## Head of Department: Ms N Holmes

## Head of Maths Mastery: Mr O Young

Mathematics is a subject that celebrates problem solving. The study of maths helps students to understand numbers, algebra, geometry and statistics. It also develops students' ability to think abstractly and critically, and to use these skills to see links between these four concepts and solve problems. At Phoenix, we believe in a mastery approach to mathematics, solidifying and consolidating students' understanding of essential mathematical concepts before moving onto the next topic. Students become mathematically literate, and have a deep understanding of number which they can then apply to new problems, both in their maths learning and across their other subjects.

Mathematics often has an undeservedly poor reputation, which results from poor teaching; many decide at an early age that they do not enjoy the subject or are not capable of it. We aim to combat this problem, believing that, with the right encouragement and support, and with effort, all students can both succeed at, and enjoy, maths.

## Key Stage 3

At Phoenix Academy, Key Stage 3 students follow the Mathematics Mastery programme of study. This acclaimed and rigorous approach involves studying particular topics in depth before moving on, thereby ensuring complete understanding ("mastery") of the curriculum content. Students develop a detailed and strong comprehension of many key mathematical ideas: place value, shape, algebra, and graphs. Students become confident mathematicians, and often develop a great enthusiasm and passion for the subject, enjoying the problem-solving possibilities it presents.

## Key Stage 4

We believe that a strong grasp of mathematical concepts, and the ability to transfer mathematical knowledge to other areas of one's learning and life, are invaluable and crucial parts of any student's education. As such, all students Phoenix Academy study Mathematics at GCSE level. We follow the demandingly challenging but excitingly rewarding Edexcel syllabus, which develops students' mathematical confidence and enthusiasm, and which builds a strong foundation for transition to further study in Mathematics at Sixth Form, University and beyond. Students gain the knowledge to tackle problems in areas including geometry, algebra, statistics and probability. They have the option to study at either Higher or Foundation level.