

# St Mary Redcliffe and Temple 6<sup>th</sup> Form



## Year 11 into 12 transition task

Subject: Physics

**Are you planning on studying Physics at A Level? If you are, here's some activities you can do so that you hit the ground running!**

### **Tasks:**

1. Create an account on the Isaac Physics website. This can be done [here](#)
2. Complete the assigned activities to practice:
  - Using and Rearranging Equations.
  - Using Standard Form and Prefixes.
  - Converting Units
  - Finding Gradients and Intercepts of Graphs
  - Calculating areas under Line Graphs

**These tasks should be completed for the start of the year in September.**

**Extension:** If you finish the above task and would like to further hone your problem-solving skills by revising the GCSE content, more assignments will be added over time. Make sure you are regularly checking the assignments tab for new work.

### **Sick of Netflix?**

Check out this [link](#) where you can find interesting physics books and documentaries that are worth reading/watching.

## **Important information regarding the entry requirements for A level Physics**

The entry requirement to study A Level Physics are:

- 65 in Combined Science **and** a 6 in Maths
- Or
- A 6 in Separate Physics **and** a 6 in Maths

### **What if I fall just short of this requirement?**

In the unfortunate scenario that your grade awards are just short of these entry requirements (e.g. you are awarded a 55 in Combined Science or a 5 in Separate Physics/Maths) then you will be required to pass a 1-hour entrance test in order to gain acceptance onto the course.

The questions in the test will be common GCSE exam style questions and will require you to complete tasks such as using formula to calculate quantities, defining quantities and writing explanations.

Should you need to do this test it is important that you prepare thoroughly and it is suggested that you treat it like a normal GCSE assessment (don't forget to practice those past paper questions). The material chosen for the test will be common to all exam boards so you can use your revision resources from the last two years.

**Below is a list of the topics that you would need to revise in order to be fully prepared for the test:**

**1) Forces and Motion**

- i) Resultant forces.
- ii) Newton's Laws (all three).
- iii) Conservation of momentum.
- iv) Kinetic and gravitational potential energy.

**2) Electrical Circuits**

- i) Current.
- ii) Potential Difference (often referred to as voltage).
- iii) Resistance.
- iv) Series and parallel circuits (involving calculations of the current, potential difference and resistance).

**3) Maths Skills**

- i) Rearranging equations (sometimes referred to as changing the subject of an equation).
- ii) Calculating the gradient of graphs.