



## Subject Leader Position Statement

Subject Maths

Date January 2023

### Intent

At Bradley our intent for Mathematics is to teach a progressive curriculum that is rich and inclusive. Our bespoke curriculum is being reviewed frequently to ensure that it is current and effective in meeting the needs of all our children. Our curriculum is planned so that knowledge, conceptual understanding and mathematical vocabulary are built upon each year. Children are frequently given opportunity to make connections between their maths learning and real life examples and engaging and practical learning opportunities enables our children to make better sense the world around them.

Our curriculum is taught in blocks using a concrete, pictorial, abstract approach to allow children to deepen their understanding of each topic. Learning is also constantly reviewed and revisited to ensure it is embedded. These opportunities for revisiting prior learning allow our children to become confident and capable mathematicians with a 'can do' attitude.

**We aim for our children to:**

- **Become fluent in a range of mathematical skills** to allow them to develop their conceptual understanding and work with increased accuracy. This includes learning by heart a range of number facts including number bonds and times tables.
- **Develop sufficient problem solving skills** to apply their knowledge to a variety of routine and non-routine problems.
- **Be able to reason mathematically** using rich mathematical vocabulary to argue, prove or explain their mathematical thinking.

### Rationale

Our aim is to provide pupils with the fluency and confidence to carry out a range of mathematical problems and solve them by using reasoning skills in each and every lesson.

Children at Bradley are displaying significantly more positive approaches to maths, being enthusiastic and confident when talking about their maths learning. We are striving to improve outcomes for all our pupils whilst achieving the aims of the National Curriculum: Fluency -Reasoning -Problem Solving.

We are working towards mastery throughout our teaching and are progressively improving our teaching of mathematics through CPD and association with Abacus North West Maths Hub. There are several elements and areas (below) that are key to this and that are helping us to:



improve our teaching of mathematics, expand the quality of learning that is taking place in our classrooms for all groups of learners and increase the learning outcomes for children.

## **Implementation**

At Bradley we teach the National Curriculum (2014) for mathematics. We use the White Rose Maths resource planning small steps as a frame for our lesson planning in conjunction with a variety of other resources, sourced and created by our teachers. Teachers choose the most suitable resources to meet the needs of their class and the learners within it. Our curriculum ensures that knowledge, concepts and procedures are built on within each year and in subsequent years.

### **Depth of learning**

We are developing, through CPD for teachers and teaching assistants, an environment where all staff are aware of and drive depth of learning as an essential part of everyday lessons. We build upon a mathematical concept across a series of lessons with stem sentences to support and embed learning. Vocabulary is a key focus within our school in ensuring clarity and depth of learning are both maximised and children are equipped with the language they need to communicate their mathematical thinking.

### **Fluency and Efficiency**

We recognise the importance of fluency in being a successful mathematician and this is an integral part of our lesson planning. We ensure that fluency is taught with the key idea of variation at the forefront of teaching. Children are exposed to different models to widen their understanding and the school has purchased resources to ensure that classes have sufficient and varied supply of manipulatives and resources.

We teach children to use the most efficient method and approach to solving different problems and calculations. Children are taught a full range of mental/informal methods and formal written methods and are provided with frequent opportunities though variation in questions to choose the most efficient approach.

### **Developing reasoning and Understanding**

Opportunities are provided for children to demonstrate and discuss their reasoning as a frequent part of each sequence of lessons. Amongst many other forms of eliciting reasoning and encouraging its use, children are given time to discuss their ideas and mathematical thinking with peers.



### **Problem solving**

We teach problem solving as an embedded part of each lesson of mathematics alongside varied fluency and reasoning and it is presented through the use of contextual questions that are accessible to the full range of different learners (with extra scaffolding and support provided when required).

### **Marking(See Policy)**

In maths most work is marked with the children so that teachers and pupils can assess understanding during the lesson. Where necessary teachers will give children written feedback that will enable them to make progress in their learning. Any question or challenge is expected to require a response from the pupil and will consolidate their thinking or encourage them to make progress.

### **Support Available**

We are currently in the Readiness Year of a four year development program for Maths Mastery led by our local Maths Hub - Abacus North West. The two subject leaders are attending workshops and relaying current information on development of teaching to staff during staff meetings.

Various teachers and teaching assistants are attending CPD courses to build on pedagogical knowledge. Monitoring of Maths across school takes place half termly and in the format of lesson observation, evaluation of practise in books and discussions with pupils.

### **Assessment**

Teachers make formative maths assessments during and at the end of each maths lessons in order to identify children that need same day intervention and/or scaffolding or extra support in the following lesson.

Termly teacher judgments against age related expectations are submitted to the Senior Leadership Team and Maths Subject Leaders.

Formal assessments take place in Year 2 and Year 6 (SATs) and Year 4 (arithmetic test).