

# Biology

Can we find ways to feed the world's growing population? Can we protect ourselves from viruses such as Ebola? Is it possible to clone a human being? Is there anything we can do about global warming? Why are bacteria becoming resistant to antibiotics? If you are interested in questions like these, then Biology is the subject for you. It will provide opportunities for those wanting to pursue careers in and Medicine, Dentistry, Pharmacology, Physiotherapy, Nursing, Biochemistry, Ecology, Marine Biology, Genetics, Microbiology, Food Science and general laboratory work



## **Case Study: Rachel Ayre**

My name is Rachael Ayre and I came to St Roberts from Biddick Academy. I chose to study biology as one of my AS levels, and then continued this on to A2, because I am applying to study medicine at university and felt the course was a sensible choice to attain this. However, I had other reasons influencing my decisions such as having enjoyed biology at GCSE. I chose St Roberts itself as my next step because the school has a good reputation and when I visited all those in the department were encouraging and motivated me to achieve a good grade. Coming to St Roberts was the best decision for me and it's much easier than you would expect to settle in and meet new people. Everyone is really friendly and approachable.

**Entry requirements:** Triple science; grades B or above Or two B grades in Dual Award Science.

## **What will you be learning?**

**AQA AS and A2 Biology (7401 and 7402).** Topics include; Biological molecules; Cells; Organisms exchange substances with their environment; Genetic information, variation and relationships between organisms: Energy transfers in and between organisms ; How organisms respond to changes in their internal and external environments, Genetics, populations, evolution and ecosystems and control of gene expression.

## **How will I be taught?**

The Biology course will involve regular laboratory work to develop your practical skills and an understanding of how scientific investigations are planned and carried out (this understanding will be assessed in the examinations). At the start of the course, you will be set short, frequent homework tasks, similar to the kind of assignments you were set at GCSE.) There will be regular end of topic tests to assess your progress. As time goes on, we expect you to take more responsibility for your own learning, and cope with less frequent, longer pieces of work. We will expect you to answer past examination questions; make structured notes on specific topics; research an area for yourself; produce leaflets or posters about a particular issue; or work through self-study material. We also expect you to review your work at regular intervals.

**What skills will I develop?** Laboratory techniques, analysis and interpretation of data, evaluation and communication; mathematical, technical and observational skills. Problem solving through use of data , theories and models. Making reasoned judgements and drawing appropriate evidence-based conclusions.

## **How will you be assessed?**

*Within school by end of topic tests, lab reports, homework tasks. Externally, all assessment of the new Biology A levels will be by terminal examinations (no coursework)*

**Biology complements most other A- Level subjects.**