



Physics

Key skills developed in this work:

- Essential maths skills involving use of standard form, prefixes and rearranging equations. Also, practical skills for record data including tables and graphs.
- Understanding of foundation concepts for the course including atomic structure, electrical circuits and wave structure.

Research work:

- Using the Cornell style of notation to research quarks, material structures, and background radiation/cosmic noise. (These can be found in the PiXL Club resource.)

Website links:

The PiXL Club -

<https://www.pixl.org.uk/>

Isaac Physics -

<https://isaacphysics.org/>

Institute of Physics -

<http://www.iop.org/education/student/index.html>

Educating Physics -

<https://educatingphysics.com/bridging-the-gap/>

Appropriate additional reading:

CGP [Head Start to A-Level Physics](#) – Currently FREE on kindle through Amazon.co.uk

CGP [Essential Maths Skills for A-Level Physics](#) - £6.56 on kindle through Amazon.co.uk

Tasks to complete:

Access the PiXL Club PDF and try out the research tasks. You can also try the bridging-the-gap tasks and quiz.

<https://drive.google.com/file/d/1MjhEFDrfqZxSCQALKUMStEPOCSIn9Xn/view>

Join Seneca class and work through course content as a preview (School: Unknown)

<https://app.senecalearning.com/dashboard/join-class/OrOylg5ehr>

Work through the activities to build up essential maths skills:

<https://www.ccwhitby.org/assets/Uploads/A-Level-Physics-Introduction-Task.pdf>

Other:

For additional reading to pique interest, we suggest:

- Why Does $E=MC^2$ – Brian Cox and Jeff Forshaw
- A Short History of Nearly Everything – Bill Bryson
- Storm in a Teacup: The Physics of Everyday Life – Helen Czerski
- How to Teach Quantum Physics to your Dog – Chad Orzel