

Faculty: Mathematics

Subject: Mathematics Key Stage 4



St John Fisher
Catholic High School

Faculty Introduction:

The KS4 curriculum has evolved as a result of recent Government initiatives to drive up standards in mathematics. The course has gone from modular to linear and a whole new suite of GCSE exams will be taught from 2015 and subsequently examined in 2017. All students will continue their mathematics education until a Grade C or better is achieved and so we cater for that eventuality by extended teaching throughout the sixth form. We provide appropriate courses to suit the needs of individual students and currently use both Edexcel and AQA boards at both Foundation and Higher tier. For the time being we also provide the Edexcel Certificate in mathematics as an additional option. The aim of this course is that students become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time.



Topics/Modules to be covered in the key stage:

Many of the topics introduced in KS3 will be further developed during KS4 and the spiral learning process continues. All students are expected to develop their mathematical fluency, ability to reason mathematically and solve problems.

Below is a summary of the core topics that will be developed:

Number	Algebra
Probability	Statistics
Ratio, proportion and rates of change	
Geometry and measures	

Assessment:

All students are regularly assessed through topic tests, homework and teacher assessments. As in KS3 all students are placed in class sets of similar ability which are regularly restructured to reflect individual progress. Formal Pre Public Exams take place during Year 11 and this is aimed at providing a “mock results day” where all students can experience the emotion of success and learn skills from external speakers. We all recognise how important this key stage is to individual students and as a result we continually collect data and monitor progress closely, this is communicated to parents through regular meetings and written reports.

Homework expectations/key deadlines:

All of our specialist teachers set high standards in everything that they do, you can expect to receive well prepared lessons which provide for a wide variety of learning requirements. In addition your books will be marked regularly which will provide you with the opportunity to develop a learning dialogue which will stretch your learning experience. We expect all students to be punctual to class, exhibit the school learning habits and always have the correct equipment available to use. Failure to meet these expectations will result in “consequences” all of which are set out in the student school diaries. We believe that independent working at home is a fundamental part of your mathematics education and homework is issued on a weekly basis for all classes.

Enrichment activities/revision sessions:

Regular enrichment activities in the form of Focus Days are provided where students get the opportunity to learn mathematics in a different way. For example during a recent Focus Day all students got the opportunity to review exam questions and develop revision presentations which were shared with all KS4 students. KS4 is a vital time for learning all subjects and mathematics is no exception. To assist students we provide after school lessons, lunch and breakfast booster clubs, we are just commencing a maths Saturday school and all students are supplied with a revision DVD and a revision workbook. Additional tuition is always available and often provided by class peers and sixth form students.

Useful websites for revision/revision guides/exam boards:

We use Edexcel maths A at both Higher and Foundation tier, Edexcel Certificate at Foundation tier and AQA linear B at Foundation level. Revision guides are provided during Year 11 in addition to a revision DVD.

<http://www.mymaths.co.uk>

<http://www.bcbitesizemaths.co.uk>

Mathswatch dvd