

**SCIENCE DEPARTMENT**

**Department overview**

The Science team at Northwood school is vibrant and energetic. It is a leading department within the school where students consistently perform well in comparison to national results. There is a friendly and supportive working atmosphere where both beginning and experienced teachers are encouraged to develop and excel.

Student learning and engagement in science are the key priorities for the department. Students’ attitude to learning in lessons is excellent across all year groups. Our ethos is such that we aim to provide the environment and support needed to ensure that all students progress and this has been reflected in our consistently good results.

Students are encouraged to explore Science outside of lessons through educational visits throughout the school year and through practical sessions and talks delivered by external scientists from industry and academia. We also work collaboratively with the STEM subjects to engage and promote the subjects by running an extra-curricular science club, to accelerate the development of thinking skills in Science.

**Staffing and resources**

Currently the department consists of ten teachers and two technicians and will continue to expand as the school’s 6th form intake continues to grow. All members of the department are all highly committed to the achievement of students through teaching and learning. Teachers are keen to trial new initiatives and evaluate practice in order to continually improve. The quality of teaching is exceptional in the department. There is a range of experience within the team and clear expectation that everyone shares approaches for good practice and collaborates to develop and review SOWs and other resources. We offer committed, passionate and enthusiastic teachers an ideal opportunity to develop their career in a school with a caring atmosphere.

**Curriculum overview**

The science department offers a comprehensive and strong academic pathway across KS3, KS4 and KS5.

Students in Years 7 and 8 follow the new KS3 National Curriculum using a two-year scheme called ‘Activate.’ This course provides a strong foundation of knowledge and practical skills, across all three sciences, that allows students to progress on to the new GCSE curriculum in Year 9. This course is supported with an online learning package for both teachers and students called ‘Kerboodle’ which provides interactive activities, online homework and assessment tasks that can be assigned to students. In Years 7 and 8, students are currently taught in mixed ability form groups.

At Key Stage 4 (Years 9 -11), all students follow the new AQA exam board GCSE course. Students follow the Combined Science Trilogy course and many of our highest achieving students opt to follow the Separate Science pathways. Throughout the course they are taught all three sciences on a rotation basis with a particular focus on developing practical skills to meet the requirements of the new curriculum. This course is also supported by the online learning platform ‘Kerboodle’ where students have access to revision materials and digital textbooks. Teachers are also supported with a range of assessment and differentiated resources that can be used. Class sizes at KS4 vary depending on the size of the year group, however class sizes rarely exceed 25 students.

At Key Stage 5, we currently offer AS level and A Level Biology, Chemistry and Physics and aim for our KS5 provision to expand and grow. All science courses follow the AQA exam board and are also supported by the online learning platform Kerboodle.