

Purpose of task:

We follow the new OCR Physics AS and A level specification (H156=AS, H556=A level). There is a lot to learn ready for the mock exam module in early January and this is a big step up for some students. Therefore it is important that you see what is coming up for the Autumn term before you start, and get an overview of the course ahead.

These summer tasks will help you to get ahead of the game and ensure that you start with a solid foundation in September, so enjoy and good luck!

Recommended resources:

OCR A Level Physics Online

<http://www.ocr.org.uk/qualifications/as-a-level-gce-physics-a-h156-h556-from-2015/>

A Level Physics Online

https://www.youtube.com/channel/UCZzatyx-xC-DI_VVUVHYDYw

Kahn Academy Physics

<https://www.youtube.com/channel/UC4a-Gbdw7vOaccHmFo40b9g>

Task 1:

Getting to know the specification from the exam board

Read the pages 5-7 of the new AQA Physics specification <http://www.ocr.org.uk/Images/171726-specification-accredited-a-level-gce-physics-a-h556.pdf>

Then read through the subject content part of the spec. as follows:

SECTION 3.1 Motion (pages 15-16)

SECTION 4.4 Cells (Pages 26-29)

Make a poster / mind map on A3 paper for each section to summarise key parts of the two topics and the study requirements. Add as much detail as you think is useful. You could tick those topics that you already know something about or topics that you cover during these summer tasks.

Task 2:

To get the best grades in A Level Physics you will have to get good at completing independent research and making your own notes on difficult topics. Below are links to 2 websites that cover some interesting Physics topics.

Using the Cornell notes system: <http://coe.jmu.edu/learningtoolbox/cornellnotes.html> make 1 page of notes **from each site**:

- a) <https://phet.colorado.edu/en/simulations/category/html>

PhET create online Physics simulations when you can complete some simple experiments online. Open up the resistance of a wire html5 simulation. Conduct a simple experiment and make a one page summary of the experiment and your findings.

- b) <http://www.livescience.com/46558-laws-of-motion.html>

Newton's Laws of Motion are fundamental laws for the motion of all the objects we can see around us. Use this website and the suggested further reading links on the webpage to make your own 1 page of notes on the topics.

Deadline for task:

1st week in September!