SCIENCE DEPARTMENT

**The Staff**

The Science Department is a team of thirteen teachers who are Science specialists with Key Stage 3, 4 and 5 Managers who also have oversight of Physics, Chemistry, Biology and Psychology. There is a core of experienced teachers and a variety of ages. The department is recognised by the Senior Leadership Team as being a model for cooperative teamwork. All colleagues teach across the age and ability range. The department has consistently produced excellent examination results at all levels. One member of the department is participating in the Herts Cam Teacher Leadership Programme which leads to the Certificate of Professional Studies.

**Accommodation**

The department has nine laboratories all with interactive whiteboards. Eight have relatively recently been completely refurbished and remodelled. The department has access to ICT through a class set of IPads and regular class visits to one of seven ICT rooms. Years 7 and 8 have Chrome books and next year this will be extended to Years 9 and 10. Four technicians provide support.

**Curriculum**

The school operates a fifty period, two-week timetable with each period being one hour long.

**Key Stage 3**

Years 7, 8 and 9 have six periods of science per fortnight and one teachers teach each group. Years 7 and 8 are taught in mixed ability teaching groups. Year 9 are banded according to ability. Year 9 groups start GCSE Sciences early. Each student from Years 7, 8 and 9 has their own online textbook.

The department follows a KS3 science course based on the updated Exploring Science course which has been modified to maximise development of literacy and numeracy skills. This includes new multimedia resources and exciting activities for the pupils. We base our curriculum on the big ideas of science and sequence our curriculum using Best Evidence Science Teaching.

The department runs a very successful science club for all pupils and the pupils have taken part in CREST, Salters Festival for Chemistry, Astronomy Centre and CREST “Express Yourself” day. We also run an annual science week which is very popular with students and a year 7 trip to the Big Bang Science fair.

**Key Stage 4**

Pupils in Science at Broxbourne study a range of courses to meet their individual needs. In Years 9, 10 and 11, we offer AQA Separate Sciences and Combined Science (Trilogy). We use a range of textbooks to support the courses and all pupils are issued with a GCSE textbook and revision guide.

Years 10 and 11 are taught in ability bands. Students are allocated groups at the beginning of Year 10 on the basis of their KS3 test results and their performance throughout Years 7-9. Their progress is monitored and reviewed on a regular basis. Each GCSE Combined Science group has nine periods in a fortnight whilst our separate science groups have 12 lessons per fortnight (4 per subject) and are taught by three specialist teachers.

**Key Stage 5**

We offer OCR Specification A Sciences to A-level. Both Years 12 and 13 have nine timetabled periods per fortnight. Two specialist teachers teach each group. The uptake of A-level Sciences is high as follows: 76 Biology; 68 Chemistry; 25 Physics; 26 Psychology

**ICT**

ICT activities are written into all schemes of work. The department makes extensive use of multimedia resources. We have a large range of equipment based on Data Harvest data loggers with many sensors available to use as class practicals. Chromebooks have recently been introduced to students as a learning tool and teachers are undergoing training in this area.

**Letter of Application**

In the letter of application, which should not exceed two sides of A4, candidates should, amongst other points, describe their approach to the teaching of Science.