**Mathematics Department**

The Morley Academy is one of the most innovative and forward thinking schools in the North of England, and the Mathematics Department is at the forefront of change and development within the academy. The GCSE results attained by the department have been consistently impressive; last year 88% of our Year 11 cohort secured a Grade 4 or above in Mathematics, placing The Morley Academy as the top performing school in Leeds for this measure. Achieving results, however, is not our only aim; the number of students choosing to study mathematics at Advanced Level over the last few years is testimony to their enjoyment of the subject and their ambitions for the future. All colleagues in the Mathematics department are expected to act as role models for our students in addition to being highly committed to inspiring our students, building their confidence and insisting upon high standards.

**Staffing**

The Director of Mathematics is supported by two Deputy Directors and an Assistant Leader; there is also one AST and one AST designate and these colleagues drive innovative teaching and learning within the academy and across The GORSE Academies Trust. We have also recently welcomed three Newly Qualified Teachers to the department, all of whom have made excellent starts and settled extremely well. The department has a fantastic reputation for both the NQT mentoring and professional development that we provide as part of The GORSE Academies Trust's SCITT programme. We are always keen to welcome other visitors; recent examples include school governors, primary colleagues and those seeking to start a career in teaching.

**Curriculum**

**Key Stage 3**

In Year 7, students are taught in two parallel bands and are set in each band according to ability. Strong relationships with our main Primary feeder schools enable us to have a smooth transition from Key Stage 2 to Key Stage 3 and a number of colleagues in the department work directly with Year 6 students. Year 8 students are set in two parallel bands where they are comfortable with Assessment for Learning and Key Processes, and they are given regular opportunities to show their skills through formal assessments and iterative testing. Year 7 and 8, have four hours of mathematics a week.

We have re-structured our Key Stage 3 mathematics curriculum to include more real-life tasks in lessons, making it more practical and exciting for our students. We are keen to develop the thinking skills of all our students and to integrate more problem solving activities into our schemes of work. Greater emphasis is now placed on supporting students to apply their mathematical knowledge to real life situations whilst at the same time we also hope to improve their problem solving, communication and team working skills. This approach will reap rewards at Key Stage 4 where we are acutely aware of the changes in the new specification and the importance of ensuring our students continue to achieve outstanding outcomes within the new framework.

**Key Stage 4**

At The Morley Academy, students commence their GCSE programmes of study in Year 9 and sit their GCSE examinations at the end of Year 11. All students have at least four hours of mathematics lessons a week. For the last five years, we have followed the Edexcel Linear course and we are pleased that students have consistently performed amongst the top performing schools nationally. As stated above, 88% of students gained a Grade 4 (standard pass) or above in mathematics in 2016-17, this exceeded the national average by 17.3%. Similarly, 65% of our students achieved a Grade 5 or better which again impressively exceeded the national pass rate by 15.3%. We also had excellent results from a small group of students that opted for Statistics, and completed the course at the end of Year 10; these students have now progressed onto studying the Level 2 Certificate in Further Mathematics.

**Resources**

The most important resource within the department is the teaching staff. They, above all else, determine the quality of mathematical education provided within the academy.

The department has recently moved into a suite of newly refurbished classrooms on the first floor of the main building. All of the classrooms are air-conditioned and they are equipped with interactive white boards; we subscribe to various software providers such as MathsBox, Mymaths, MethodMaths and Active Maths. There is also a department workroom equipped with desktop computers and a storeroom where a photocopier is situated to support the work of the department.

**Department Initiatives**

Over the last six years, the Mathematics Department has gone through a huge shift in its approach to teaching and learning. Assessment for Learning is a key part of our learning process and all lessons include a ‘Purple Zone’ where students are expected to work independently on a particularly challenging task in silence for a section of the lesson. We want the students to develop more resilience and tenacity as we believe this will empower them by equipping them with the skillset needed to effectively tackle the new mathematics GCSE style questions. We are currently trying to encourage parents to be more involved in mathematical education through the ‘Engage’ programme and we have built close links with our feeder primary schools. The academy has a rich offering of personalised Continued Professional Development and it is a supportive environment in which to work; members of staff have excellent opportunities both internally and externally to ensure that they are supported in their development. Teaching and learning is the focus of our work and we have regular opportunities to meet with colleagues both within the academy, and across The GORSE Academies Trust, to share ideas, plan collaboratively and develop resources. Regular examination marking, standardisation and moderation remain a cornerstone of how the department operates.

At Key Stage 4 the department has fully embraced the challenge of a new specification and colleagues have worked together to ensure that the students are well prepared for all upcoming examinations. This year our focus with Year 11 is to ensure, they have the skills necessary to be successful at the problem solving aspect of the GCSE papers. We have worked extensively with colleagues from across the trust to develop the new scheme of work and accompanying resources.

The Mathematics Department believes that every student deserves the chance to develop mathematical skills, discover new concepts and enjoy the subject. Colleagues enjoy supporting students outside of their timetabled lessons and regular study support sessions are offered to students at lunchtime and after school. We also look to enrich our students through trips and competitions. In recent years, we have organised trips to the University of Leeds and students have taken part in the UKMT challenges. We also have The Pentmathlon, an annual Key Stage 3 Maths house competition, which is well supported by the students.

All members of the Mathematics Department work together and are supportive and approachable. Through our strong and sustained teamwork, innovative teaching and learning strategies are constantly being developed, and we are all proud of the high standards we maintain.