The idea with this bridging is work is that you will begin to explore some of the topics that we will study at A Level. Each task requires you to complete some research into a key topic and then complete an associated task. You should be aiming for approx. 45mins – 1hr of research per task before completing the work set. Remember to use your research to understand any topics you are unsure of. You may find some information at GCSE level too from text books etc. Your teachers have provided some useful links to help support your research into each topic.

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| Subject Name |  | |
| Task Title | Task Description | Estimated Time |
| Basic Physics skills | In the Physics A Level Transition booklet complete the first five sections (Prefixes and units and Significant figures and Converting length, area and volume, rearranging equations and variables). Rearranging equations is a key skill that is required throughout the course in mathematical questions and identification of variables and how one variable affects another is what makes Physics different from Maths. The use of these is expected throughout the course and getting to grips with them now will give you a head start. | 2 hours |
| Constructing tables, Drawing lines of best fit, constructing graphs | In the Physics A Level Transition booklet complete sections 6, 7 and 8. In the Practical Endorsement tabulating results has to be done in a particular way to hit the standards. This section will teach you the right way of doing this. Also graph work is particularly important in many of the topics. Lines of best fit and curves are used to determine relationships and drawing them correctly particularly in Paper 3 needs to be done correctly. | 2 hours |
| Calculating gradients, areas and interpreting graphs | In the Physics A Level Transition booklet complete sections 9, 10, 11, 12 and 13. Calculating gradients of straight-line graphs is something that you should be used to however calculating gradients of curves may be a new skill. You will also need to calculate areas under graphs. The gradients and areas will tell you a lot about the link between 2 variables and interpreting graphs is a key skill for A Level Physics | 2 hours |
| Accuracy, Precision and errors | In the Physics A Level Transition booklet complete sections 14 and 15.  In the practical endorsement and in experimental questions in exams you will need to be able to comment on limitations in accuracy and precision and calculate errors. This section will show you how to do this. | 2 hours |
| Improving experiments and describing experiments | In the Physics A Level Transition booklet complete sections 16 and 17.  In the practical endorsement you will be assessed on making improvements to experiments or asked in exams how to improve precision and accuracy. You will also have to use all of your experiment skills and knowledge about variables to write experimental methods. | 2 hours |
| Useful resources | Seneca Learning: <https://app.senecalearning.com/courses?Price=Free>  Kerboodle: You should be able to find the online textbook if you click on the OCR A level Physics Course on your current kerboodle log in.  Gorrila Physics <https://www.youtube.com/channel/UCDWYbhR94ZYFUXd4NJvAHYQ>  Practical Physics: <https://spark.iop.org/practical-physics#gref> | |
| How to submit | Please email your work to: [lee.knowles@verulam.herts.sch.uk](mailto:lee.knowles@verulam.herts.sch.uk)  Or  Upload to the Google Drive which can be found here | |