

## Maths at Lockwood



### Intent

At Lockwood, our aim is to make maths both purposeful and meaningful by providing opportunities for children to apply their knowledge and skills to a range of practical and real-life contexts. Skills are linked and taught together to maximise teaching and learning time to give context to learning, and encourage pupils to make connections in their understanding. From an early age, we aim to ensure a high focus on developing varied mathematical fluency. As pupils develop confidence and fluency, we then aim for pupils to reason and rationalise in a thoughtful way and use maths talk to develop strong problem-solving skills. We believe these aims ensure children are equipped with the skills to solve problems, both now, and looking to the future as adults.

### Implementation

With support from the local DfE funded Archimedes Maths Hub, we have introduced and are continuing to develop our maths curriculum based upon 'Teaching for Mastery'. This approach involves employing approaches that allows pupils to acquire a deep, long-term, secure and adaptable understanding of the subject.

Our teaching is based on the recommended National Curriculum to ensure a robust approach. The 2014 National Curriculum for Maths aims to ensure that all children:

- become fluent in the fundamentals of Mathematics through varied and frequent practice.
- reason mathematically by following a line of enquiry.
- solve problems by applying their mathematics to routine and non-routine problems.

This is then personalised to meet the needs of our learners. The White Rose scheme of work has been used to help sequence the objectives for each individual year group and to ensure pace and progression within skills throughout school. We ensure varied fluency in our lessons by supplementing White Rose with several other resources. We also plan opportunities for skills and key learning to repeat and build over time, revisiting and reviewing throughout each year group.

We offer all children access to the scaffolding, resources and manipulatives that they need to master core concepts. Visual, concrete and pictorial aids are used to help support children in learning the interrelated dimensions of mathematics and the underpinning relationships within the number system.

We empower our children to be mathematicians who are confident in using and applying mathematical vocabulary, accurately and confidently, across a wide range of contexts.

We develop fluency and accuracy in the recall of key number facts and procedures through the implementation of the Mastering Number programme in EYFS and KS1, and daily morning maths and Number Sense sessions in KS2. We nurture positive learners who embrace challenge, show resilience, and think logically when faced with problems and challenges. Children are encouraged to value the process of solving problems rather than the solution.

To support this, teachers motivate children to use a growth mindset, whereby they have a 'can do' attitude – we believe everyone can do maths to the best of their ability. Children understand that mistakes and misconceptions are a significant and vital aspect of learning, which should be celebrated, and through the development of metacognitive strategies, perseverance, and self-belief.

### **Impact**

At Lockwood, a variety of teacher and standardised assessments are used to assess children against the year group National Curriculum objectives. These provide a summative record of what each child has achieved as well as informing ongoing planning.

White Rose end of topic assessments are used as formative assessment and trackers are completed to identify gaps that are to be addressed during morning maths sessions and through targeted interventions.

NEFR summative tests are administered termly from Years 1-6. These materials are used alongside judgements made from class work to support teachers in making judgements to indicate if children are accessing, are in line with or have fully achieved all year group objectives.

EYFS have specific assessment check points throughout the year.

Pupil Progress meetings are timetabled each term and are conducted by the Maths Coordinator to help monitor data. The progress of pupils is discussed, potential barriers identified, and appropriate interventions are considered and put in place where appropriate.

Y2 and Y6 complete the national tests (SATs) in May and will undergo practice tests.

Year 4 are administered the Multiplication Tables Check in June.

Pupil, staff and parent views are used to help shape our curriculum to ensure it is accessible for all, and meets the needs of our pupils.