

A-level Physics

at The Blue Coat Sixth Form

Part of the Science Department



Part 2

Welcome back Physicists! I hope that you found part 1 of the bridging material accessible, and that it provided an opportunity to brush up on some of those GCSE skills that might have become a little rusty over the past couple of months.

For part 2 we are going to use an online learning platform. This is valuable for two reasons; firstly it will familiarise you with one of the platforms you will be using next year, and secondly it gives feedback which allows both you and the subject lead to see how you cope with some introductory A-level work.

A lot of people have misconceptions about online learning, thinking that they need to complete it as quickly as possible and/or only complete it once. As you are completing the assignments please take your time. Make notes as you are going through, these will be helpful when completing the assignments but also will be useful next year. File them in your notes folder if you have set one up already. If you struggle with any of the assignments, leave it for a couple of days and then go back and do it again. Your subject lead can see your first score and your best score. They will be looking for evidence of students that grasped it first time, and also for students who kept trying until they did grasp it. The most successful A-level students are those who have resilience, so keep revisiting the trickier sections until you can get 100%.

Task:

We are going to use the Seneca online learning platform, which is a free-to-use online learning resource. You can use the website on a phone, tablet or PC.



You may have used Seneca to support your learning in one or more subjects at KS4, in which case you just need to log in with your existing account and join the class using the class code.

If you have never used Seneca before you will need to create an account. To do this you just need an email address and to create a password. We do not have an overview of passwords so you will be responsible for remembering it and/or resetting it if necessary. Please give your correct first name and last name when setting up the account so we can match you to our class lists. When you have created an account you can join the class using the class code below.

Website: <https://senecalearning.com/en-GB/>

Class code: [sh50ri7dk9](#)

Once you have joined the class you will be able to start working through the course by clicking into it ("my courses").

Optional Extension

The University of Warwick Physics Faculty ran an online Journal Club during lockdown last year. It's a weekly discussion of a scientific paper, aimed at people aged 16-18 who are studying physics and want to learn more about research within physics. You can look at a scientific papers covering completely different aspects of physics and attempt to understand some of the ideas and thoughts at the forefront of scientific thinking. The research papers have been specially picked to be challenging, but accessible to students in Y11-13.

<https://warwick.ac.uk/fac/sci/physics/outreach/journalclub>

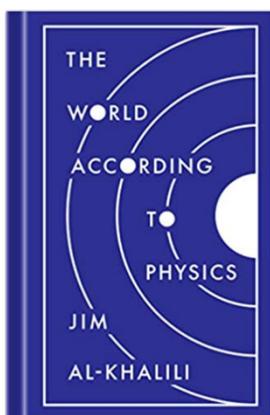
Make sure you read the instructions first as they tell you how to approach the task. Look through the archive of previous weeks and see if there is one that suits your area of interest.

Next time!

In the final part of the bridging course we will be setting some independent study that will lead up to your first assessment in September. This will be the first piece of A-level work that your new teachers will see in September, so your first opportunity to impress them!

Reading List

If these tasks have whetted your appetite, here are some recommendations for background reading which will support your A-level learning:

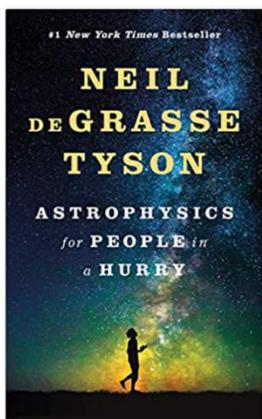


The World According to Physics

Jim Al-Khalili

Find it on Amazon here:

<https://qrgo.page.link/ZGCh7>

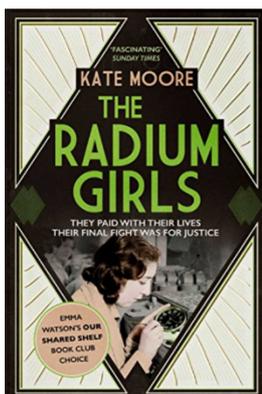


Astrophysics for People in a Hurry

Neil de Grasse Tyson

Find it on Amazon here:

<https://qrgo.page.link/kDYXe>



The Radium Girls

Kate Moore

Find it on Amazon here:

<https://qrgo.page.link/rFKHJ>

Useful information to know

Course leader: Mr P Cass, Head of Physics (PCASS@blue-coat.org)

Director of Science: Mrs C Oles (COLES@blue-coat.org)

What specification is it?

AQA A level Physics 7408

<https://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408>

You can download the specification for free. Have a look through to see what sort of topics you will be covering.

If you want to get organised you can set up your folder using the unit headings in section 3.

AQA

AS AND
A-LEVEL
PHYSICS

AS (7407)
A-level (7408)

Specifications
For teaching from September 2015 onwards
For AS exams in May/June 2016 onwards
For A-level exams in May/June 2017 onwards

Version 1.3 June 2017



What text book will I use?

You will receive textbooks from the library when you start in September. If you want to purchase a copy in advance you can find it here:

<https://qrgo.page.link/LHQHH>

You may also find it useful to purchase a revision and practice book – we recommend this one:

<https://qrgo.page.link/4H9eE>