

Curriculum Statement – Maths

Intent

- In Year 7 and 8 students follow a programme of mastery with the aim of building on skills from key stage 2 and to ensure depth of understanding of key mathematical concepts, e.g. multiplying by 10 is not “add a zero”
- In Year 7 and 8 all students will follow the same curriculum model to ensure equality of provision
- 100% of students study GCSE mathematics
- In Years 9, 10 and 11 students will follow either a Foundation or Higher tier model appropriate to their abilities.
- A level mathematics is available to students who have achieved at least a grade 7 at GCSE.
- AS level Further mathematics over two years is offered as an enrichment opportunity.
- The highest ability students in Years 10 and 11 will also study for the Level 2 certificate in Further Maths to provide greater elements of stretch and challenge and also to prepare for A level.
- To develop student confidence and an expectation of mathematical achievement.
- To develop an understanding of “why” not just rules and methodology.

Implementation

- Setting in Years 9-11 enables students to make the maximum progress. Class setting is reviewed after every assessment to ensure all students are in the most appropriate class to maximise their learning and progress.
- 100% of students are entered for the GCSE exam at the end of Year 11. For those who have studied Further Maths a decision is made about exam entry, in consultation with students and parents, during the spring term. Most students in 11AA (currently 30/33) take the exam but some may opt to focus on working to improve their GCSE Mathematics attainment.
- A calendar of work with a detailed scheme of learning is followed by all teachers. The calendar of work is reviewed prior to each new academic year to improve/refine as appropriate.
- There are extensive resources available to staff with guidance within the scheme of learning.
- All students in key stage 4 have a workbook at home for homework and all students have access to online resources (MathsWatch, My Maths)
- Key stage 5 students also have access to “Integral Resources” online and their own text book to study from.
- Up to date textbooks for all years except 8 are available. Year 8 books are on order and awaiting publication.
- Assessment is rigorous and in key stages 4 and 5 consists of GCSE/GCE questions. Full past papers are completed as mocks from the end of Year 10. Assessment always includes current topics and also questions on previous topics to ensure a spiral learning approach. All assessments are teacher marked, graded and individual follow-up work set.
- Homework is set weekly and assessed fortnightly for key stages 3 and 4 in line with school policies. For key stage 5 students are set 3 hours of assessed work and 3 hours of independent work per week.
- Past papers are used extensively in Year 11.
- Data is analysed after each assessment to track the progress of all learner demographics.
- A room is teacher-staffed every lunchtime to offer help and support to all students from all year groups. Additionally interventions at lunchtime and after school for Year 11, 12 and 13 are extensive. There is an hour per week timetabled intervention for Years 12/13 for both compulsory and drop in attendance by students.
- Revision work is provided to all students and set as homework prior to assessments.
- Staff share resources and ideas continually and there is a willingness to trial new ideas and approaches (eg mastery and variation)
- Extra-curricular activities – EES, Year 6 induction, Year 8 Science and Maths day, UKMT maths challenges (junior, intermediate, senior and team challenge and individual follow up rounds), year 8 Maths and Science day, key stage 5 taster lessons.
- Pupil premium students are provided with additional resources including online software and equipment.
- Students below 100 on entry from KS2 have access to online software and small group additional support.

Impact

- Students across all demographics consistently achieve excellent results in external exams. Results can be more variable with assessments but this is followed up with monitoring and intervention to address difficulties and subsequent assessments will include questions from these prior topics.
- Revision skills develop over the 5 years and the majority of students have a clear understanding of the best approaches to maths revision, particularly the need for exam questions.
- Students recognise and appreciate the rigour of the work ethic expected and student voice indicates a recognition of the thorough preparation for exams, particularly practice exam questions.
- Uptake of both A level and AS Further Maths is very good and there is a high percentage of students who opt to sit the Level 2 Certificate in Further Maths exam (91% this year)