**Science Department Information**

# Science Teaching and our Curriculum

The Science Department is a collaborative, supportive and successful department with good results at KS3, KS4 and KS5. Science is a large faculty with a very low staff turnover, partly due to the number of opportunities for career progression across the wider school, but also as we support each other in the department like a family. The department is very well resourced and currently consists of 18 teaching staff and 3 technicians teaching in 12 laboratories, and a focus on practical work ensures pupils in all key stages are enthusiastic about Science.

Students follow a carefully considered and developed in-house scheme of work through KS3 which builds a good foundation of knowledge, the grammar of Science, and focuses on the three big scientific ideas of cells, particles and energy, before we increase the complexity of understanding and introduce a fourth big idea, ecosystems.

Our recently designed KS3 course has been seen as an opportunity to teach creatively, and develop a breadth of knowledge built on the big ideas that underpin the majority of understanding across the 3 main disciplines of Science. We aim to encourage inquisitive minds, and do not have a planned sequence of lessons, so much as a planned sequence of questions.

KS3 is often instrumental in determining post 16 choices, especially for high attaining students with aspirations to work in STEM subjects. This is where we get them interested, and we hope to deliver a course that stimulates interest in the wonder of Science but continues to develop the mastery of key skills needed to be a success at GCSE and beyond.

Our curriculum is at the heart of what we do each day, a well thought out journey taking our students from year 7 through to year 13.

At KS4, most students follow the AQA Trilogy (double award) Science scheme with around 25% completing a third Science GCSE as part of the AQA Separate Sciences scheme, and the students following the Separate Science route in particular achieve excellent results.

A-level Sciences are also popular with a significant number of students choosing to do Biology, Chemistry and Physics A-levels each year. In addition, we offer Level 3 BTEC Applied Science Diploma in Years 12 and 13. Students are dedicated and enthusiastic with a large number gaining high grades and going on to study at prestigious universities.

All teachers at Turton are part of a Triad group for professional development, taking on aspects of the Walkthrus programme to develop their own teaching each year. This is a collaborative and coaching focussed approach with an emphasis on sharing ideas and developing good practice.

There are also opportunities for professional development throughout the year, with external providers coming in to deliver Physics CPD, and other informal cognate sessions offered within the department on a voluntary basis depending on personal needs.