

Mossbourne Community Academy

Science Learning Area: Departmental Overview

Welcome statement:

The Science Learning Area is comprised of: biology, chemistry, physics, vocational science and middle Science. At MCA we deliver outstanding lessons that develop creative, critical and pragmatic scientists driven by curiosity and inspired to find out the answers to questions posed by the world around us. We are a dynamic and reflective learning area, which provides opportunities for staff to develop professionally, supported by a team of science specialists.

We provide a positive, and optimistic working environment focused on ensuring that all pupils reach their full potential. By insisting on well-planned lessons, effective pupil feedback, and a rigorous assessment approach (formative and summative) the Science Learning Area provides the framework that supports the learning of all pupils within the sciences.

The Science Learning Area has 24 staff who are hard-working, passionate and reflective. Staff work collaboratively to develop high quality science education for all. Moreover, we have a rich pool of resources readily available to staff to support excellent teaching practice.

Within the learning area there are nine large, recently refurbished laboratories and an IT cluster in addition to two staff workrooms. There are two prep rooms and four technicians who support with all practical elements within the subject, using the equipment to meet the practical requirements of the new curriculum

Key Achievements

Science is hugely popular within the academy, boasting a large intake in years 12 and 13. A bespoke Medics Programme runs at the academy, supporting the progression to STEM related courses at Russell Group Universities. This has resulted in a large number of students being offered places to study Medicine, Dentistry, Veterinary Science and Engineering at university, including at Oxbridge and MIT.

Students enjoy numerous activities in addition to their lessons ranging from STEM Club to building robots. Not only does this provide the opportunity for students to develop further their scientific skills but also their enthusiasm and passion for the sciences. Students who participate in extracurricular activities within science, have become great ambassadors for Science.

Outcomes for students in years 11 and 13 are higher than national average. At A-level in 2017 100% of students achieved A* - D for Biology, Chemistry and Physics. Physics A-level students achieved an ALPS of 2; over 80% of students achieved A* - C in both Biology and Physics and over 95% of students achieved A* - C in Chemistry. At GCSE over 35% of the cohort achieved a grade of 7+ in Biology, Chemistry and Physics, with over 100 students studying triple science.

Departmental Structure:

HOLA – Head of Learning Area

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Head of Biology

Head of Chemistry

Head of Physics

Head of Vocational Science

Lead teacher of Science

8 Biology Specialists

5 Chemistry Specialists

6 Physics specialists

4 Technicians