



Science Learning Area

LEARNING AREA

The Science Learning Area is comprised of nine specialist laboratories and two study rooms. These facilities are shared with Health and Social Care which also falls under the governance of Science. There are two well provisioned preparation rooms which service the Science Learning Area.

The Science laboratories are laid out in pod format which allows collaborative learning to take place between students. In addition most of the laboratories have concertina doors between one laboratory and another which can create the opportunity for dynamic and creative teaching and learning styles. Seven of the laboratories contain four networked computers each and every laboratory has an interactive smart board connected to an outstanding networked system.

Full, high speed Wi-Fi coverage allows suites of laptops to be used anywhere in the Academy.

STAFFING

Currently there are thirteen full time members of the team and it has a healthy blend of subject specialisms to provide the best opportunities for the students. The team contains one Deputy Head who has wider school responsibilities, Head of Department, Subject Heads and Key Stage Co-ordinators. The department is supported by two full time technicians.

EXAMINATION RESULTS

Of the outgoing Year 11 students from 2019, 59% gained two good GCSEs at Grade 4 or above. 42% of those students doing triple award sciences gained A*/A grades. The students at A level also enjoyed success with 100% of the students entered for A level Biology, Chemistry and Physics passing the courses.



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TEACHING AND LEARNING

The Learning Area groups students predominantly according to their attainment and ability, but also takes into consideration other academic factors and their social interaction with peers and staff. Class sizes are typically just 26 students offering an outstanding teacher/pupil ratio. Students are provided with four and a half hours of Science each week. Where possible subject specialists are used to provide pupils with the best opportunities for progression.

Key Stage 3

Students are taught in full mixed ability groups through their first year. Students are provided with four and a half hours of Science each week. This is fantastic for a practical subject such as Science and allows for some deep learning to take place. At the start of Year 8, students are placed in sets allowing us to accelerate their progress. The Key Stage 3 scheme of work has been written in-house and follows the National Curriculum for Science and is supported by a range of different differentiated resources.

Key Stage 4

At Key Stage 4 there are a range of learning pathways tailored to student's ability and learning styles. Top set of students follow the separate Sciences route. Whilst further sets follow Combined Science Trilogy. All GCSE courses currently follow the AQA specification.

Key Stage 5

In the Sixth Form we offer OCR A level Biology, Chemistry and Physics as well as BTEC Applied Science course. All are well subscribed with the majority of our own Key Stage 4 cohort wishing to stay on at the Academy and wanting to continue to work with a fantastically dedicated and supportive team of staff.

ENRICHMENT

The Science Department provides a wide range of opportunities for 'Learning Outside the Classroom.' To this end we have run a Biology Field trip to Cannock Chase every year for Year 13 students. We take Sixth Form Physics students to visit CERN in Switzerland every two years. Lower school have previously visited Leicester Space Centre and have been to the Big Bang Science Fair. Year 10 students have taken part in a Biological Science workshop at Aston University. Forensic Science Club, STEM Club and Medical Society are run during Session 3. Many of our Sixth Form students are STEM ambassadors and we host an annual STEM competition in June each year. Medical society students have regular guest speakers from different specialisms within the medical profession and have attended Medlink conference.