

# 5 hours in... Physics

Research shows that the most successful students (i.e. those that make the most progress and get the highest grades) are doing between 20 and 25 hours of independent study per week by the end of Year 13. That may seem a lot, but it's something that you would build up to over the course of your A-Levels. In Year 12, we're talking something more like 15 hours per week. This equates to roughly 5 hours of independent study per A-Level per subject.

Remember that your independent study is divided into three types – **Consolidation, Reactive and Proactive.** How this is divided may vary from week to week or between subjects but one approach could be:

## **Consolidation - 45mins**

Straight after a physics lesson, or that evening / the following day you should reread your notes, talk a topic through with somebody, write summaries, mindmaps, flashcards e.g. for equations, definitions, facts you need to recall etc.

### **Reactive – 3hrs**

This is your 'homework'. Each of your teachers should give you at least 1 hours' worth of homework each week. This could be linked to upcoming exams, preparation work for required practical's, exam questions, knowledge organiser work, Cognito, revision or "flip" homework to get prepared for next lesson.

If you find this takes more than 1 hour, that's fine, you can take this from the proactive phase (not from the consolidation phase though). Equally, if you find you finish your reactive work quickly, spend more time on your proactive work.

### Proactive – 1hr 15mins

This is the section that will broaden and deepen your overall understanding of the subject you are studying. It will not necessarily involve work that has been set by your teacher, but instead it is about you doing the extra practice questions, reading articles, watching videos, TED talks etc. In physics, this might contain some of the following:

- Complete a set of practice past paper questions available from the exam board website (1 hour)
- Use Seneca Learning to complete and add to class notes (30 minutes)
- Use the specification checklist or assignment brief to evaluate your understanding (10 mins)
- Answer questions from your revision guide (30 mins)
- Completion of knowledge organisers (1 hour)
- "Read, Cover, Write and Check" sections of Knowledge organisers (30 mins)
- Watch a TED talk on a relevant topic (20 mins)

#### **Useful links**

- AQA Past papers <a href="https://www.aqa.org.uk/find-past-papers-and-mark-schemes">https://www.aqa.org.uk/find-past-papers-and-mark-schemes</a>
- AQA specification <a href="https://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408">https://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408</a>
- Physics and maths tutor <u>https://www.physicsandmathstutor.com/</u>
- Physics Review <u>https://tinyurl.com/beckfoot-alevel-magazines</u>
- Isaac Physics <u>https://isaacphysics.org/login</u>
- TED Talks <u>https://www.ted.com/topics/physics</u>
- Cognito Login | Cognito (cognitoedu.org)
- Focuselearning Focus eLearning by Focus Educational Software Itd.
- Kerboodle <u>Kerboodle Sign In</u>