Mathematics

Statement of Intent

Our vision within the Maths Faculty is to deliver an ambitious yet inclusive curriculum to all pupils at Nishkam High School Birmingham. Fitting with our faith inspired and virtues led approach, we aim to impart our passion and enthusiasm for Mathematics onto our students, so they are able to appreciate the awe and wonder of Mathematics in the world around us. Our goal is to encourage students to develop virtues such as resilience and determination in their journey towards fluency and becoming successful problem solvers.

Our curriculum design allows pupils to revisit key topics often within Key Stage 3 and 4 through a spiral curriculum, this allows pupils to leave us with the strong numerical skills they will need future learning and employment. Our pedagogy is supported by a mastery approach, where we assess pupils on their understanding and forensically determine where misconceptions lie, and how to tackle them before moving forward. We strongly believe that investing in a strong mathematical foundation knowledge through fluency, means that we can build strong structures in later years and develop students reasoning skills. In line with evidence-based practices regarding cognitive load theory, we revisit topics taught in the previous half term, term and year within starters; this will allow pupils to recall information thus embedding key concepts into their long-term memory.

Our inclusive curriculum allows pupils at all levels to be stretched and challenged as well as offering support when needed. With a strong focus on quality first teaching, our team are passionate about ensuring all students can access our curriculum through excellent planning and delivery of lessons. We intend to develop this further by putting more emphasis of prior knowledge checks to ensure that pupils are confident in the skills before we introduce new concepts within the lesson.

As well as accessing the curriculum during lesson time, students use various online platforms to complete independent study, this will allow pupils to develop accountability for their own progress and independence to delve further into the curriculum. Students will also get exciting opportunities to see real life links to our curriculum through trips, visits and experiences. Within KS5, we have wider curriculum books within the library to give our students a broads view of mathematics and how this is applied in different industries and within popular culture.