



### Summer Preparation Work

Physics will see you studying the smallest subatomic particles to the largest galaxies. You will strengthen your quantitative reasoning and problem-solving skills whilst also deepening your ability to apply mathematical principles to real world problems. It is integral that you complete this prep work so that you hit the ground running and make the most of this opportunity to skill build and prepare yourself for higher level education and the scientific workplace.

**Please be aware that prep work** is an important aspect of your induction onto all courses at Wilberforce Sixth Form College. Please have this ready to hand in during enrolment or to your course teacher in the first week of lessons.

Kind regards

Ashley Howe  
**Faculty Head for STEM**

#### Task 1 - Research

There are many topics in A-level Physics which relate to how objects move. This branch of the subject is called mechanics. All of the topics come together in many different real world applications. One of these is the aerofoil.

Research how a plane can fly. See the Physics – Part 2 worksheet or you can use other information that you can find.

#### Task 2 - Create

Produce a report aimed at AS level physics students. This should explain at their level how an aeroplane's wing works, (an aerofoil). Make sure that you describe how all the forces are produced and what effect the addition of all these has on the motion and position of the plane.

You can produce it as a report, poster leaflet or presentation – the choice is yours.

#### Task 3 - Question

Click on the link below to access a quiz. If it does not work or you have a paper copy google search quizizz, click on 'enter code', and enter the code number: 363492

<https://quizizz.com/join/game/U2FsdGVkX19ego%252BJu9CCoyxB%252Ff0wQq8Codo94cZnmYMQCRFxbOBTr%252FwX9QkUc%252BbwkZSnv8qhNwWrFWZC%252FajJEA%253D%253D?gameType=async>