



## **Mathematics Department Information**

Teaching mathematics at Shuttleworth College means you will become part of a supportive department with a range of teaching experiences. With nine subject specialists, new staff will be joining a skilled department with a collaborative and developmental approach within the team.

All students follow the White Rose Maths mastery scheme of work, sitting the Edexcel GCSE in mathematics at the end of their journey. We have recently moved to the White Rose Maths scheme to align with our whole school change to mixed ability teaching through the KS3 curriculum, offering greater depth and understanding to key principles necessary to develop resilient learners. At KS4, students are taught mathematics in ability sets, with the potential to study statistics as an option at GCSE level. Formative assessment is a core principle for teaching and learning across the school to enable all students to progress, including strategies such as cold calling, mini-whiteboards and low stakes quizzes. Pupils are given regular and timely feedback, with in-class opportunities to respond.

Students are encouraged to participate in extra mathematical events, mainly the UK Mathematics Trust (UKMT) Challenge at KS3 and a robotics club. We enter the annual EEP Robotics Competition, a national robotics challenge designed for KS3 students to develop their programming, design and teamwork skills. In the 3 years we have entered the North West division of the competition we have received a trophy on two occasions; "Robot Design and Programming Knowledge" and "Programming Challenge". The latter involved a 5 minute obstacle course where the robot is required to complete various tasks and challenges independently after the students have programmed the robot correctly to perform them.

The department is well resourced with interactive boards in most maths classrooms, as well as a plethora of manipulatives and additional resources available for all staff to access. We believe that students come to structured maths lessons, filled with teacher led examples, guided and independent practice, and opportunities to develop their problem solving skills.