

The Quality of Education – Intent, Implementation, and Impact.

Maths.

Intent – what we want to achieve.

The aim of our curriculum is to inspire students to see the true beauty of Mathematics by bringing maths alive, making it interesting, developing deeper understanding and broaden their understanding of mathematical concepts for an ever more technical future. It builds upon their understanding of maths from KS2, with the curriculum split into key mathematical topics, and prepares them for Post-16 Mathematics.

To create *aspirational citizens*, our curriculum is:

- ambitious and rigorous.
- accessible for all.
- fostering reasoning and problem solving, leading to mastery and logic thinking.

To create *successful learners* our curriculum is:

- rich in knowledge and skills.
- carefully sequenced, inclusive, and an interleaving curriculum.
- resourced with high quality lesson planning and materials.
- designed to develop problem solving skills by firstly looking at fluency of skills and then introducing worded problems.

To create *leaders and communicators* our curriculum:

- promotes effective mathematical communication.
- shows students the importance of teamwork and collaboration.
- enables pupils to develop effective problem-solving skills.

Students have opportunities to:

- experience real world applications of Mathematics such as Maths and money topic which looks at interest rates of banks.
- develop their mathematical personal development through activities such as UKMT, girls in maths etc.

Students have opportunities to:

- regularly revisit and embed key concepts.
- express curiosity about Maths in the real world through classroom discussions.
- become confident problem solvers.

Students have opportunities to:

- communicate through mathematical language, notation and diagrams as they hypothesise, reason, conjecture and explain.
- recognise and value everyone's input.

Implementation – how we achieve it.

- Effective curriculum leadership which ensures quality first teaching delivered by subject specialists.
- Contextualised adaptation of a national scheme so that the curriculum sequence meets the needs of our cohort.
- Adaptive teaching and personalised intervention so all students are supported to make progress.
- Rigorous and accessible assessments to allow for next steps to be identified.
- Well planned and sequenced lessons, designed by shared planning for consistency.

Impact – how we know we have been successful.

- All students are confident learners, communicators and future citizens.
- Develop detailed knowledge and skills across the curriculum and achieve well.
- Achieve qualifications which enable them to move onto the next steps in education or employment.
- In 2023, 20.4% students achieve 7+, 54.9% of students achieve 5+ and 71.7% of students achieve 4+ in GCSE Mathematics.

SMSC Statement.

Spiritual: Mathematics in our school encourages our students to appreciate the beauty and wonder of the subject. We inspire curiosity and a sense of awe in mathematical patterns, structures and the universe. Through problem solving and critical thinking, students develop a deeper understanding of the world around them and their place within it.

Moral: Students learn the importance of honesty and integrity. They understand the precision and accuracy are crucial, fostering a sense of responsibility and ethical behaviour. Our curriculum encourages fair mindedness and the pursuit of truth, helping the students to make reasoned and principal decisions.

Social: Maths classes provide opportunities for collaborative learning where students work together to solve problems and share ideas. This fosters teamwork, communication and respect for other viewpoints. Our students learn to support each other and value the contribution of their peers building a strong sense of community.

Cultural: We highlight the contributions of diverse cultures to the field of mathematics, celebrating the global heritage of mathematical discovery. Students explore the historical and cultural context of mathematical concepts recognising the universal language of mathematics and its role in various cultures. This fosters appreciation and respect for cultural diversity and the inter-connection of our world.

Equality, Diversity and Inclusion (EDI) in the Curriculum.

At BGGS, we prioritise Equality, Diversity, and Inclusion (EDI) to enhance the student experience. Our goal is to cultivate a nurturing environment where all students can learn and thrive, free from discrimination or prejudice. We offer a comprehensive range of resources and support aimed at promoting inclusivity and fostering a sense of belonging within our school community such as using examples and problems that reflect a diverse culture. The curriculum is designed to support students from all backgrounds and to encourage them to see themselves as future mathematicians by including examples of mathematicians who reflect our student body such as Shakuntala Devi. We explore protected characteristics in several different ways – always ensuring our activities, data sets and references to inspirational mathematicians reflect not only our student cohort but the wider population.

British Values in the Curriculum.

Democracy is modelled through group work where students lead activities, through mathematical conversations, justify and argue particular positions.

Rule of Law is modelled through the discussions around real world laws such as speed limits and reviewing of government data.

Tolerance and respect are modelled through sharing and valuing opinions of others within topics and promoting good working relationships in the classroom.

Individual liberty is modelled through choice of tasks and through a study of numerical constraints on behaviour, such as speed limits on cars.

Careers in the Curriculum.

Almost all jobs and careers require you to have Maths GCSE but there are also many careers in which you would make a lot of use of Mathematics. These include business management, psychology, banking, ICT, engineering and medicine, to name just a few. Students find these out during their maths lessons through class discussions and links of maths to the wider world within questions.