

Maths Curriculum Overview

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Statement of Intent

Mathematics is a fundamental life skill that supports independence, decision-making, and everyday activities such as managing money, time, and recognising patterns. At Cann Bridge School, we are committed to equipping learners with severe learning difficulties (SLD) with the mathematical understanding needed to navigate the world confidently.

Our curriculum is inclusive, engaging, and carefully adapted to meet individual developmental needs, ensuring learners make progress in the key strands of Number, Measure, Geometry, and Statistics. We prioritise personalised learning pathways, functional application of maths in real-life contexts, and the development of mathematical language and reasoning.

Mathematics is embedded across the curriculum and delivered through discrete lessons, continuous provision, and cross-curricular links. Our goal is to prepare learners for adulthood by developing the skills necessary for independent living, employment, and active participation in the community.

Implementation

Mathematics at Cann Bridge School is taught through discrete lessons, continuous provision, and cross-curricular opportunities. This approach ensures learners experience maths in meaningful, functional contexts that promote understanding and engagement.

Curriculum Rolling Long Term Programme

The Rolling Long-Term Curriculum Programme provides a coherent structure for developing mathematical knowledge and skills throughout each learner's journey through the school. Teachers adapt planning and delivery to meet diverse needs, using assessment frameworks to identify starting points and inform next steps.

Learners have frequent opportunities to apply maths in practical, real-life situations—such as shopping, cooking, and travel—to deepen understanding and reinforce functional numeracy skills essential for independence and adulthood.

Early Years Foundation Stage (EYFS)

Early mathematical development begins with foundational cognitive concepts that underpin future learning. These include:

- Attention: Focusing and concentrating to recognise patterns and relationships.
- Object Permanence: Understanding that objects exist even when out of sight, supporting concepts such as conservation of quantity.
- Noticing Change and Movement: Observing changes in size, shape, quantity, and position to build early number and spatial reasoning skills.

Once these foundations are secure, learners explore early mathematical principles such as:

- Cardinality: The final number in a count represents the total.
- Stable Order: Number names follow a consistent sequence.
- One-to-One Correspondence: Each counted object has one number name.
- Abstraction: Anything can be counted.
- Order Irrelevance: Counting order does not affect the total.
- Subitising: Instantly recognising small quantities without counting.

These concepts are developed through multi-sensory, engaging activities that lay a strong foundation for future mathematical learning.

Key Stage One

Key Stage 1 consolidates early mathematical understanding and introduces more complex ideas through practical, hands-on experiences. Learners continue to develop prerequisite skills through exploration, problem-solving, and targeted activities that reinforce the five number principles and subitising.

By mastering these early concepts, learners are well-prepared for the transition to subject-specific learning in Key Stage 2, entering with confidence and a secure mathematical foundation.

Key Stage Two

Mathematics in Key Stage 2 is delivered through the informal, semi-formal, and formal pathways according to individual needs.

- Informal pathway: Focuses on developing foundational cognitive and mathematical concepts through multi-sensory, individualised activities.
- Semi-formal and formal pathways: Follow a structured four-year rolling programme aligned with the National Curriculum, covering Number, Measure, Geometry, and Statistics.

Teaching builds on earlier learning, introducing more complex ideas such as arithmetic operations, fractions, measurement, and shape. Lessons are differentiated to meet individual learning styles and needs, ensuring all pupils receive appropriate support and challenge.

Key Stage Three

At Key Stage 3, learners continue along their respective pathways with mathematics taught as a discrete subject—typically through four lessons per week.

- Informal pathway: Delivers maths through play-based and sensory-led activities tailored to individual learning styles.
- Semi-formal and formal pathways: Cover a broad range of mathematical concepts aligned with the National Curriculum through a two-year rolling programme, ensuring progression and continuity.

Streamed sessions enable all learners to access maths at an appropriate level, ensuring personalised support and progression.

Key Stages Four and Five

In Key Stages 4 and 5, the focus shifts to applying mathematical skills in functional, real-life contexts that promote independence and preparation for adulthood. Mathematics is embedded within Work-Related Learning and everyday activities such as budgeting, money management, and decision-making.

Learners with particular interest or aptitude in maths are supported through adapted teaching, specialist resources, and access to accreditation pathways such as the NOCN Maths Skills Awards. Streamed learning and continuous support ensure that all learners continue to develop mathematical understanding at an appropriate level.

White Rose Maths

Cann Bridge School follows the White Rose Maths scheme from Key Stage 1 to Key Stage 3 due to its accessibility and structure for learners with SLD.

Key features include:

- Small, Sequenced Steps: Concepts are broken down into manageable steps, supporting secure progression.
- Structured Lessons: A consistent format that builds on prior knowledge.
- Adaptability: Flexible to meet diverse learner needs.
- Precise Mathematical Vocabulary: Encourages clear communication and reasoning.

This approach ensures high-quality, inclusive teaching that supports all learners in developing essential mathematical skills and understanding.

Maths Medium-Term Planning

Mathematic Resources

Currently under review

Assessment and Accreditation

Progress in mathematics is tracked using B Squared Assessment Frameworks, providing a clear and consistent approach to monitoring and evaluating learning. This system identifies gaps in knowledge, informs planning, and supports personalised teaching.

In EYFS and Key Stage 1, maths progress is assessed using the Early Steps Assessment Framework – Mathematics. This is used as a baselining framework to identify pupils starting points in Key Stage 2 and beyond.

From Key Stage 2, for learners on the semi-formal and formal pathways, progression is guided by the *Progression Steps* (Key Stage 2 & 3) and *Step 4 Life* (*Key Stage 4 & 5*) *Assessment Frameworks*, which align with and aspire towards the National Curriculum. These frameworks build on prior learning, providing personalised support, appropriate challenge, and opportunities for academic and personal growth.

For learners on the informal pathway, assessed using the *Engagement Model*, mathematics supports and measures engagement through multi-sensory experiences. Here, activities are designed to stimulate interaction, with assessment focused on engagement rather than the acquisition of specific skills. Assessment and progress is captured using the Engagement Steps Assessment Framework.

Personalised Learning Goals – Maths

All pupils at Cann Bridge School have at least one Personalised Learning Goal (PLG) in Maths. These goals are either aligned with the pupil's EHCP Long-Term Outcomes or an additional goal is created to ensure personalised progress in Maths for every learner. Pupils work towards their individual PLGs within lessons, and evidence of progress—including observations, assessments, and examples of work—is systematically recorded on Evisense. This ensures that progress is monitored, measurable, and informs ongoing teaching and next steps.

Workbooks, Files and Evisense

Pupils in Early Years and on the Informal Pathway will have their evidence, assessment and observations recorded using Evisense. Those on the Semi-Formal and Formal Pathway will use books/files capturing work, observations and assessments, with some also being captured on Evisense.

For more information about our Assessment Processes, please see our Planning, Assessment, Marking, Reporting & Recording Policy

NOCN Maths Skills Awards

In Key Stages 4 and 5, learners on the semi-formal and formal pathways work towards NOCN Entry Level Maths Skills Awards, gaining formal recognition for their achievements and enhancing future opportunities in education, training, or employment. The NOCN Units are mapped into the Long-Term Programme. Evidence is collated in a portfolio against the unit criteria.

For more information, please see our Accreditation Policy and 14 to 19 Curriculum Policy.

Staff Training and Continued Professional Development (CPD)

Ongoing CPD ensures high-quality maths teaching and supports staff confidence and expertise. Key CPD priorities include:

• Staying informed about new pedagogical approaches and evidence-based practice.

- Developing effective strategies for scaffolding, differentiation, and the use of concrete-pictorialabstract methods.
- Aligning planning with curriculum frameworks such as White Rose Maths and B Squared.
- Supporting diverse learner needs across all pathways.
- Conducting annual audits of staff confidence and subject knowledge to inform targeted CPD.
- Holding regular moderation sessions to ensure consistent assessment and share best practice.

This structured approach to professional learning strengthens teaching quality and improves learner outcomes.

Impact

The mathematics curriculum ensures all learners—regardless of pathway or ability—develop the understanding and skills needed to use maths confidently in daily life. Through personalised and inclusive teaching, pupils make measurable progress across Number, Measure, Geometry, and Statistics.

Embedding mathematics across the wider curriculum provides frequent opportunities for functional application, promoting confidence in reasoning, problem-solving, and communication. Progress is carefully monitored through robust assessment frameworks, ensuring every learner is supported to reach their full potential.

Monitoring, Evaluation, and Review

Equal access to the maths curriculum is maintained through continuous monitoring and evaluation. The Understanding of the World Team Lead meets regularly with the curriculum team to review learner progress and ensure alignment with the school development plan.

Monitoring activities include:

- Action Plan review
- PLG progress analysis
- Learning walks and planning scrutiny
- Curriculum conversations and moderation
- B Squared and Evisense analysis
- School Improvement Partner and Education Improvement Officer visits
- Stakeholder surveys
- Staff training evaluations
- Book looks

This policy links to the following policies and procedures:

- 14-19 Curriculum Policy
- Accreditation Policy
- EYFS Curriculum Booklet
- EYFS Policy
- Pathways to Independence Policy
- Planning, Assessment, Marking, Reporting & Recording Policy
- Curriculum Long-Term Rolling Programme