

# Mathematics Policy

## Our rationale for teaching mathematics

Mathematics equips pupils with a powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is important in everyday life and we want to ensure our children develop a positive and enthusiastic attitude towards mathematics that will stay with them throughout their lives. The Early Years Foundation Stage Document and the National Curriculum Programme of Study for Mathematics describes in detail what pupils must learn in each year group and used together with our year group Number Facts Booklets and Written Calculations Policy we aim to provide progression and achievement for all across the primary school. Through use of appropriate equipment, opportunities for investigating mathematical ideas, discussions and opportunities to practise skills we hope our children will become confident mathematicians.

## Our aims in teaching mathematics

Mathematics is widely used in society, both in everyday situations and in the world of work. It can be used to represent or communicate ideas, to predict, explain or to verify. It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society.

Our pupils should:

- acquire sound mathematical concepts through concrete experiences
- have a sound sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out calculations mentally
- calculate accurately and efficiently both mentally and in writing
- draw on a range of calculation strategies
- explain their methods and reasoning using correct mathematical vocabulary
- develop at their own rate
- have plenty of opportunities to apply what they have learnt

## How mathematics is taught throughout the school

Mathematics is a specific area within Early Years which focuses on Number and Shape, Space and Measure. It is a core subject within Key Stage One and Two and The National Curriculum Programme of Study for Mathematics describes in detail what pupils must learn in each year group. The Early Years Staff use the Development Matters document as a guide to observe, plan, assess and review the mathematical learning for all children. The Lancashire Medium Term Planning Document is used by Key Stage One and Two staff to help with their weekly planning

and to ensure a progressive learning journey for all children as they move through school. Lessons should be differentiated appropriately. In addition, staff refer to the Number Facts Booklet for their year group to ensure children have the opportunity to practise the number facts needed. There should be opportunities for counting and practising quick recall of number facts within every lesson. Practical equipment should be readily available for children to use when they feel they need it. Use of the 'Do you know?' year group teaching tins should ensure children have chance to revisit learning regularly. Use of the 'Maths Reasoning' year group teaching tins should provide opportunities for reasoning and problem solving.

### **Assessment in mathematics**

There is continuous assessment of children's work, much of which is informal. This assessment is used to inform future teaching and identify when intervention is needed. Children's progress is identified on the KLIPS on a termly basis.

From September 2019 Reception children will complete a baseline assessment.

### **Equal opportunities in mathematics**

Mathematics is taught within the guidelines of the school's equal opportunities policy. We ensure that all our children have the opportunity to gain mathematical knowledge regardless of gender, race, class, physical or intellectual ability. We recognise the particular importance of first-hand experience and use of practical equipment for motivating children with learning difficulties. We try to ask challenging questions and encourage original thinking.

### **Role of the Subject Leader**

- to ensure teachers understand the requirements of the Early Years Curriculum and the National Curriculum and support and offer advice on issues related to the subject
- to provide efficient resource management for the subject
- to lead by example by setting high standards in their own teaching
- to observe colleagues from time to time with a view to identifying the support they need

M Beer

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