



## Maths@Minchinhampton

*Belief + Hard Work + Understanding = Success*

### Vision

Mathematics is an important creative discipline that helps us to understand and change the World. We want all pupils at Minchinhampton to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

At Minch, we foster positive 'can do' attitudes, believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems before acceleration through new content.

### Curriculum Intent: Skills

#### **We aim for all pupils to:**

- + Become fluent in the fundamentals of mathematics (see Year by Year Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- + Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- + Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- + Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.

### **Additionally for our SEND vulnerable learners:**

We endeavour to make learning as inclusive as we can, and our 'Teaching for Mastery' approach has a belief that all children should have the same opportunities to learning at its core. Within Maths lessons, generally all children are given the same opportunities for success. We believe that scaffolding should occur through support, resources, time and outcome as opposed to directly differentiating by task. Research shows that this way of learning results in positive outcomes both academically, and for the mindsets of our learners. Where possible, our aim is for children to move through the Maths Curriculum at broadly the same pace. If a child is stalling in their learning, the first instance will be to provide extra support to help them to 'keep up', rather than 'catch up' at a later date. This 'keep up' support can be varied but may take form in the way of pre-teaching, discrete interventions or additional adult support within the classroom. In exceptional circumstances, where a child is working significantly below age related expectations, then a more bespoke way of teaching and learning Mathematics will occur to support the specific needs of the child. This tailored support could consist of all/some of the following:

- Prioritisation of core strands of the curriculum (e.g., place value and number)
- 1:1 or small group teaching with an adult
- Teaching and learning content from a lower year
- My Plan targets to reflect next steps within Maths

Teachers collaborate with the SEN team to determine the best provision for the needs of the child. This provision will then be shared with parents

### **Minch Maths EYFS/Nursery**

In Early Years the children learn new concepts and embed their knowledge through both discrete teaching sessions and through their play when they are accessing provision. EYFS Mathematics is addressed through a combination of adult led activities, small group activities, independent group activities and child-initiated play. This is then supported by discrete maths sessions through the week (Maths Mat). The learning environment has number representations throughout so that children are reinforcing skills and knowledge throughout the day.

## Curriculum Implementation

<b>Mathematics Lessons: Teach Up</b> M/T/W/T/F: <input type="text"/>		<b>Maths On Track Meetings: Keep Up</b> M/T/W/T/F: <input type="text"/>
<i>'Learning Together'</i>	<i>'Support &amp; Challenge'</i>	<b>Deliberate Practice Sessions</b> <i>Arithmetic/Intervention/Practice</i>

### Mathematics Lessons

Each lesson focuses on a manageable step of new learning based on the NC statements.

#### **Typical Lesson design:**

- 1) Hook It: Introduction
- 2) Teach It: Live modelling of the new learning with explicit use of potential misunderstandings
- 3) Practise It: All children practise together **Support & Challenge**
- 4) Do It: Up to 5 examples – 5 'What it is' or '3+2 'What it is/What it's also' **Challenge 1: Procedural Fluency**
- 5) Twist It: 1 or 2 Misunderstandings (True/false, Spot the mistake) **Challenge 2: Conceptual Understanding**
- 6) Explore It: Apply understanding to solve new problems **Challenge 3: Mathematical Thinking**
- 7) Review It: Lesson Recap: Key Concept Statement and Key Vocabulary

### MathsOnTrack (MOT) Meetings

- Day 1 : Arithmetic
- Day 2 : Arithmetic
- Day 3 : Deliberate Practice: Past and Present
- Day 4: Deliberate Practice: Past and Present
- Day 5: Fact Friday