



## WALTHAMSTOW SCHOOL FOR GIRLS

### Science Faculty Information



The Science Faculty at Walthamstow is a warm and supportive team, made up of eleven very committed and enthusiastic teachers with a board range of experience they each bring to the faculty. Teamwork is central to the success of the Science faculty and members will always share resources and activities to support one another in the delivery of lessons. We are constantly striving to raise standards in science and capture our student's imagination, so they become the Scientists of the future helping to solve world problems.

Classes are currently taught in mixed ability groups in year 7 and 8, and ability grouping in year's 9 to 11. There are Higher and Foundation groups at KS4. Effective classroom support is provided by members of the Learning Support department which, together with high expectations, allows pupils of all abilities to make good or better progress.

A team of two technicians provide the practical support for teaching in the department. The department is very well resourced, and our technicians provide equipment for all areas of the Science curriculum whilst also being actively involved in researching and creating new resources to further improve the learning and teaching as well as support in the updating of schemes of learning. They are an integral part of the science team and work closely with all teachers to provide an efficient delivery of equipment to lessons in order to enhance learning.

The Science curriculum places great emphasis on developing skills and confidence within the subject. As teachers of Science, we aim to capture the girls' imagination, whilst also aiming to engage their scientific curiosity. Our approach of providing maximum practical work to support knowledge, builds the students' skills as they move through the school. We also aim to integrate both skills with the curriculum so students can grasp the scientific approach and link this to content. We hope to encourage them to go on to further education in science or to consider careers in related fields.

The Faculty has extensive collaboratively-produced schemes of learning in place for both Key Stages, which cover the requirements of the National Curriculum. These consist of carefully devised sequences which respect students' diversity, stimulate their interests and introduce them to fresh challenges.

We have been developing our curriculum recently to include a more spiraled approach and altered the order of content delivery in order that students continue to touch on and build key concepts through KS3 and KS4 as opposed to seeing them independently. We have also developed formative assessments that are to be used by all teachers to improve consistency in the delivery of units so that all students ultimately receive the same “diet” in terms of the Science they are being taught from all teachers and what they are being assessed on.

At KS4, all students follow the AQA Trilogy suite where all material is assessed at the end of year 11. Students have 9 lessons of Science per fortnight in year 10 and 11. Here we follow the AQA Combined Trilogy course as well as Separate Science where students can gain a GCSE in Biology, Chemistry and Physics. Students are also chosen to study Separate Science in KS4 where they are taught Biology, Chemistry and Physics separately by subject specialists.

At the beginning of January 2010 following a Building Schools for the Future initiative the Science Faculty moved into a brand-new building. The Science Faculty had a major input into the design of the new facilities with an emphasis on obtaining the highest quality learning environment possible. We now have a suite of eight well equipped laboratories, all with interactive whiteboards and broad band internet access. This is supported from four preparatory rooms and, in addition the science department has its own faculty base room. There are excellent grounds, enhanced by the rebuild, including a purpose designed school pond and sympathetic planting, which provides an excellent resource for ecology and related studies, as well as providing a pleasant environment to enhance the girls' learning.

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