

THE SCIENCE DEPARTMENT

The Science department at Valentines plays a key role in raising attainment and improving the life chances of the students. Attainment is significantly above the national average. Attitudes towards Science lessons are very positive. Behaviour in the school is noted as exemplary, with parents and students having an appreciation of a good Science education.

Science is delivered at Key Stage 3, 4 and 5. In Key Stage 5, Science is offered as an A Level in Biology, Chemistry and Physics. GCSE is taught using the AQA specifications. For A level, the department runs the AQA A Level Chemistry and Biology as a two-year course. This also applies to the OCR A Level Physics course.

The Science department at VHS firmly believes that learning Science at GCSE is fundamental in strengthening a person's emotional and physical wellbeing into adulthood. Not only this, we know that GCSE science is needed, more now than ever, in order to educate our next generation in a step towards addressing the many problems that we face as a global society.

To put it simply, someone who leaves school with a good understanding of science will be able to look after themselves, their families and the planet.

With topics ranging from personal health and hygiene through to climate change, food security and gene technology, GCSE Science is about more than the qualification. It is about developing young citizens, preparing them for their future as an active, useful member of society.

Our curriculum intent is as follows:

- Students will build, remember and connect a rich body of scientific knowledge and ideas
- Students will be able to explain the material world through developing key knowledge and skills in Biology, Chemistry and Physics
- Students will be able to work scientifically, problem solve and think logically. Practical's will be used to focus students on the content we want them to learn and remember

The Science department consists of a Head of Department, a Head of Chemistry, a Head of Biology, Head of Physics, a Head of KS4 & Head of KS3. There are eleven Science teachers.

The department enjoys excellent facilities, with 13 laboratories and a new Science demonstration classroom. There is a generous allowance of prep rooms and laboratory support.

All laboratories enjoy excellent ICT facilities with interactive whiteboards. Lessons are planned/stored using a VLE. Classes are set from year 9-11. All students take at least Combined Science GCSE, with top sets taking separate Sciences.

Science GCSE 2023 results were outstanding with 30% of students achieving a grade 9-7 in Combined Science, well above the national average. On average, students achieve almost a grade higher than what they are expected to achieve.

In Separate Sciences Biology and Chemistry, over 80% of students achieve a grade 9-7, with students achieving a grade higher than what they are expected to achieve.

The sixth form is very large for a 6 FE school, (370 students). Sciences are the most popular subjects post 16. This is a truly exceptional opportunity in an outstanding school.