SCIENCE AT WADDESDON

The Science team currently comprises twelve members of teaching staff, all of whom are subject specialists, ably supported by three highly-skilled science technicians. Together, the teaching staff hold an impressive range of experience and expertise. Science is taught in eight laboratories, and there is an excellent preparation room.

We encourage a range of teaching styles in the department and are supportive in the sharing of resources and creative approaches. We believe that excellent Science teaching captures student imagination and deepens knowledge. To aid teacher preparation, a variety of software packages are regularly used across each key stage.

Extra-curricular clubs and opportunities include a Key Stage 3 Science Club and running the CREST Award with Key Stage 3. The department is very active, running educational visits to the zoo, the Royal Observatory, the Science Museum and GCSE and A Level 'Science Live' conferences. In January 2020, the A Level physicists visited CERN in Switzerland.

The laboratories are in very good condition, five having been refurbished recently to a very high specification. The eighth lab was added to the department suite due to the popularity of the sciences.

We use Activate, schemes of work and resources at Key Stage 3 which fully embrace the school's mastery curriculum. Assessment and testing for tracking pupil progress in Key Stage 3 makes use of a combination of tests and prescribed investigations. At Key Stage 4 most students take Combined GCSE Science. However this year thirty students opted to sit Biology, Chemistry and Physics as separate GCSEs, following the AQA GCSE specifications. Curriculum time in science is good, and allows us to run a three-year Key Stage 4, with Year 9 as a skills and foundation year. In this year we develop students' understanding of energy pathways, and of equations and calculations such as magnification, giving them a solid foundation from which to build. A Levels are offered in Physics, Chemistry, Biology and in Level 3 Extended Certificate of Applied Science. They are popular subjects in

the school, all following the AQA syllabi.

Results at GCSE have been strong over the past three years, with subject progress and attainment being significantly higher than the national average for the past two years. In 2019 the Progress 8 Score for Science was 1.0. The table below outlines the attainment and achievement of GCSE students in 2019 which is representative of grade distribution during normal times.

| W | Qualification Name | 7-9% | 5-9% | 4-9% | Student Count |
|---|-----------------------|------|------|------|------------------|
| | Biology GCSE | 71 | 100 | 100 | 28 |
| | Chemistry GCSE | 68 | 100 | 100 | 28 |
| | Physics GCSE | 82 | 100 | 100 | 28 |
| | Combined Science | 24 | 73 | 90 | 111 |

A Level results vary from year to year, and there is high demand for all three science subjects. Students achieve across the grade range and mostly achieve an ALPS grading of 'Good'. Many students intend to study science-based courses at University.

The department has been very active in training, mentoring and developing NQTs, GTPs, SCITT and PGCE students. We are committed to staff development and our department is one in which colleagues can thrive and develop professionally as part of a happy and hard-working team of highly-skilled subject specialists.

The school is looking to appoint an enthusiastic and knowledgeable Teacher of Science who is looking for a position in a vibrant and supportive science department. The ideal candidate will be a strong advocate for the sciences as well as fostering a deeply held belief that teachers make a difference to young people through their positive relationships June 2022



and excellent teaching.

Finally, the successful candidate will have a clear view of the joy and excitement engendered by good Science teachers and the desire to work at a school which prizes student development and the promotion of positive values at the heart of its day-to-day practice.

Matthew Abbott, Headteacher