Mathematics Department Curriculum Statement

Our Vision

In the Mathematics Department, we want all students to become confident, resilient and successful mathematicians. We aim to provide a high-quality and engaging maths education that helps students develop problem-solving skills, logical thinking and confidence with numbers that they can use throughout their lives.

We believe maths should be accessible to all students and that it should be relevant, interesting and challenging. Our curriculum helps students understand how maths links to the real world and prepares them for further study, employment and everyday life.

At Key Stage 3, we follow the White Rose Maths scheme of work, which allows students to build a strong understanding of key mathematical concepts through fluency, reasoning and problem solving.

We begin the Pearson Edexcel GCSE Maths course in the Spring Term of Year 9. Starting early gives students plenty of time to cover the course thoroughly, revisit topics and complete structured revision before their exams.

At Key Stage 4, students study:

- Pearson Edexcel GCSE Mathematics

Some students have the opportunity to be entered for:

- Pearson Edexcel Entry Level Mathematics
- AQA Level 2 Certificate in Further Mathematics

At Key Stage 5, students can continue their studies through Pearson Edexcel A Level Mathematics.

Teaching and Learning

Our lessons focus on helping students:

- Develop fluency in mathematical skills
- Explain and justify their thinking
- Solve problems in a range of contexts
- Apply maths to real-life situations
- Build confidence and resilience

We aim to make maths engaging and relevant by linking learning to everyday situations such as finance, science, engineering, business and technology. Students are encouraged to think independently, discuss ideas and try different methods when solving problems.

Inclusion and SEND

We are committed to ensuring that all students can succeed in mathematics, regardless of their starting point or additional needs.

Teachers use adaptive teaching strategies to support students, including:

- Scaffolded tasks and clear modelling
- Visual and concrete representations
- Careful use of mathematical vocabulary
- Targeted questioning and feedback
- Appropriate challenge and support

Students with SEND are supported through high-quality teaching, differentiated resources and close communication with the SEND department. Interventions and access arrangements are used where appropriate to help students make progress and achieve their potential.

SMSC in Mathematics

Mathematics contributes to students' Spiritual, Moral, Social and Cultural development in many ways.

Spiritual Development

Students experience curiosity, creativity and enjoyment when solving problems and exploring patterns and relationships in mathematics.

Moral Development

Students learn to think logically, justify answers and work accurately and honestly when presenting solutions and interpreting data.

Social Development

Students work collaboratively, discuss methods and learn to respect different approaches and ideas during lessons.

Cultural Development

Students learn about the contributions different cultures and civilisations have made to mathematics and how maths continues to shape the modern world.

Cultural Capital

Through mathematics, students develop knowledge and skills that help prepare them for life beyond school. The curriculum helps students:

- Understand how maths is used in everyday life
- Become financially aware and responsible
- Interpret data and information critically
- Explore future careers and opportunities
- Develop confidence in using maths in practical situations

Careers and Gatsby Benchmarks

The maths curriculum supports careers education and helps students understand the importance of mathematics in the wider world. We regularly link classroom learning to careers and real-life applications, supporting the The Gatsby Foundation Benchmarks, particularly:

- **Benchmark 4:** Linking curriculum learning to careers
- **Benchmark 5:** Encounters with employers and employees
- **Benchmark 7:** Encounters with further and higher education

Students learn about careers linked to mathematics, including engineering, finance, computing, medicine, architecture, construction, business and data analysis. They also develop transferable skills such as problem solving, communication, resilience and analytical thinking.

Financial Education

Financial education is built into the maths curriculum to help students develop important life skills. Students study topics such as:

- Percentages and interest
- Budgeting
- Tax and wages
- Loans and mortgages
- Ratio and proportion
- Financial graphs and data

These topics help students make informed financial decisions and understand the role maths plays in everyday life.

Impact

By the time students leave our department, we want them to:

- Be confident and capable mathematicians
- Apply maths successfully in real-life situations
- Think logically and solve problems independently
- Be well prepared for further study and employment
- Understand the importance and value of mathematics in the world around them

For more information about the Maths curriculum at KEVI, please contact the school office and ask to speak to the Head of Mathematics.