



MATHEMATICS KEY STAGE 5 SCHEDULE

2023-2025

COURSE

Exam Board and Specification

We follow the MEI syllabus, which is administered by the OCR examination board.

Course Title

MATHEMATICS B (MEI) H640

Assessment

3 examination papers at the end of year 13

Paper 1 : Pure Mathematics and Mechanics, 100 marks, Calculator allowed. 2 hours.

Paper 2 : Pure Mathematics and Statistics, 100 marks, Calculator allowed. 2 hours.

Paper 3 : Pure Mathematics and Comprehension, 75 marks, Calculator allowed. 2 hours.

The first two papers are split into two sections, with the first sections being comprised of questions which involve minimal reading and interpretation and the second sections involve longer questions and more problem solving.

Within the examinations there will be questions related to some pre-release material, which is a 'Large Data Set'. Students will work with this throughout the Statistics elements of the course, becoming familiar with the data and the skills that will be assessed in the examinations.

EXAMS

WHEN

PAPER 1 : PURE MATHEMATICS AND MECHANICS

JUNE 2025

PAPER 2 : PURE MATHEMATICS AND STATISTICS

JUNE 2025

PAPER 3 : PURE MATHEMATICS AND COMPREHENSION

JUNE 2025

IT SHOULD BE NOTED THAT THERE WILL BE INTERNAL TESTS AND EXAMS TO TRACK PROGRESS THROUGHOUT THE TWO YEARS.

PROJECTS/SCHEME OF WORK/TOPICS

DURING

TEACHER 1: SURDS, QUADRATIC EQUATIONS, EQUATIONS, POLYNOMIALS, GRAPHS, BINOMIAL EXPANSION, EXPONENTIALS. DATA COLLECTION, DATA PROCESSING, PRESENTATION AND INTERPRETATION, PROBABILITY, BINOMIAL DISTRIBUTION, HYPOTHESIS TESTING

YEAR 12

TEACHER 2: PROBLEM SOLVING, COORDINATE GEOMETRY, TRIGONOMETRY, VECTORS, DIFFERENTIATION, INTEGRATION, KINEMATICS, FORCES AND NEWTON'S LAWS OF MOTION, VARIABLE ACCELERATION

YEAR 12

TEACHER 1: DIFFERENTIATION, VECTORS, KINEMATICS, PROJECTILES, SEQUENCES AND SERIES, FURTHER DIFFERENTIATION, INTEGRATION, PARAMETRIC EQUATIONS, PROOF, DIFFERENTIAL EQUATIONS, FORCE AND MOTION, FRICTION, MOMENTS

YEAR 13

TEACHER 2 : FUNCTIONS, TRIGONOMETRY, TRIGONOMETRIC FUNCTIONS AND IDENTITIES, ALGEBRA, PROBABILITY, PROBABILITY DISTRIBUTIONS, HYPOTHESIS TESTING, NUMERICAL METHODS.

YEAR 13

OTHER INFORMATION

Textbooks

We use the MEI series of textbooks published by Hodder Education.

Calculators

Students will require a new calculator which have statistical tables (these will hopefully be sold by the school at a cheaper cost than the shops – we recommend the Casio FX-991ex)

Homework and Revision

Homework tasks often involve completing exercises from the above textbooks as well as completing topic review sheets written by MEI. Pupils also have access to the resources on www.mymaths.co.uk. Past papers are available to download from www.mei.org.uk.

Contacts

If you have any queries, please telephone the school or contact Mr Boxall via email using ben.boxall@tbshs.org.