



## Allerton CE Primary Mathematics Policy

### Mathematics – Vision and Aims

At Allerton CE Primary School, we strive for all pupils to develop a passion, knowledge and understanding of mathematics. Children are able to grow into confident, creative, mathematicians, who flourish in their learning, making links between taught concepts and Maths in everyday life.

### We aim that all pupils

- Become fluent in the fundamentals of mathematics, developing an ability to recall and apply knowledge rapidly and accurately
- Can reason mathematically, developing an argument or proof using mathematical language.
- Can show resilience and persevere to solve problems by applying their mathematics to a variety of problems including unfamiliar contexts and every day, real-life situations.
- Can use mathematical language accurately; discussing their learning with confidence and precision, both independently and collaboratively.
- Possess positive attitudes to Mathematics through interesting, purposeful and enjoyable experiences.
- Record their work in a clear and accurate way where the presentation is of a high standard and something that they are proud of.

### Mastery Approach

At Allerton CE Primary, we follow a Maths Mastery Approach using Maths No Problem. In every KS1 and KS2 classroom, the children are using textbooks and workbooks, which have been written to support teachers in all aspects of their planning whilst delivering Singapore Maths methods effectively. These 'Maths No Problem' resources are being fully supported by the Department for Education because 'mastery', the ability to understand fully a concept and being able to apply it within different situations, is part of the requirements of the curriculum. The Maths – No Problem! primary school series has been created specifically for children living in the UK and is fully aligned to the 2014 curriculum. It provides all the elements that teachers need to teach Maths mastery with confidence.

### In mathematics lessons you will see

Well-planned lessons that are tailored to support the needs of all children. Children engaged showing a passion for Maths. Interactive and practical learning including concrete, pictorial and abstract resources used in tandem.

- A range of challenges to consolidate and extend learning.
- Working walls that enable learning and support discussion.
- Mathematical vocabulary being used accurately and confidently where children can articulate their reasoning.

### **On working walls you will see:**

- A 100 square.
- Current learning represented as concrete/pictorial with the abstract method alongside.
- A Maths dictionary available in the classroom.
- Challenge boards reflecting current learning.
- Maths - No Problem! stem sentences to prompt discussion.

### **Mathematics in EYFS**

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS profile document. Mathematics development involves providing children with opportunities to practise and improve their skills in counting numbers, calculating simple addition and subtraction problems, and to describe shapes, spaces and measures. The profile for mathematics areas of learning are; Number (ELG 11) and Shape, Space and Measures (ELG 12). We continually observe and assess children against these areas using their age-related objectives, and plan the next steps in their mathematical development through a topic-based curriculum.

### **Useful links:**

- [Numberblocks](#)
- [Mathletics](#)
- [NCETM - The Main Areas of Early Years Maths](#)
- [Development Matters in EYFS](#)
- [NRich Maths](#)
- [White Rose Maths - Early Years Resources](#)

### **Maths - No Problem! (Years 1-6)**

At Allerton CE Primary, we follow a Maths Mastery Approach using Maths No Problem. In every KS1 and KS2 classroom, the children are using textbooks and workbooks, which have been written to support teachers in all aspects of their planning whilst delivering Singapore Maths methods effectively. These 'Maths No Problem' resources are being fully supported by the Department for Education because 'mastery', the ability to understand fully a concept and being able to apply it within different situations, is part of the requirements of the curriculum. The [Maths No Problem Primary School series](#) has been created specifically for children living in the UK and is fully aligned to the 2014 curriculum. It provides all the elements that teachers need to teach Maths mastery with confidence.

To find out more about how this new series aids your child's mathematical development watch the videos below:

## **Mathematics – Pupil Support and Assessment**

Taking a mastery approach, differentiation occurs in the support and intervention provided to different pupils, not in the topics taught, particularly at earlier stages. The National Curriculum states:

Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.’

There is little differentiation in the content taught but the questioning and scaffolding individual pupils receive in class as they work through problems will differ, with higher attainers challenged through more demanding problems which deepen their knowledge of the same content. Pupils’ difficulties and misconceptions are identified through immediate formative assessment and addressed with pre-teach or rapid intervention. – commonly through individual or small group support later the same day.

In Years 1-6, ‘NFER’ assessment is used termly to identify misconceptions which then inform future planning.

## **Mathematics – Supporting your child at home**

### **ACE Times Tables Games:**

Maths board games that help your child’s times tables development.

### **Mathletics (Year 2):**

Our school subscribes to Mathletics in order to help support your child both in the classroom and at home, through interactive activities, games and challenges.

### **Mathseeds (EYFS – Year 1):**

Mathseeds teaches kids aged 3-9 core math and problem solving skills with fun online math games and activities.

### **Numberblocks (EYFS):**

Sing along and learn all about number with the Numberblocks!

### **Times Tables Rockstars (KS1 & KS2):**

Times Tables Rock Stars is a carefully sequenced programme of daily times tables practice. School invests in ‘TT Rockstars’ with every child in KS1 and KS2 having an account.

### **Topmarks (EYFS-Year 6):**

Fun, free maths games that consolidate learning from school.

### **Sumdog (KS2):**

“Personalised Maths practice that pupils love.” Sumdog engages pupils with adaptive learning and multi-player games. Sumdog is proven to accelerate progress in maths. School pays for a Sumdog account for every child in KS2.

### **My Mini Maths (KS2):**

Free resources for all of the objectives your child will study in KS2. My Mini Maths is incredibly popular as it contains video tutorials to support you and your child at home.

**Maths Frame (KS2):**

Mathsframe has more than 200 interactive games and 300 maths worksheets and assessments linked to the national curriculum. Resources are designed by experienced KS2 teachers and updated regularly.

**Review**

This mathematics policy is a working document. It will be reviewed by the mathematics leaders in the light of guidance, training or changes in legislation, or at the request of a member of the school community. Any amendments will be agreed by the Curriculum Lead and Head Teacher.

Drafted by: Sam Kay

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