Physics
Preparing for A Level

If you are considering studying Physics next year, then these are activities that you should seriously consider completing over the next few months to prepare yourself for the very large step up to A Level from GCSE.

The activities are divided into:
Essential - suggested as good preparation for the course.
Recommended - suggested to support the essential activities for the course
Optional - suggested to support wider learning around the subject; you are expected to do this independently at A level.

A Level Specification
Read through the 'Physics' specification to gain an understanding of the expectations of the course.
Link

Digital Resources
Access the digital resources that are available for you such as Seneka, Crash Course videos on YouTube and at KhanAcademy/Physics

Essay Preparation
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 5 websites that cover some interesting Physics topics.
Find out about how to take 'Cornell Notes'

CERN - Link
CERN encompasses the Large Hadron Collider (LHC) and is the largest collaborative science experiment ever undertaken. Find out about it here and make a page of suitable notes on the accelerator.

The Solar System - Link
The solar system is massive and its scale is hard to comprehend. Have a look at this award winning website and make a page of suitable notes.

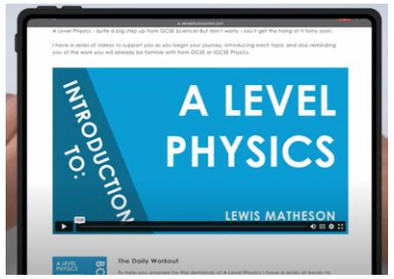
PhET – Link
PhET create online Physics simulations when you can complete some simple experiments online. Open up the resistance of a wire html5 simulation. Conduct a simple experiment and make a one page summary of the experiment and your findings.

NASA – Link
NASA's Jet Propulsion Laboratory has lots of information on Climate Change and Engineering Solutions to combat it. Have a look and make notes on an article of your choice.

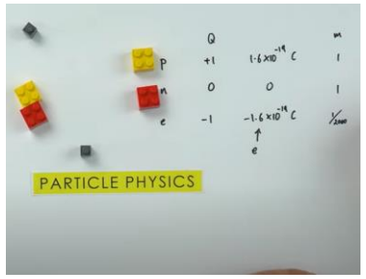
Newton's Laws of Motion – Link
Newton's Laws of Motion are fundamental laws for the motion of all the object we can see around us. Use this website and the suggested further reading links on the webpage to make your own 1 page of notes on the topics.

Recommendations to watch
Watch the following videos and make notes on the important facts covered in the content.

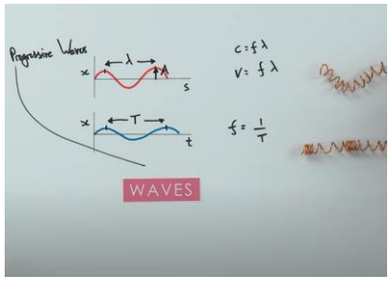
An intro to A Level Physics



Particle Physics



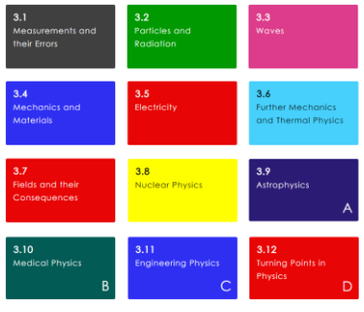
An intro to Waves



Moon 2009

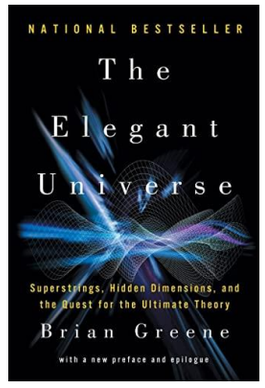
Gravity 2013

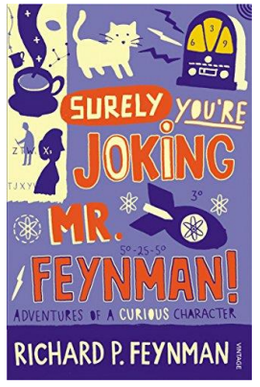
A Level Physics Online
Have a look through these short courses on the right and make sure you complete one – we recommend the electricity course.

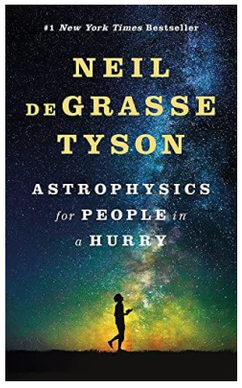


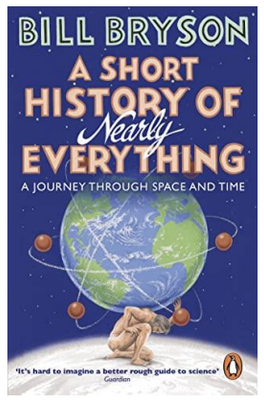
Online Reading

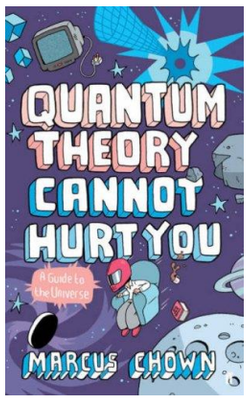
Keele University Observatory
Welcome to Keele Observatory. It was founded in 1962 to host a 31cm refractor dating back to 1874. It has since acquired a 60cm reflector for research, and undergone significant refurbishment in 2009.
Link











SHIRELAND COLLEGIATE ACADEMY
An altogether better place to learn

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