



WESTONBIRT
— SCHOOL —

PHYSICS A-LEVEL

Exam Board - EDEXCEL

What can I expect from this subject?

Physics has no limits – physics seeks to explain everything in your life, from quarks to quasars; on this planet, other planets, to the far reaches of the universe and beyond. You will already be familiar with many of the topics that you will study, including forces, waves, radioactivity, electricity and magnetism. At A-Level, you'll look at these areas in more detail and find out how they are interconnected. You will also learn how to apply Maths to real-world problems and explore new areas such as Particle Physics, and Cosmology. Perhaps more importantly, you will develop skills that can be transferred to just about any other area of work, from setting up a business to saving the planet. Learning to think like a physicist will help you get to the root of any problem and draw connections that aren't obvious to others. Physics won't give you all the answers, but it will teach you how to ask the right questions.

What can I do to prepare for this course?

You will need to have good prior knowledge of maths and physics; this will usually mean you have excellent grades in GCSE Physics or Combined Science, and in GCSE Mathematics as well. Prior to Year 12 we will send you a Headstart Guide to Physics and you will be expected to have a good understanding of the content in this book. Watching YouTube videos on physics, for example on the channel 'minutephysics', will help you build your general physics knowledge. To be successful at A-Level Physics you will have to be organised, proactive, resilient and willing to ask questions.

What will my next steps be?

If you study physics you can go on to follow a wide variety of careers and Higher Education courses, including: medicine, astrophysics, law, media and TV, renewable energy, mechanical engineer, architecture, accountant, particle physicist, publishing, environment and climate scientist, computer games development, sound engineering, music producing, satellite engineer, and a wide variety of other areas and roles. In recent years students at Westonbirt who have studied A-Level Physics have gone on to read medicine, biological engineering, architecture, actuarial studies, pharmacy, veterinary science, maths and physics, geography and electrical engineering.