



South Bank Primary School Curriculum Statement

Maths

2024/2025

Subject Leader: Nicola James

Intent

At South Bank Primary we aim to deliver a high-quality maths education that engages and inspires pupils to become open ended thinkers and problem solvers, who recognise the importance of maths in everyday life. We encourage children make sense of our world, tackle real life problems, communicate information and develop skills which are essential in most other areas of the curriculum and develop skills for life which enable them to achieve success in the workplace and economic well-being. We aim to spark curiosity, engage reasoning, secure knowledge and understanding and deepen learning for all.

We are embedding a mastery approach throughout school from EYFS, so that the teaching and learning is consistent and will support all pupils with their understanding and retention. Pupils will be required to explore maths in depth, using mathematical vocabulary to reason and explain their workings. We will encourage resilience and acceptance that struggle is often a necessary step in learning.

We intend for all pupils to solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing complexity, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

We intend for all pupils to reason mathematically by following a line of enquiry, recognising relationships and generalisations, and developing an argument, justification or proof using mathematical language. The expectation for children to explain in full sentences using the correct mathematical terminology is key.

We intend to create a vocabulary rich environment, where talk for maths is a key learning tool for all pupils. Pre-teaching key vocabulary is a driver for pupil understanding and develops the confidence of pupils to explain mathematically. We aim to develop of the use of stem sentences and an 'I say, we say, you say' approach throughout school will help to achieve these intentions.

Implementation

At South Bank Primary we follow the Power Maths scheme of work. Aligned with the new National Curriculum, Power Maths is a whole-class, mastery resource that empowers every child to understand and succeed. Power Maths rejects the notion that some people simply 'can't' do maths. Instead, it develops growth mindsets and encourages hard work, practice and a willingness to see mistakes as learning tools. It combines interactive teaching tools, digital games, high-quality textbooks and practice books, teacher guides, ongoing PD, and assessment to empower teachers to make maths an adventure for all children.

Our maths curriculum teaches and challenges children to make connections, use methods in the most appropriate, efficient way and develop problem solving and reasoning skills.

Children are encouraged to solve problems each day through the use of concrete resources, pictorial representations and abstract thinking (the C-P-A approach). This helps children tackle concepts in a tangible and more comfortable way. Teachers use careful questions to draw out children's discussions and their reasoning. The class teacher then leads children through strategies for solving the problem, including those already discussed. Children then progress to their independent work, where each question varies one small element to move children on in their thinking. Children complete intelligent practice independently, ending in a 'Reflect' section where children reveal the depth of their understanding before moving on to more complex related problems.

Mathematical topics are taught in blocks, to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, with children who are quick to grasp new content being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

Power Maths supports staff in the implementation of the National Curriculum for Maths, which aims to ensure that all pupils: become fluent in the fundamentals of mathematics, can reason mathematically, and can solve problems by applying their mathematics.

To support the implementation of the maths curriculum we also consolidate our learning through the use of Numbots (KS1), Times table Rockstars, Freckle and active learn maths.

In Reception there are daily sessions of mastering number of approximately 15-20minutes. In KS1, there is a daily maths lesson of between 45 and 60 minutes for all children in mixed ability classes. In addition, in KS1 there is a daily Mastering number session, which takes place outside the maths lesson. In KS2, we have a daily maths lesson of approximately 60 minutes for all children in mixed ability classes. At the start of the maths lesson in KS1 and KS2 children complete a daily fluency task called 'Daily 5' to practise key skills including calculating skills, counting, times tables, problem solving and a time question.(year group appropriate) In order to embed key knowledge all year groups have one day a week focused on arithmetic skills. In UKS2 a greater emphasis will be on regular arithmetic session to embed key knowledge. In KS1 (when appropriate) and LKS2 there will be a focus on teaching the times tables and recognising patterns within different times tables in order to support understanding.

Impact

Students can underperform in Mathematics because they think they cannot do it or are not naturally good at it. The Power Maths programme addresses these preconceptions by ensuring that all children experience challenge and success in Mathematics by developing a growth mindset. and problem-solving approach and a curiosity and excitement for maths. We therefore hope that as our journey towards embedding the mastery approach continues: We will have teachers and support staff who fully understand and support the pedagogy. We will have children who are increasingly engaged in maths lessons and talk passionately about the subject, making links with other subjects and with the wider world. We will observe children tackling mathematical challenges with resilience, confidently using concrete resources and visual representations. We will have children who are more articulate when discussing mathematical concepts. We will see progress becoming more accelerated due to the way lessons are structured and the impact of immediate, tailored interventions. Progress will be seen end of unit checks, half termly assessment tests and maths data input termly on Sonar. We will have a greater proportion of our reception children achieving age-related expectations within the early learning goals, and a greater percentage of our children achieving the higher standard scores at the end of each key stage.