

What are the aims of the department?

Mathematics is a universal language that enables understanding of the world. The vision of the maths department is:

- To inspire and instil a love of learning of Mathematics by sharing our own love of Mathematics and subsequently enthusing students to develop their own love of the subject and its many applications.
- To enable students to feel comfortable and not anxious when dealing with daily Mathematical situations by providing them with basic Mathematical life skills (for example checking a wage slip, reading gas and electricity meters).
- To build and deepen understanding; to identify misconceptions and build on prior knowledge.
- To promote mathematics as a language used to explain patterns and symmetries in the real world.

At Lord Lawson of Beamish Academy, we intend to provide a well-balanced curriculum that will enable all students to reach their potential, regardless of their background or ability. We are passionate about creating and delivering lessons that enable our students to make connections between mathematical concepts so that they develop fluency and reasoning, and consequently the ability to solve problems confidently.

The curriculum is a 5-year plan over KS3 and KS4 which builds on and reinforces prior knowledge from KS2. New learning is sequenced carefully to allow new skills to be developed and topics are interleaved in a way that promotes the student's ability to work fluently across different curriculum areas. Students are given sufficient time to practice and master new skills, before moving on to applications and problem solving. Retrieval of prior knowledge is built in to lessons regularly and all learning is consolidated through weekly homework.

The KS5 curriculum is a 2-year plan which reinforces and builds on KS4. The curriculum is carefully sequenced to ensure students are able to develop a thorough understanding of the topics covered. Weekly homework focuses on both retrieval of prior knowledge and consolidating current topics.

Students are assessed regularly throughout KS3, KS4 and KS5 in a variety of ways. Informal assessments are used in lessons to ensure students understand the current content. Students are assessed more formally regularly throughout the year.

What will my child study in year 7, 8 & 9?

In Key stage 3 students' study 16 units of work that assess the areas of number, ratio and proportion, algebra, geometry and measure, probability and data handling. Please click on the links below to see the topics covered for each year, and a detailed overview of the fundamental knowledge and skills your child will develop in each unit.

What will my child study in year 10 & 11?

In Key stage 4 students' study 12 units of work at foundation level, and 14 units of work at higher level that culminate in 3 exams: 2 calculator papers and 1 non-calculator paper. Please click on the links below to see the topics covered for each year, and a detailed overview of the fundamental knowledge and skills your child will develop in each unit.

What will my child study in year 12 & 13?

In Key stage 5 students can study A level Maths and A level Further Maths. Please click on the links below to see the topics covered for each year, and a detailed overview of the fundamental knowledge and skills your child will develop in each unit and the key vocabulary.