

PiOneers

The principal focus of our Pioneers course is to ensure that students become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They will be encouraged to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language. They will be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum - cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. This course assists in making their thinking clear to themselves as well as others by using discussion to probe and remedy their misconceptions. It will prepare students in Key stage 3 for GCSEs and give those already starting on the course the confidence to progress.