Using Radiation • Double-Decker Bus Design <p>Assessment Objectives covered - AO1, AO2, AO3</p>	