**The Science Department**

The Science Department is one of the ‘powerhouses’ of The Morley Academy. The department fosters a climate of excellence that is embraced by staff and students. Over a number of years results have been outstanding in measures of attainment and progress for all groups of learners. In 2016 over 80% of our GCSE cohort achieved a C grade or higher with 82% of students making 3 or more Levels of Progress and over 40% securing 4 or more Levels of Progress.

As a department we hold dear the sentiment that all learners, regardless of background or prior academic attainment, deserve an outstanding science provision. The Morley Academy’s Science Department recognises that Key Stage 3 is critical in equipping students with the skills and knowledge that are required to thrive in a linear examination landscape.

There will be a new Director of Science starting in September and he will be supported by a Deputy Director and two Assistant Leaders of Science and there are fifteen science teachers who teach across all disciplines and Key Stages. The department has three full time technicians who support teachers with requisitions and practical components of lessons. We recognise the impact that each member of our team has on students regardless of their role or experience.

**Curriculum**

The Morley Academy’s Science Department has strived to remain at the vanguard of curriculum reform, collaborating with colleagues from both within The GORSE Academies Trust and beyond, to ensure that students thrive within the new examination framework.

**Key Stage Three**

All classes are taught in sets, across a band system. Students complete the skills and content of the Key Stage 3 curriculum over 2 years. We are passionate in our belief that Key Stage 3 should act as a gateway between Key Stage 2 and 4 and beyond; as such we have established excellent schemes of work which we plan collaboratively as a department and wider Trust. We aim to make meaningful cross curricular links, in which skills and learning experiences are reinforced. In addition, this year sees a whole academy and trust focus on the development of students’ understanding towards the Social, Moral, Spiritual and Cultural aspects of their learning. In Years 7 and 8 students have three hours a week of formal Science lessons.

**Key Stage Four**

Previously at GCSE the majority of students completed AQA Core and AQA Additional Science. With new specification changes students will complete either the Trilogy or Separate Sciences provided by AQA.

Having reviewed our provision for Separate Sciences we made the decision to structure Year 9 and 10 in a way that all students can follow the Trilogy Science course. This decision creates the opportunity for students to transition smoothly onto the Separate Science programme in Year 11 should this be deemed appropriate. Previously students had to make a decision in Year 8 as to whether they would like to study separate sciences as an option. By strategically delaying this selection we are able to foster and nurture our higher ability students to maximise their attainment on this course by focusing on the additional components in Year 11. This flexibility will be key in ensuring accurate examination entries within the reformed GCSE suite.

Trilogy Science is taught in cycles developed by Directors of Science from across The GORSE Academies Trust. The required practical elements are fully integrated into schemes of work with more emphasis placed on the investigatory skills in both Key Stages. Iterative testing is commonplace and parity across departments throughout the trust ensures rigorous and robust assessments processes are in place.

**Accommodation and Resources**

Science is currently taught in nine laboratories, all of which have whiteboard projectors; two laboratories are brand new and one has recently been refurbished. As part of an ongoing refurbishment of the premises a further three laboratories will be built over the next two years. As well as a wealth of subject specific resources the department also benefits from academy facilities. The Flexible Learning Centre is located on site and offers a fantastic space where students can become immersed in a variety of different learning environments. The auditorium style seating has allowed for University style lectures by guest speakers, and acts as the venue for The GORSE Academies Trust Science Journal awards evening.

**Extra-Curricular Activities**

The department is committed to ensuring that students are given a range of opportunities in order to allow them to develop their learning outside of the classroom. We have a vibrant Science Club called Xplosive aimed at, and run by, KS3 students. KS4 students are able to join Xplore which links to the science curriculum and offers participants the opportunity to gain accreditations towards the Duke of Edinburgh’s award. We also run a Science House Competition in which students plan, perform and review a practical investigation and enter a contest to win points for their house.

For parents, we run ‘Engage’, which sees parents and carers being invited to attend a series of evenings to support them in assisting and encouraging their child’s learning in Science. We also run a similar session which focuses on revision skills and this was extremely popular with students and their parents and carers this year.

**Our Ethos**

All members of our department are extremely dedicated and professional individuals who are committed to raising standards through high quality learning and teaching. Our passion and enthusiasm for our subject is evident, and we have high expectations of ourselves and of our students and team work is central to everything that we do. This is, undoubtedly, an exciting phase in our development as we move back to a linear structure and explore the most effective ways of ensuring that the progress and the attainment of all our students is maximised.