

Sixth Form Summer Work 2025



A Level Physics

We are asking all students to complete some Independent Preparatory Work over the summer, before they join Year 12 in September. You will need to bring this work to lessons as the content will be assessed through introductory assessments which will be completed within the few first weeks of the new term.

Tasks

You will have an assessment in September covering your knowledge about physics (including Maths skills)

It will be GCSE Higher level entry test.

The contents will cover ALL the topics tested for GCSE, including: Forces and Motion, Energy, Electricity, Waves, Particle model of matter, atomic structure, electromagnetism, ...

A Level Physics is a course that basically expands your knowledge on these topics, introduces some more, and develops your analytical thinking and problem-solving skills, as well as your investigative skills.

Maths skills are spread through the curriculum and, even though they are not going to be any higher level than that for your GCSE (higher), it is a good idea to revise before September. In particular, we will be working with lots of VECTORS during Y12 and Y13. Make sure you know your trigonometry!

Prepare yourself for the course content:

In order to come ready next year, we have prepared a Transition Pack.

You must do every task as your summer work, including the reading of at least one book, the Research activity (pages 6 and 7) and all the exercises included in the pack. The last activity is a self-assessment: you should time yourself while doing it. When time expires, make a note where you were if you had not finished, and then complete the rest. Time management is a skill you will need to develop for A Level Physics.

Students strongly recommended to:

Purchase your own copy of the text book. Second hand is acceptable.

OCR A Level Physics

https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/textbooks/

You can buy Year 1 and Year 2 books separately, or the "big one". Both versions include exactly the same contents.

Purchase AQA revision guide.



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Make sure you keep yourself updated with excellent physics websites such as https://www.iop.org/
For the course specifications you can visit: https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/specification-at-a-glance/
Additional websites you should explore are: https://www.youtube.com/@PhysicsOnline Great YouTube channel tailored to A Level Physics
https://phet.colorado.edu/en/simulations/filter?subjects=physics&type=html Lots of nice simulations to "play" with.
Extra reading
Take a look at book recommendations on the transition pack, pages 4 and 5
Get familiarised with the "Pocket Physics" booklet.