

Intent, implementation and Impact Statement for Mathematics, 2024-2025

Intent

We believe that all children should enjoy, and can be successful in, mathematics. Children should not be limited by prior attainment or negative perceptions. Maths is for everyone and everyone can improve!

We seek to create a stimulating mathematical environment in school that nurtures the children as unique learners, providing them with opportunities to reflect upon life and ask questions beyond the immediate world of the visible and tangible. We aim to look beyond the material and ponder concepts such as awe, wonder, beauty and mystery, with faith and belief, that will encourage our children to become spiritual, thoughtful mathematicians in the 21st Century.

At Gayton Primary Academy, we are developing a mastery approach to the teaching and learning of mathematics. We aim to deliver an inspiring and engaging mathematics curriculum through high quality teaching which enables our pupils to develop the skills of numeracy and the ability to apply those skills in different situations across the curriculum and in daily living outside school.

We believe that children should not be afraid to make mistakes and should fully embrace the fact that mistakes are part of learning. A mastery curriculum promotes a deep, long-term, secure and adaptable understanding of the subject, so that children become fluent in calculations; possess a growing confidence to reason mathematically and hone their problem-solving skills.

At Gayton we recognise the importance of using mathematical vocabulary accurately and confidently. Maths vocabulary is modelled in lessons by both staff and children, allowing everyone to 'talk like a mathematician'. Once a child can articulate their understanding of a concept, can they truly begin to make connections within their learning. A positive growth mind-set and an excitement about the subject is crucial to developing Mathematical confidence, achievement, high attainment and success.

Teachers promote children's enjoyment of maths and provide opportunities for children to build a conceptual understanding of maths before applying their knowledge to everyday problems and challenges. We ensure that challenge is provided for all children, whatever their depth of understanding. Children are encouraged to be brave and push their boundaries, deepening their understanding further.

Implementation

At Gayton, we recognise that children need to be confident and fluent across each yearly objective.

To ensure a consistent coverage, quality of learning and approach we have a bespoke Recovery Curriculum for classes and have access to high quality resources, such as White Rose Maths Hub, Master the Curriculum, NRich, Classroom Secrets, PIXL and NCETM to support, stretch and challenge all children within the classroom. In addition, our calculation policy is used to ensure a coherent approach to teaching the four operations across our school. To further supplement our learning, children have access to various learning platforms including the PIXL Times Table app and Tackling Tables website and app.

Our curriculum encourages the concrete, pictorial, abstract approach. By using all three, the children can explore and demonstrate their mathematical learning. Together, these elements help to embed knowledge so children truly understand what they have learnt. All children, when introduced to a new concept for the first time, are encouraged to physically represent mathematical concepts.

Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

These C.P.A. methods are used:

Concrete – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.

Pictorial – children then build on this concrete approach by using these pictorial representations, which can then be used to reason and solve problems.

Abstract – with the foundations firmly laid by using the concrete and pictorial methods the children can move onto an abstract approach using numbers and key concepts with confidence.

Classes also focus on committing learning into long term memory through retrieval practice techniques such as regular quizzes and daily SODA and/or 'maths meetings'. Monitoring and assessment ensures consistency of practice and means that gaps are identified and addressed. Floorbooks and displays are used to celebrate and support learning in Mathematics. The school website and Class Dojo are used to share mathematics with the whole school community.

Impact

Summative assessment takes place at the end of each unit/term and children's progress and attainment is discussed and analysed by teachers, subject leaders and the Senior Leadership team.

- Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of their class.
- Children are encouraged to take ownership of their learning through self- and peer assessment.
- Leaders monitor the effectiveness of teaching frequently through lesson observations, book scrutiny and pupil interviews.
- The use of Class Dojo and the website gives Maths a high profile throughout the whole school community.