



### **Our aim and curriculum:**

Our curriculum is specialised and designed to inspire our students to see Maths as a lifelong learning experience, not just as a lesson. We aim to ensure the children are offered opportunities to explore key concepts in a practical and concrete ways as well as in the abstract. We place importance on allowing the children to explore and develop their learning using resources that help the individual and support their learning as individually as possible. Our curriculum and planning encourage us to teach with a hands-on method utilising our bank of specific chosen manipulatives: creating memorable learning experiences and lifelong learning opportunities. Through doing this, children learn a method that supports them individually. Our use of daily revisiting using Flashback4 and Tough Ten allows our children to build on their previous knowledge, make connections and develop their skills throughout their journey with us.

### **Teaching and Learning in Maths**

We aim to deliver an enriched, engaging curriculum full of new skills, developed concepts and manipulatives to ensure children are given every opportunity to explore each skill in a way that supports their individual learning. Within our lessons, teachers allow the children to become mathematicians with a thirst for mathematical knowledge. Our teaching considers the ability, aptitude, physical, emotional and intellectual needs of each of our children.

### **Aims & Skills:**

In both key stages 1 and 2, maths will involve fun, exciting and challenging activities. Many opportunities are created for child led hands on practical experiences which aim to help children to relate maths to the real world.

In order to support learning, all children, in all years will be encouraged to use concrete practical materials and pictorial resources as well as more abstract concepts. There is equipment available in all classes which include Numicon, Dienes rods, cubes and place value counters which all support the teaching of place value and calculations. Children will be taught in a variety of ways and with the expectation that the children are moving towards independent learning. We also encourage the children to work in pairs and groups to encourage collaborative learning especially with problem solving.

This also helps to develop children's confidence and team building skills. We follow a programme of study that encourages the use of progression in skills from fluency and reasoning to problem solving involving the concepts that are being studied.

### **Coverage**

Children will cover all the concepts required by the Maths National Curriculum which include place value, number, shape, measures, geometry, statistics, algebra and ratio and proportion. We achieve this through the use of the White Rose Maths planning and resources.

### **Our Lessons**

We use maths starters/Flashback4 which draw on the children being able to recall and apply previous knowledge, which helps us assess their memory and understanding. We aim to give the children daily opportunities to practice their times tables to help support learning. To help build fluency and conceptual understanding manipulatives and pictorial representations are chosen carefully to support our learners. Questioning is used during lessons to ensure children develop fluent proficiency and think deeply about the concepts. Children are encouraged to use precise mathematical vocabulary and answer in full

sentences. This is supported through stem sentences, which we have planned and modelled during the lesson. Conceptual variation (varied fluency) are used to look at the concept through different representations (i.e. fractions as part of shapes, bar, a group, ....) and also look at examples and non-examples of concepts (i.e. triangles, not triangles and nearly triangles). We aim to use reasoning and problem solving in the majority of lessons to ensure that, where possible, all children have an opportunity to reason and problem solve in each lesson.

### **How we support children**

Differentiation happens in the support and intervention given to children who need the additional scaffold. Students are challenged through more demanding problems to deepen their knowledge of the same content.

Immediate formative assessment is used for rapid intervention which should lead to less gaps to close. Rapid intervention during the lesson (led by teacher), or that afternoon (by class TA) supports children who are showing difficulties in understanding. Questions and tasks within lessons are used as assessment opportunities.

### **Testing**

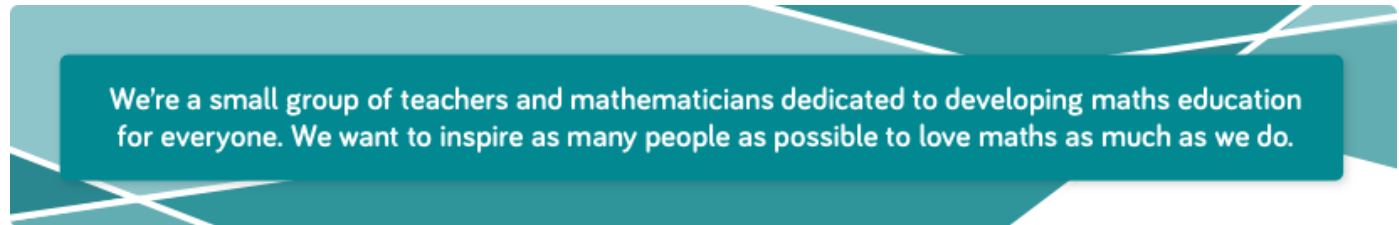
In accordance with government requirements, children will be formally assessed in Year Two and Year Six. Children in Year Four will be tested on their multiplication tables and will need to know up to twelve times twelve by June. We use Rising Stars PUMA assessment papers during the school year to benchmark and track performance. Children will be supported throughout the whole process of testing in order to help them achieve their full potential.

**Throughout the key stages, we aim to ensure that children leave Lower Halstow Primary School with a positive experience and love of maths and are ready for the next stage of their education. Parental support and involvement is invaluable and will be encouraged in both key stages.**

### **Maths Curriculum Planning**

We believe every child can do maths. Our use of the White Rose resources is aimed to develop highly effective lovers of maths through excellent maths teaching, resources & CPD.

### **White Rose Maths**



We're a small group of teachers and mathematicians dedicated to developing maths education for everyone. We want to inspire as many people as possible to love maths as much as we do.

Influenced, inspired and informed by the work of leading maths researchers and practitioners across the world, White Rose Maths brings together a team of highly experienced and passionate maths teaching experts to train, guide, help and support all those who want to make change happen in their schools.

They offer in-depth training programmes, a vast bank of clear and practical resources.

With their support, we're building a whole new culture of deep understanding, confidence and competence in maths – a culture that produces strong, secure learning and real progress. No matter what their starting points, we help learners to achieve excellence.

Their mantra is simple:



Using their resources and small step approach, we're shaping assured, happy and resilient mathematicians who relish the challenge of maths. Our aim is that the children become independent, reflective thinkers, whose skills not only liberate them in maths but also support them across the curriculum.

We're committed to be and give the very best, and to make a difference to every pupil.

### **Resources**

Within the federation, we value a wide range of resources and use them thoroughly to support learning and teaching of Maths. We make use of the resources that are provided by White Rose as well as sublimating these with additional resources from other providers to provide support and challenge.