

## **Mathematics department in context**

### **Staffing**

There are currently 7 staff who teach Mathematics in the school, of whom all are Mathematics specialists, this includes the Head of Department and Second in Department. Three members of staff have additional responsibilities within the school, (2 Assistant Head Teachers and 1 SENDCO). All the Maths teaching staff have their own classroom, in the suite of Maths classrooms, which includes a room fitted with 30 computers.

### **Setting**

Students are setted for Maths across the whole year. In Year 7, the boys are placed in sets within the first few weeks of school, using their Key Stage 2 attainment in Maths alongside the results of a baseline assessment. Set changes take place at any time throughout the year, though are generally looked at following each tracking input, twice a year, so that students are in the most appropriate set for their ability. In Years 7 and 8, students are taught in these sets for other subjects and therefore it is important to take into account the needs of other curriculum areas, when set changes take place. In Years 9 to 11, students are taught in discrete Maths sets, making it easier for movements across sets.

### **Overview**

The department has purchased the GCSE 9-1 textbook (by Pearson) and this is supplemented using the older GCSE Collins textbooks, worksheets and activities to deliver the new curriculum. In the majority of lessons, work is differentiated and set at 3 levels (green, amber or red). Homework is set once a week for all students, using Hegartymaths as the main resource. The department is well resourced including puzzles and mysteries to consolidate learning. A range of software is used both within the classroom and as homework including Mathsbox and Hegartymaths.

### **KS4 (years 9-11)**

All students in examination stage are studying for the Edexcel GCSE Mathematics examination. Resources and activities have been created and embedded into the Scheme of Work, but this is ongoing as we continually develop more resources.

There is a significant increase in the demands of the GCSE course and the breadth of study, at both the foundation and higher tiers. Since its introduction the department has continued to monitor students' progress though modular and cumulative assessment. These have been written to mirror the expectations for the new GCSE using past papers, shadow papers, assessments and specimen papers published by Edexcel. These assessments are continually reviewed as more secure papers become available. The department has worked collaboratively with other schools in Sefton to validate our grades for these assessments and this will continue to be a focus area. The department is continually reviewing the systems in place to ensure we best support our students in preparing for this more challenging qualification. Following each tracking, the progress of the students is monitored and interventions are put in place to tackle any underperformance. Interventions also take place following each module assessment where required.

### **GCSE Statistics**

Within each year group, a cohort of students study for an additional GCSE in Statistics following the specification for the Edexcel exam board. This course is delivered during the students' normal timetabled Mathematics lessons and is currently taken at the end of Year 10. For the new GCSE specification, with the removal of the controlled assessment component, we are looking at our first cohort to sit the qualification this year.

### **Foundation Stage (Years 7-8)**

The Scheme of Work for the Foundation stage has been rewritten, alongside the Examination stage Scheme of Work, so that students are prepared for the greater challenge of the new GCSE. As in the Examination stage, resources and activities have been embedded into the Scheme of Work, and this is being continually updated and developed. At present, students are assessed through module tests. These have been based on the assessments provided by Pearson for Edexcel. The department is currently introducing more formal, cumulative assessments to raise the importance with students of the need for spiral learning and to encourage students to improve their ability to recall prior knowledge.