

## How we teach Mathematics at Burgh by Sands

## Intent

At Burgh-by-Sands School our intent for the Mathematics curriculum is to develop a deep understanding and appreciation of the subject while nurturing the skills and confidence necessary for all learners to thrive.

Our progressive mathematics curriculum is designed to ensure that all children can achieve mastery in mathematics through the following principles:

- **Develop a Conceptual Understanding**: We focus on building strong foundations in mathematical concepts through concrete, pictorial, and abstract approaches. This progression enables pupils to make connections across different areas of mathematics.
- Build Resilience and Problem-Solving Skills: We encourage a growth mindset, helping pupils to understand that mistakes are valuable learning opportunities. Through engaging problem-solving tasks, we aim for students to develop resilience and the ability to tackle challenges confidently.
- Encourage Logical Reasoning: By fostering a culture of questioning and exploration, we want pupils to communicate their mathematical thinking effectively, justify their reasoning, and challenge their own and others' ideas.
- Apply Mathematics in Real-Life Contexts: We seek to make mathematics relevant by linking learning to real-world scenarios. This helps pupils appreciate the significance of mathematics in everyday life and various future career opportunities.
- **Promote Enjoyment and Engagement**: We aim to instil a love for mathematics by providing a rich and varied curriculum which includes games, practical activities, and opportunities to explore mathematical concepts in creative ways.

## Implementation

To achieve our intent, we implement our curriculum with a consistent and coherent approach. Key aspects of our implementation include:

- **Structured Curriculum**: Our teachers follow a well-sequenced curriculum that is carefully mapped to ensure progression in skills and knowledge from EYFS to Year 6. Each unit is designed with clear learning objectives, enabling teachers to plan effectively.
- **High-Quality Teaching**: Our teachers use engaging and interactive teaching methods that promote active participation and collaboration. Lessons are planned with clear, differentiated objectives that cater for mixed-ability classes, ensuring that all pupils feel motivated and included in their learning. Our teachers utilise visual aids, manipulatives, and technology to enhance understanding.

- Mathematical Language and Reasoning: We place significant emphasis on developing mathematical vocabulary and reasoning skills. Pupils are encouraged to articulate their thought processes, share their findings, and explain their methods, which reinforces understanding and promotes higher-order thinking.
- Assessment and Feedback: Formative assessment practices are embedded within our teaching to identify students' understanding and areas for development. Feedback is timely, specific, and constructive to guide pupils towards improvement and mastery. Summative assessments inform future planning and intervention strategies.
- **Rich Learning Environment**: The mathematics learning environment is enhanced with interactive displays, resources, and engaging materials that stimulate curiosity and encourage exploration. Outdoor learning and cross-curricular links provide authentic contexts for mathematical thinking.
- Enrichment and Challenge: To further enrich the mathematics experience, we offer a variety of extracurricular activities, including maths clubs, challenges, competitions and themed days, which promote enthusiasm and engagement in mathematics beyond the classroom.

## Impact

The impact of our mathematics curriculum can be measured in several ways:

- **Pupil Progress:** Our pupils consistently make strong progress from their starting points, with the majority achieving age-related expectations or better at the end of each key stage. This is evidenced through internal assessments and national testing outcomes, which demonstrate strong performance relative to local and national averages.
- Engaged, Confident Learners: Observations and pupil feedback indicate high levels of engagement and enthusiasm during mathematics lessons. Pupils articulate their learning confidently and show a keen interest in applying mathematical concepts in various contexts.
- Inclusive Practice: All groups of pupils, including those with SEND and disadvantaged backgrounds, make significant progress in mathematics, reflecting our commitment to an inclusive education.
- Lifelong Learning: Our focus on developing a love for mathematics has instilled a sense of curiosity and a desire to continue learning beyond the classroom, preparing pupils for secondary education and beyond. Feedback shows that many pupils take the initiative in their own learning and are not afraid to ask questions or seek help.
- **Real-World Application**: Through our curriculum, pupils effectively apply mathematical concepts to real-world situations, indicating a strong understanding of the relevance of mathematics in daily life.

Through this intent, implementation, and impact framework, we aim to provide an outstanding Maths education that empowers all pupils to succeed and thrive.