Maths

Why study Maths?

Mathematics is the means of looking at the patterns that make up our world and the intricate and beautiful ways in which they are constructed and realised. Numeracy is the means of making that knowledge useful.

Mathematics contributes to the school curriculum by developing pupils' abilities to calculate; to reason logically, algebraically, and geometrically; to solve problems and to handle data. Mathematics is important for pupils in many other areas of study, particularly Science and Technology. It is also important in everyday living, in many forms of employment, and in public decision-making. As a subject in its own right, Mathematics presents frequent opportunities for creativity, and can stimulate moments of pleasure and wonder when a problem is solved for the first time, or a more elegant solution to a problem is discovered, or when hidden connections suddenly manifest.

It enables pupils to build a secure framework of mathematical reasoning, which they can use and apply with confidence. The power of mathematical reasoning lies in its use of precise and concise forms of language, symbolism and representation to reveal and explore general relationships. These mathematical forms are widely used for modelling situations; a trend accelerated by computational technologies.

KS4 – GCSE (Edexcel)

Pupils have already started their GCSE course in year 9. The Maths GCSE is divided into six main areas: Number; Algebra; Ratio, proportion and rates of change; Geometry and measures; Probability; and Statistics. Pupils are set according to their mathematical ability and this is regularly monitored through class work and half-termly assessments, and set changes are made as appropriate. Pupils are regularly set home learning tasks. The GCSE course is assessed through three 90 minute examinations, two with a calculator and one without. There is no coursework. All pupils sit their GCSE at the end of year 11. We aim to get as many of the pupils as possible to the key bench marks; grade 7 for progression to Maths at A Level and grade 5 required by many other A level courses, colleges, universities and future employers.

Future Pathways

Worthy of further study in its own right, Mathematics is also essential for careers and further study in so many other areas including: Accounting, Architecture, Computing, Engineering, Finance, Sciences and Technology.