



# Parklee Community School

## Policy for Maths

**Head teacher:** MrsD Roper

**Subject Leader:** Miss L Baker

### School Vision

*ENJOY, ENGAGE, EMPOWER*

At Parklee we believe that primary education should be a time of opportunity, a happy and meaningful experience that promotes a love of learning, enriches lives and develops lifelong skills.

### Introduction

This policy outlines how Maths is currently taught in our school. The implementation of this policy is the responsibility of the whole teaching staff and is overseen by the Head teacher and Maths coordinator. This policy is supported by the Teaching and Learning policy, the SEND policy and the calculations policy.

### Intent

The 2014 National Curriculum for Maths aims to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

At Parklee Community School, these skills are embedded within Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

### Implementation

Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6. In school, we follow the national curriculum and use White Rose Schemes of Work as a guide to support teachers with their planning and assessment. The calculation policy is used within school to ensure a consistent approach to teaching the four operations over time. At the start of each new topic, key

vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses.

All new units begin with a short assessment called a 'pre learning task' to aid teachers in finding out what prior knowledge children have. Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts through reasoning and problem solving tasks. The mastery approach incorporates using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

Children work on the objective at whatever entrance stage they are assessed as being at. Children can acquire the skill, apply the skill or deepen the skill within the lesson. Children move through the different stages of their learning at their own pace.

Reasoning and problem solving are integral to the activities children are given to develop their mathematical thinking. Resources are readily available to assist demonstration of securing a conceptual understanding of the different skills appropriate for each year group. Children are encouraged to explore, apply and evaluate their mathematical approach during investigations to develop a deeper understanding when solving different problems / puzzles. A love of maths is encouraged throughout school via links with other subjects, applying an ever growing range of skills with growing independence. Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant support as necessary. For those children who are working outside of the year group curriculum, individual learning activities are provided to ensure their progress.

### **Impact**

The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others.

Our is that by the time children leave Parklee they can demonstrate;

- A quick recall of facts and procedures. This includes the recollection of the times table.
- Children show confidence in Believing that they will achieve.
- Each child achieves objectives (expected standard) for year group.
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children show a high level of pride in the presentation and understanding of the work

### **Curriculum and planning**

The LTP is taken from the White Rose maths hub overviews and their lesson overviews are used to inform MTP. The LTP is used as a guidance tool in order to pace out coverage of the curriculum throughout the year. Teachers are encouraged to use professional discretion

when deciding on how long is needed on particular curriculum area whilst ensuring all objectives are covered by the end of the academic year.

Short term planning (STP) is recorded each week on standard planning sheets. These plans outline the topic area /focus with specific learning objectives to be taught that week. Specific representation, fluency, reasoning and problem solving columns identify the focus area, activity and support children will be carrying out/receiving.

### **Assessment**

Assessment is a vital tool in the teaching of Mathematics, designed to monitor children's progress and measure attainment. It is also used to inform future planning by staff at this school or the child's next school.

Teachers are responsible for assessing and recording children's progress in mathematics.

Assessment opportunities are built into the planning of lessons and a range of other methods are used as appropriate. Standards are checked both in school and through external moderation opportunities. These include

- children's work marked promptly and in accordance with the school marking policy
- Completion of the Foundation Stage Profile on-entry and at the end of the school academic year
- summative standardised tests (SATs) from Y2 to Y6 with statutory tests at the end of Years 2 and 6
- Daily Fast maths which is recorded by the teacher
- self assessments and peer assessments by the children which may be recorded as a numerical value and / or traffic light are recorded in books
- listening to what children say and questioning them to ascertain their level of understanding
- Termly Teacher Assessments using the White Rose Assessments
- Pre and Post learning tasks at the beginning and end of each unit of work

At the end of the academic year, children's assessments are passed on to the next teacher and to the maths coordinator to identify areas for improvement.

As a statutory requirement, the report will also include whether a child has reached end of year age related expectations in mathematics as in the other core subjects.

### **Inclusion**

At Parklee, we plan to provide for all pupils to achieve, including boys and girls, higher achieving pupils, gifted and talented pupils, those with SEN, pupils with disabilities, pupils from all social and cultural backgrounds, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds.

Differentiated activities across the school will take account of the children's differing needs and abilities (working toward national standard, at national standard and mastery standard) ensuring all children have access to the mathematics curriculum at the appropriate standard. Children with special educational needs in mathematics are supported to enable them to achieve the learning objective. (see the Special Educational Needs Policy)

### **Resources**

The school acknowledges the need continually to maintain, update and develop its resources by investing in resources that will effectively deliver the strands of the national curriculum and support the teaching of maths throughout school.

Each class is equipped with a range of mathematical resources and apparatus relevant to the year group of that class. These are stored in accessible and clearly labelled drawers / shelves / containers. All children have access to a range of numeracy aids such as place value cards, dice, time table squares and 100 squares.

### **Monitoring and Reviewing**

The monitoring of the standards of the children's work and of the quality of teaching in maths is the responsibility of the subject leader. The subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The subject leader gives the head teacher an annual summary report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching and through pupil voice interviews with the children.