

# **Maths Policy**

## Why

At Brookdale Primary School, the curriculum is designed to **include**, **inspire**, **engage** and **nurture** our children to achieve and flourish as citizens of today and the future; encouraging children of all ages to think deeply about the past, present and future of our community and the wider world.

Mathematics is a universal language that is critical to helping make sense of the World. Confidence in numeracy and other mathematical skills is a precondition of success across the national curriculum.

A quality Mathematics curriculum develops a child's ability to problem solve and work methodically to complete tasks accurately and efficiently. It provides children with a range of tools to confidently navigate the world independently, valuing resilience and perseverance.

### How

Our Maths curriculum **includes**, **inspires**, **engages** and **nurtures** our children's interest in and enjoyment of Maths through opportunities to:

- Be part of creative and engaging lessons, giving opportunities to explore mathematics following a mastery approach.
- Experience maths through concrete, pictorial and abstract representations to show how maths works and deepen understanding of mathematical concepts.
- Use high-quality resources from Maths No Problem from F2 onwards which are designed to build on prior knowledge through sequential lessons, as well as between year groups.

#### EYFS –

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS profile document. Mathematics development involves providing children with opportunities to practice and improve their skills in counting numbers, calculating simple addition and subtraction problems, and describing shapes, spaces, and measures. From F2, mathematics is taught using the Maths No Problem's scheme, journal in preparation for Year 1.

Years 1 to 6 - follow the National Curriculum for Mathematics 2014

- Following on from F2, teachers in Years 1 to 6 use the textbooks and workbooks from Maths No Problem to support their planning and delivery of teaching mathematics.
- The Maths No Problem textbooks and workbooks are arranged in chapters and, over the course of the academic year, all units of the National Curriculum 2014 are covered.
- Morning activities provide opportunities to practice calculations, times tables and revisit previous work in order to strengthen long-term memory of key mathematical knowledge. Various materials are available to resource this including, daily calculations and assertive mentoring.
- Maths is applied across the curriculum i.e. recording data in science.
- Online programs such as Times Tables Rockstar and Mathletics are used as

homework, for additional maths activities and interventions. They are used to reinforce key knowledge, practice key skills and as additional learning support following teaching from the class teacher.

- Further intervention support is provided in individual and small group work as preteach sessions using the Maths No Problem! materials.
- Each class practices Brookdale Maths Dictionary for their year group 4 times a week to improve retrieval of key knowledge.

A Typical Lesson – Maths – No Problem!

- Lessons last approximately 1 hour with each class having 5 lessons a week.
- Pupils start the lesson with an 'Explore' problem, which they discuss in partners. This
  is a problem-solving activity, which prompts discussion and reasoning. In Key Stage
  One, these problems are almost always presented with objects (concrete
  manipulatives) for children to use. Pupils should also use manipulatives in Key Stage
  Two. Teachers use careful and deliberate questions to draw out pupils' discussions,
  promoting deep thinking and reasoning.
- The class teacher then leads pupils through strategies for solving the problem, including those already discussed. At this part of the lesson, the children might need to write down their mathematical thinking and strategies in their Maths Journal.
- The class teacher then guides the class through some questions in 'Guided Practice'. Carefully designed variation in these questions builds fluency and deep understanding. Teachers should verbalise their thinking throughout this section to give a structure to mathematical thinking.
- When they are ready to apply their learning independently, the children answer questions in their own workbooks. If some children are not ready by this point, they will continue 'Guided Practice' with the teacher in a small group.
- Maths Journals can be used to record extension work in order to deepen knowledge and understanding.

## What

- Children know more and remember more as they progress through school.
- Children have built up knowledge and skills they can talk about and demonstrate.
- Children are able to talk about key vocabulary and learning from subject Knowledge Organisers
- The subject leader is able to report on maths standards across the school to the governing body making them aware of attainment and progress.
- Twice-yearly pupil progress meetings always include maths and focus on cohort, group and individual progress. Clear next steps are discussed and agreed upon during the course of the meetings.
- F2 staff make summative judgements against the Early Learning Goals at the end of the academic year in readiness for Year 1.
- Year 1 to 6 make two data entry points (Spring and Summer) into Insight. This gives an overview of Maths attainment across the school.
- Summative tests (see assessment policy) are used to help inform teacher judgements.
- In addition, Year 6 teachers will be asked for predictive SATs results in February as a way of monitoring cohorts and planning for any additional support. Year 4 teachers will be asked for predictive Times Tables Check Scores in February as a way of planning for next steps.
- In addition to data, the impact of maths is measured through learning walks which include lesson observations, book scrutinies and pupil voice.