

Mathematics

Curriculum Intent

Curriculum Objectives

What does it mean to study Mathematics at Humphry Davy School?

The heart of the maths curriculum is based around deep thinking. From there we seek to provide opportunities for students to play, explore and question in maths. We seek for them to gain mathematical insight through experiments and manipulating to ultimately discover mathematical structures. We believe that wide branches of consolidation can only occur when there are solid and firm roots of understanding. We therefore expect our students to be able to describe their maths, to be able to recall and reapply their learning.

Curriculum Intent

What we want students at the end of year 8 to know

A deep understanding of Number and Algebra.

To extend and apply their understanding of Number and Algebra to Geometry, Data and beyond.

To explore and apply their knowledge, building on an ever deepening understanding of number, shape and algebra.

What we want students at the end of year 11 to know

We expect the Year 9 to have a solid grounding in number and algebra, with a particular understanding of the power of proportional thinking.

To be able to apply these skills to the contexts of Geometry and Statistics.

They should have good problem solving skills and know the importance of maths in their wider studies (and future careers).

To enjoy the struggle of thinking and know that they are able to make progress in their mathematical understanding.

We seek our year 11 to have interdependent problem solving skills with a can do attitude. We want them to break down problems, look for patterns, make links (weave their knowledge) and begin to apply critical thinking. Using these skills we expect our students to have the knowledge needed to be not only GCSE ready but also be ready for life beyond Humphry Davy.

How British Values, PSHE and Careers are promoted your subjects curriculum

- Helping students gain understanding of the history of maths and the development of mathematical knowledge we seek to show maths as a culturally rich subject. For example discussion of historical context, maths around the world and equality in maths.
- We also find a rich scope for teaching maths in the context of life skills. For example; managing a bank account, low income budgeting, social media and marketing, insurance, taxation, mortgages, loans, investments and savings.