



The Science Faculty

General

The Science Faculty is made up of 11 specialist teachers and two technicians. In addition to the Head of Faculty, there is a Second in Science, a Key Stage 3 coordinator and an Interventions Coordinator. There are 10 fully equipped science laboratories, and an ICT suite within the Faculty. In addition we have a class set of tablet computers with full internet access for student use.

The Science Faculty is situated within a purpose built "state of the art" school. Although no longer brand new, the school building, fixtures and fittings have been maintained to a high standard. Resources in Science facilitate many learning and teaching opportunities including the use of data projectors with wireless internet access in every room. Every classroom is also equipped with an interactive whiteboard. Every teacher has a laptop for planning, preparing and delivering high quality lessons. The wireless network enables us to have excellent communication and curriculum collaboration. These resources help us deliver outstanding lessons to our students every day.

The Faculty has a centrally located and well-equipped Science preparation room staffed by three technicians. In addition to the main staffroom the Science Faculty has its own PPA (Planning, Preparation and Assessment) room, which provides a quality environment for Science staff to collaborate, with access to the latest digital resources. It is fully utilised during non-contact time and allows us to support each other in our own development and learning. Our teamwork and collaborative working practices are one of the real strengths of the faculty. Everyone receives all the support they need to be the best they possibly can. The facilities for staff and students in science and throughout the school are simply outstanding. All Science classrooms are fully equipped laboratory with integral gas and electrical points. Each classroom has an interactive whiteboard and fume cupboard. The design of the labs is extremely flexible, which allows you to customise the layout to suit your own preferences or for individual activities. We also have wide access to whole school facilities- so you will see groups of students pretending to be solid, liquid and gas particles in the central atrium!

Every member of staff is expected to make a valuable contribution to the effective running of the Faculty through extracurricular and enrichment activities. Our students are experiencing an ever increasing range of activities designed to inspire them to achieve in science. Prior to Covid restrictions, they were visited by an ex student who had just qualified as a doctor. She was able to describe the experiences she has had and raise our current student's aspirations. We have STEM projects, run trips to see RSC demonstrations and visit universities.

We have strong links with our local feeder primary schools where Science is taught by members of our staff. Successful Science Weeks are held during which students experience a range of exciting activities including practical work and visits.

It is the goal of the Radclyffe School to become the best school in the country. It is the goal of the science faculty to become the best faculty within the Radclyffe School!



2019 GCSE Results

Subject	4-9	7-9
Combined Science	55%	8%
Biology	97%	78%
Chemistry	97%	63%
Physics	97%	72%

We are confident that we will continue to show improvement year on year at GCSE level, both at the standard 4+ measure and with the number of students achieving grades 7+. Current data suggests we will achieve above the national average of these grades this year, as we have done in recent years. Science results were highlighted as a strength of the school in our "outstanding" OFSTED report.

Curriculum

Key Stage 3

Students in Year 7,8 and 9 have three 60-minute lessons per week. The students are grouped according to ability and detailed schemes of work have been developed, reviewed and revised to meet their needs. Achievement at Key Stage 3 has improved considerably in recent years, and all our data and targets suggest that this trend will continue to rise.

Key Stage 4

Students in Years 10 and 11 have up to 9 60-minute lessons per fortnight for combined science. The students are grouped according to the options choices they have taken. All students follow Combined Science, except for our most able students who selected Triple Science as an option. This ensures all students are selected for the most appropriate course and stretched to their full potential. The Combined and Triple routes currently use the AQA exam board, and we expect this to continue. Key Stage 4 is showing a continually improving pattern. Students are increasingly accessing science outside the classroom, with a wide range of activities available to them, including clubs, trips and visits.

Assessment

Key Stage 2 tests, teacher assessments and NFER data are used to group students on entry to Year 7. Throughout each Key Stage there is a rigorous assessment framework in order to monitor the progress and performance of the students. This data is actively used to ensure students are aware of, and meeting their targets. Early intervention is a key strategy of the Faculty, and our comprehensive data management systems allow us to confidently assess how every student from year 7-11 is progressing. As a Faculty we expect staff to be confident in the use of data, as we are constantly using it to challenge our students and our own achievements.