

# Have you ever wondered .....

- How chemistry and biology overlap? Chemical structures and reactions are very important in biological systems, including the synthesis of DNA and proteins
- How the physical properties of materials are important when designing a new product
- Why Health and safety at work is vital in ensuring the safety of employees in the workplace

## Study CTEC Applied Science to find out..

## Why should I choose CTEC Applied Science?

Applied Science in the sixth form is both exciting and challenging. Invaluable skills such as research and evaluation, practical work, communication of ideas and self-study are all developed due to the variety of activities and teaching methods used. The course we do is OCR Cambridge Technicals Applied Science.

#### In the first year you will be learning some of the following:

- Cell structure and function including the involvement of biological molecules and chemical reactions
- The chemistry of carbon and its importance in the world around us
- The properties of materials
- The safety implications of working in a laboratory dealing with pathogens and hazardous chemicals including the health and safety legislation that must be followed

### In the second year, you will be learning about:

- Laboratory techniques including separation techniques, microscopy, testing for ions including flame tests, cloning and aseptic techniques
- Investigating microorganisms and their uses
- Product testing including titration and chromatography techniques

#### How will I be assessed?

- 2 exams, one in June of year 12 and one in January of year 13, with the opportunity to resit one or both in June of year 13
- 3 coursework units which are internally assessed and moderated

### Am I suitable for the course?

The  $6^{th}$  Form team is committed to helping all students reach their full potential. As with all qualifications, considerable commitment is required and expected from you in order to progress from GCSE to CTEC which is equivalent to an A Level qualification. You will need an interest in science and how it is used in the workplace

If you are interested in studying Applied Science in the sixth form and would like more information, please contact Mrs Kemp or Mrs Black. [You can also email Mrs Kemp at <a href="mailto:skemp@brookeweston.org">skemp@brookeweston.org</a> or Mrs Black at <a href="mailto:eblack@brookeweston.org">eblack@brookeweston.org</a>]

#### What are the benefits?

- There are many industries where science and laboratory work is vital including product and drug development.
- There are also many opportunities in research in Universities as well as in NHS Pathology laboratories
- Health and Safety procedures are a requirement in any workplace