Maths Policy – The Albany Academy

Engage Springboard Pathway

Origins of the Curriculum

Our Key Stage 4 Maths programme of study is rooted in the National Curriculum and reflects our commitment to delivering a high-quality, inclusive education within our Alternative Provision setting. It is designed to ensure that all students, whether attending full-time or on dual placements, have access to a broad, challenging curriculum that mirrors the standards and expectations of mainstream education. The curriculum aims to complement the learning provided by students' home schools while preparing them for successful progression into post-16 education, training, or employment. The Maths curriculum is designed to ensure that all learners develop strong mathematical fluency, enabling them to reason confidently and apply their knowledge to a broad range of practical and functional problems. While we expect most students to be working towards a GCSE-level qualification in Mathematics, as determined by their home school, our curriculum is also structured to support those preparing for Functional Skills qualifications.

Our pupils come from a variety of home schools, resulting in them being entered for examinations across a wide range of exam boards. In recognition of this diversity, we have carefully designed our curriculum with reference to the National Curriculum, rather than aligning with any single exam board. This approach allows us to deliver a broad and balanced programme that focuses on developing key knowledge and skills essential for success across all specifications. Our curriculum is intentionally structured to identify and address gaps in learning, ensuring that pupils are well-prepared and equipped with the foundational understanding needed to achieve the best possible outcomes in their GCSE examinations.

At The Albany Academy, Maths at Key Stage 4 is delivered in a way that is responsive to the individual needs of our cohort. Students attending our sites have experienced diverse and often disrupted educational journeys, both in the short and long term. As a result, a significant amount of time and effort is dedicated to identifying and addressing gaps in their knowledge, ensuring they receive the support needed to make meaningful progress. Our Alternative Provision setting allows teachers the flexibility to adapt the curriculum, guiding students through the assessment objectives in a manner that supports their personal progression. Our curriculum is designed to provide students with broad exposure to key knowledge and skills in Maths. There is deliberate emphasis on developing functional understanding, particularly in the areas of number and ratio, which together account for a large proportion of the course content. These core skills are essential for both academic success and

everyday problem-solving. The sequence of learning is carefully structured to allow sufficient time for revisiting key topics, supporting long-term retention and improving memory recall.

Lessons are structured around a concentric model, enabling students to progressively build their skills through regular revisiting and interleaving of key concepts. In line with the *DfE Research Review Series: Mathematics (2021)*, our lesson planning incorporates the following principles:

- Frequent low-stakes testing to reinforce learning and identify gaps in understanding.
- A variety of tasks that promote the rehearsal of facts, methods, and strategies, while also deepening conceptual understanding.
- Opportunities to develop reasoning and problem solving skills, encouraging students to think critically and justify their mathematical thinking.

This approach reflects the unique nature of our student cohort: learners who may join us at different points throughout the academic year and who often arrive with significant gaps in their prior mathematical knowledge.

Content and Sequencing

The curriculum is designed to cover the breadth of the rigorous GCSE Mathematics specification, while being thoughtfully adapted to accommodate the unique and often time-limited nature of placements of our pathways. As a result, certain topics, (e.g. vectors and the volume of cones and pyramids) are not explored in depth. Our lessons place a strong emphasis on fractions, decimals, percentages, and ratio, as these foundational topics are integral to many other areas of the GCSE Mathematics curriculum. Mastery of these concepts supports students in tackling a wide range of mathematical problems with confidence and accuracy. In addition to consolidating subject content from Key stage 3, the fundamental areas that are covered across our curriculum are:

- Number
- Algebra
- Ratio, proportion and rates of change
- Geometry and measures
- Probability
- Statistics

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Our Mathematics curriculum is designed around a carefully structured two-year rolling programme, intentionally repeating and revisiting core mathematical concepts, skills, and applications each year. Exposure to key concepts more than once is more a more effective way to embed secure knowledge and confidence. Repetition, practice, and overlearning are essential. By repeating the core curriculum over two years, we ensure that all students, regardless of their point of entry, have multiple opportunities to encounter, practise and consolidate the foundational skills needed for future success. This repeated exposure builds fluency, deepens understanding, and embeds content.

Learning objectives are derived from the National Curriculum and are carefully sequenced to support the progressive development of skills, while also providing regular opportunities to revisit and consolidate prior learning. This approach helps embed and secure knowledge over time. Adaptations are made where necessary to meet the individual needs of pupils, particularly those on fractional placements. Instruction is tailored through the use of scaffolding, modelling, and effective task design, drawing on principles from cognitive science (e.g., Rosenshine; Fiorella & Mayer), to ensure that all lessons are accessible, stimulating, and appropriately challenging for every learner.

For students identified as working at a Higher GCSE level, lessons are extended to deepen their understanding within core topics. These students may also access additional content beyond the main scheme of work through targeted one-to-one sessions and supplementary resources, often supported by their homeschool.

It is important to note that this policy is written to reflect the fractional curriculum offer of this pathway. Dependent on a student's prior educational experiences, refinements or adaptations may be made to the curriculum content using the programmes of study to ensure it remains appropriate and responsive to their individual needs and circumstances.

Overview of units of study: Table

	Autumn	Spring	Summer
Year 1	Number, Shape, Ration and Proportion, Algebra, Statistics	Number, Shape and Geometry, Probability, Algebra	Shape and Geometry, Algebra, Number, Statistics, Probability
Year 2	Number, Shape, Ration and Proportion, Algebra, Statistics	Number, Shape and Geometry, Probability, Algebra	Shape and Geometry, Algebra, Number, Statistics, Probability

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Assessment and Outcomes

Formative assessment is embedded throughout all aspects of Maths teaching. Teachers continuously monitor students' progress through a range of classroom activities, discussions, and observations. These ongoing assessments provide immediate feedback and inform responsive teaching. In addition, summative assessments can be implemented using bespoke tasks that are closely aligned with the term's learning objectives. These assessments not only inform future planning but also help identify areas for targeted intervention or extension. Progress is tracked systematically, and assessment data is used diagnostically to support reintegration, personalised support, and sustained progression. The intended outcomes of the curriculum extend beyond measurable numeracy gains to include enhanced confidence, creativity, cultural awareness, and self-expression. Assessment data is used both to evaluate individual student progress and to inform broader curriculum development and instructional practice.

Maths and the Wider Curriculum

Our Maths curriculum is designed not only to develop numeracy and communication skills but also to enrich pupils' understanding of the world around them, preparing them for life beyond education.

Cultural Capital

Our Mathematics curriculum is designed to build students' cultural capital by equipping them with essential life skills such as reading timetables, budgeting, understanding finance, and interpreting speed and distance. These practical applications prepare students for life beyond school and the world of work.

SMSC (Spiritual, Moral, Social, and Cultural Development)

Mathematics helps students make sense of the world by applying numeracy skills to real-life contexts. Problem-solving and teamwork are central to our approach, encouraging creative thinking, discussion, and peer support. Students gain confidence through collaboration, helping them become independent learners. We also explore global mathematical methods and historical origins, fostering cultural awareness and appreciation of mathematics as a universal language.

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British Values

The curriculum promotes tolerance and resilience through problem-solving and learning from mistakes. In statistics, students are taught to critically evaluate data and identify bias, supporting informed and ethical decision-making.

Careers

Mathematics lessons highlight pathways into STEAM careers and vocational applications. Topics are linked to real-world contexts such as IT, construction, cooking, sport, science, transport planning, and finance. Staff tailor content to align with students' individual interests and career aspirations.

Reading and Literacy

We integrate reading into mathematics lessons through practical texts like menus, timetables, recipes, and advertisements. Students are supported in understanding key vocabulary, with shared and choral reading used to reinforce comprehension. Vocabulary is explicitly taught to aid retention and understanding of command words. High standards of literacy and the use of standard English are consistently promoted.