

## Mathematics Curriculum: Intent, Implementation & Impact

### Intent (What we aim to achieve)

At Newbridge, our Maths curriculum is designed to **build confidence, curiosity and resilience**, especially for pupils who have experienced barriers to learning. We know that strong mathematical knowledge empowers young people in everyday life and opens opportunities for future education and employment.

Our intent is that every pupil:

- **Builds secure fluency** in number, calculation and key mathematical ideas.
- **Develops reasoning skills**—being able to explain, justify and make sense of mathematical thinking.
- **Applies maths to real situations**, solving problems that are meaningful and practical.
- Makes **strong progress from their starting points**, whether working towards Entry Level or GCSE Foundation.

Our curriculum follows a **carefully sequenced pathway from Year 7 to Year 11**, linking new knowledge to prior learning and revisiting key concepts to help pupils remember and use what they learn confidently.

### Implementation (How we teach it)

Teaching is structured around our **Maths Roadmap**, which outlines clear, small steps from **KS2 recap in Year 7** through to **GCSE Foundation outcomes in Year 11**.

- In **KS3**, pupils secure the building blocks:
  - Place value, calculations and number facts
  - Fractions, decimals and percentages
  - Sequences and algebraic expressions
  - Shape, space, measures and data handling
  - Reasoning and problem-solving using real-life maths
- In **KS4**, learning deepens and connects:
  - Algebraic manipulation, equations and graphs
  - Ratio, proportion, percentages and financial maths
  - Geometry including angles, constructions, Pythagoras and trigonometry
  - Probability and statistics
  - Preparation for the **AQA GCSE Foundation** pathway
- We use **modelling and scaffolding**:  
*I do* → *We do* → *You do*  
 to build independence gradually and support pupils' working memory.

- **Frequent retrieval practice**, low-stakes quizzes and targeted intervention sessions help pupils remember and apply what they have learned.
- Pupils who need additional support are offered:
  - **Entry Level Certificate Maths** as a stepping stone
  - 1:1 or small group intervention
  - Visual supports, manipulatives and structured routines
- Language development is prioritised. We explicitly teach:
  - Mathematical vocabulary
  - How to explain reasoning
  - How to structure answers and show working

### Impact (The difference this makes)

By the end of their time with us, pupils will:

- Be more **confident, secure and independent** mathematicians.
- Have the **foundational skills** needed for adulthood—budgeting, measuring, interpreting information and practical problem-solving.
- Be prepared for their **next stage**—whether GCSE Foundation, Entry Level qualifications, college courses, apprenticeships or employment.
- Show **improved attitudes towards learning**, including resilience, perseverance and the belief that they *can* succeed in maths.

Success is measured through:

- Regular teacher assessment and feedback
- Pupil voice and confidence tracking
- GCSE Foundation and Entry Level outcomes
- Progress over time from individual starting points

**Our ultimate goal** is that every pupil leaves Newbridge with the mathematical knowledge and confidence they need to be successful in life—both in and beyond the classroom.