



# Maths Curriculum Statement



At Fixby J&I School, all our pupils come to school to be happy, to be safe and to learn. This is the principle that has inspired the Fixby Curriculum.

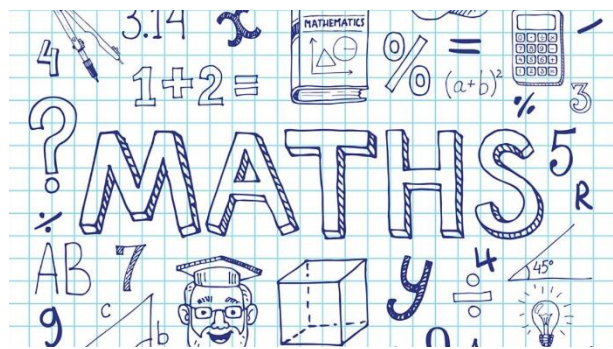


## INTENT

At Fixby Junior and Infant School our aim is for every child to become a mathematician. We want children to become mathematicians in order for them to reach age related expectations or make accelerated progress from their starting point. As well as this we want children to develop a love for maths and use their extensive knowledge of Maths to solve practical problems.

Our curriculum is designed around the needs of the pupils in our school and there are a variety of approaches to enable the pupils to make good progress.

We aim to provide all the children at Fixby Junior and Infant School with support to understand mathematical concepts using quality first teaching and a clear, well-planned progression across all aspects of maths, calculation and geometry. Therefore, we use mathematical questioning and concrete resources to enable children to access all areas of maths at their level. We also aim to ensure mathematical language and vocabulary are built up from our youngest children through school using our own school's outcome approach and our own assessment systems to ensure our children can calculate, problem solve and reason to the best of their ability.



### **Aims**

The National Curriculum for Mathematics (2014) aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

### **IMPLEMENTATION**

We follow the small steps guidance set out by White Rose Maths but supplement this with other resources which meet the needs of our children. The White Rose Maths small steps documents are used and adapted to support teachers with planning, teaching and learning that encourage a mastery approach to teaching Maths for all pupils through a daily Maths lesson in each class.

The main content of the maths lesson is taught through clear teacher modelling and the My turn, Your turn, or I do, We do, You do approach. Reasoning and Problem solving are integral to the activities the children are given to develop their mathematical thinking. Children who have shown a good depth of understanding within a particular lesson are challenged through more complex problems or reasoning activities or through probing questions.

Concrete manipulatives and pictorial representations are used to support conceptual understanding and to make links across topics. We follow the concrete, pictorial, abstract approach with students accessing the same objective using the method most suited to their ability. As a non-negotiable, ALL new concepts should be introduced with concrete manipulatives and models and images if possible. KS1 classes should use models and images on their teaching screens to support learners and this is good practice where appropriate in KS2 classes. All classrooms have maths trollies with practical equipment and children are encouraged to use these readily to support their learning and understanding.

### **SAME DAY INTERVENTION**

All children in KS1 and KS2 follow the same day intervention method where children's gaps and misconceptions are identified through formative assessment within the first part of the lesson. They are then placed in groups within the second part of the lesson where they will have concepts taught explicitly to ensure that the misconceptions are addressed and the children are making progress.

## **IMPACT**

Maths in our school is progressive and planned to meet the needs of all children. Assessments are carried out regularly to ensure children are accessing fluency, reasoning and problem-solving objectives at age related expectations. If children are keeping up with the curriculum, they are deemed to be making expected or more than expected progress. The implementation of the White Rose planning scheme has meant the school have been successful over the year, clear progression is made throughout the primary phase and greater breadth and coverage of fluency, reasoning and problem-solving. All staff are regularly updated with any changes. As a school, we measure the impact of our curriculum through the following methods: Assessment For Learning after every Maths lesson; End of block assessments; Formative assessments; Summative assessments each term and End of Key stage SATs results.

Children are regularly assessed through the delivery of our curriculum, targeted questioning in lessons and through the outcome of retrieval and consolidation activities completed in lesson time. Teachers mark Maths learning daily and give a 'next step' where appropriate that the children respond to promptly to develop depth of understand or eradicate a misconception.

In Year 4, fluency of times table skills are tracked termly in order to best prepare children for the MTC (Multiplication Tables Check) at the end of Year 4.

In termly Pupil Progress meetings, teachers are able to present assessment data and discuss strengths and weaknesses of Maths within their class with the Senior Leadership Team.

The outcomes of summative assessments are implemented into future planning.

The impact of Maths is assessed through the following methods:

- Monitoring by subject leader and link Governors, including
  - Planning scrutiny
  - Work Scrutinies
  - Pupil interviews
  - Data analysis