



Departmental Overview – Mathematics

The department has a suited area based in the Overpool building, predominately on the F and H Corridors. This area consists of 11 classrooms and a computer suite.

Staffing:

The Mathematics department consists of a team of highly skilled Maths specialists each of whom take responsibility for some element of the day to day running of the department.

- Mrs A Anthony Senior Curriculum Leader/Associate member of SLT
- Mr A Stanworth Assistant Curriculum Leader responsible for department teaching and learning, moderation and digital platforms
- Miss G Watson Assistant Curriculum Leader responsible for department teaching and learning, assessment and intervention.
- Miss R Hughes House Progress Manager for Tudor House
- > 7 x Mathematics Teaching Staff
- 1 x Learning Support link

How the department works:

In years 7 - 11 the Mathematics department prepares students for examinations in the new Edexcel 9-1 GCSE Mathematics specification and Edexcel GCSE Statistics. In each year the students experience:

- Learning Journeys (Years 7-10)
- Individualised probing questions
- Focussed intervention weeks with re-tests
- Problem solving questions
- Regular review and testing of basic arithmetic skills

At Key Stage 5 Year 13 students are studying for the Legacy GCE A Level qualification in Mathematics which includes modules in Statistics and Mechanics, whereas the Year 12 students are preparing for the new Edexcel GCE A Level qualification in Mathematics.

Teaching Expectations:

The majority of students within Years 7 – 9 are taught in mixed attainment groups. Within each year group each band also has either one or two high ability groups made up of identified HAPP or HAP students and a nurture group for students with very specific pastoral or learning support needs. Stretch and Challenge has been at the forefront of our planning and development of mixed attainment teaching methods and resources this year. The development of the learning journeys has enabled us to help teachers plan and deliver differentiated lessons and resources to ensure the highest levels of challenge.

They also encourage the students to track their own progress and aim high to achieve as much as possible within all lessons. All schemes of work include:

- 2-3 week expectation of content in the form of the Learning Journeys
- ➤ 2-3 weekly assessments and DIRT tasks, based on the Learning Journeys that build to a termly assessment.
- > Homework schedules
- Fortnightly arithmetic tests for all year groups
- ➤ A full schedule of intervention and skills development weeks

Year 10 and 11 groups are not part of the mixed attainment method. They are all set by tier of entry. Time within years 10 and 11 is also spent preparing the students for their GCSE in Statistics.

Intervention and support:

The Mathematics department has high expectations for all learners within all year groups. Many support systems are in place to ensure all learners have opportunity to achieve and progress. These include:

- Targeted support for selected year 7 and 8 students by learning support link
- Good Neighbour rota to support pupils removed from lessons
- PLC's issued to all Year 7-10 students in the form of Learning Journeys
- Focussed individualised intervention weeks for all pupils after every summative assessment
- Weekly 'Period 7' intervention for Year 11 students across the whole department
- Year 11 lunchtime drop in Method Maths sessions daily in H1a
- PiXL Maths App inter group competitions
- ➤ Full timetable of intervention and revision sessions for targeted Year 11 and Year 13 students working with AA/ST/GWA/WL and SHR
- Two targeted Maths Forms 3 mornings a week
- Walking Talking Mock Exams
- ➤ Half Term holiday exam support sessions
- Pre exam breakfast revision sessions
- PLC's issued to all Year 11 students based on GCSE tier of entry
- ➤ Targeted individualised intervention questions uploaded onto PiXL Maths APP based on performance in Dec and March Mock Exams
- Additional weekly data analysis sessions for Year 12 students to help them access the new Large Data Set.

Assessment:

In the Mathematics department assessment and tracking is at the forefront of all planning. We continually use robust assessment procedures to ensure that all students understand where their strengths and weaknesses lie and what they need to do to improve. Assessment in Maths includes:

- ➤ 2-3 weekly assessments based on the Learning Journeys that feed into regular homework DIRT tasks which contain individualised probing questions.
- > Targeted marking in books of DIRT tasks for regular formative assessments.

- > Termly summative assessments using GCSE 9-1 style questions
- Question by question analysis grids to help both staff and students track their GCSE 9-1 skills
- Doddle Skills tracking
- > PiXL Maths App and Method Maths records to monitor Year 11 engagement with key revision

Development Priorities:

The department operates a robust self-review system which is in line with whole school policy. Work scrutiny, learning walks, pupil voice and assessment moderation takes place every half term to ensure consistency and accuracy within the department. For 2017-2018 our priorities are:

- > P8 progress to be greater than 0.0
- Continue to improve A Level Maths results within the new A Level Maths curriculum
- ➤ Improve the level of challenge across all of KS3
- > Improve the quality of assessment, marking and intervention
- Introduce a more consistent approach to teaching methods, assessment and homework