

## THE MATHEMATICS CURRICULUM AREA



Formby High School's Mathematics Department aims to nurture, to the optimum level, the mathematical potential of every student and to assist in their progress towards becoming confident, autonomous young people. Teachers within the department strive to stimulate, motivate and inspire the students through engaging lessons which draw on active, participative learning. They use a range of innovative approaches to teaching and learning that capitalise on emergent learning technology. In this context, the Curriculum Area endeavours to foster a positive learning culture, which allows students' self-confidence to develop within a framework of high expectations.

As part of our Blueprint for Teaching and Learning, teachers have embraced a range of whole school pedagogical strategies to embed three core strands of vocabulary development and literacy, metacognition and retrieval practice. Regular feedback is provided through STAR marking and the use of purple pen to encourage meaningful dialogue between teachers and students.

The National Curriculum for Mathematics is taught in Years 7 and 8, using appropriate resources. In Year 7 we have recently adopted a mastery approach to deepen our students' understanding of fluency, reasoning and problem solving. In order to deliver the curriculum as effectively as possible, students are placed into ability sets at the end of the first half term in Year 7. A wide range of teaching materials are used that enable each student to make their best progress throughout Key Stage 3, and opportunities are provided for students to work on challenging Mathematics, both within school and in national competitions.

Students currently begin their GCSE course at the start of Year 9 and setting continues throughout Key Stage 4. The teaching resources used have been specifically designed to deliver the new Edexcel GCSE course which students follow throughout this key stage.

Results at GCSE are consistently very good. In 2018 89% of students attained grades 9 – 4. The priorities for future improvements are to ensure consistently excellent attainment for the able cohort and the pupil premium cohort. Many students go on to study Mathematics at A Level and Further Mathematics is a popular choice for a small number of the most able mathematicians. Results at A Level are also very good – in 2018 two thirds of students attained A\*-B grades in Mathematics and Further Mathematics. Each year, a number of students progress to study Mathematics at degree level and, in recent years, a pleasing number have gone on to study at Oxbridge or the Russell Group universities.

The excellent curriculum is complemented by a thriving and successful extra-curricular programme, providing students with the opportunity to attend Code Breaking and STEM Clubs, and our annual Pi Challenge draws in many Year 7 and 8 students. The Department also takes part in individual and team UKMT competitions and attend lectures at local universities. We also contribute to our FHSBacc programme in the Sixth Form, through the delivery of a Core Maths qualification within our enrichment offer. On top of this, we deliver a range of community outreach activities with local partner primary schools.



All seven teaching rooms have been recently refurbished and have interactive whiteboards. ICT is integral to the delivery of Mathematics; it is used regularly in class and to support students' homework routine.

The nine full-time members of the Mathematics Curriculum Area are an enthusiastic, dedicated, experienced and caring team of teachers. They are receptive to new ideas, honest in their assessment of the department's strengths and areas for improvement, and ambitious to achieve excellence. They also give up considerable free time to support students in their preparation for GCSE and A Level examinations. The leadership structure within the Curriculum Area comprises the Curriculum Leader (who oversees Key Stage 5), Key Stage 3 and Key Stage 4 Mathematics Coordinators, and a Lead Practitioner.