

# PALFREY INFANT SCHOOL

## MATHS POLICY

Lead Teacher: H Collett



Updated: Dec 2024

Governing Body:

***As a Rights Respecting School we believe:***

***Every child has to learn and have an education. Article 28 & 29***

***Every child has a right to be safe from harm and abuse. Article 19***

***Every child has a right of freedom of expression. Article 13***

***Every child has a right to be part of a community and practise his or her own religion and use his or her own language. Article 30***

***Every child has a right to rest and leisure. Article 31***

***Every child has a right to keep healthy. Article 24***

***We believe we fulfil these rights at Palfrey Infant School***

### **Introduction**

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Palfrey Infants School.

Our aims are:

- To implement the current legal requirements of the National Curriculum through the Programmes of study for Year1 and Year 2 and the Early Learning Goals for the Foundation Stage;
- To develop knowledge, understanding and skills in:
  - Counting and understanding number
  - Knowing and using number facts
  - Calculating
  - Understanding shape
  - Measuring
  - Handling data
  - Using and applying mathematics to reason
  - Using and applying mathematics to problem solve
- To secure high standards of achievement through effective teaching and learning;
- To foster positive attitudes and to increase pupil confidence in the ability to express themselves and their ideas using the language of maths;

- To develop an ability to think logically, clearly and with independent thought;
- To encourage parents to take an active part in their child's learning.

### Teaching Styles and Strategies

A range of teaching styles are necessary for the teaching of Mathematics. Approaches need to be flexible and adapted to meet the needs of the pupils and the topic being taught. Teaching at all levels will provide opportunities for:

- Whole-class work, group work, partner work and individual work;
- The development of mental strategies;
- Mathematical discussion (pupil/pupil, pupil/teacher, group work);
- Reasoning and explaining thinking;
- Practical work;
- Consolidation and practise of fundamental skills and routines;
- Problem solving;
- Investigational work;

### Teaching Time

To provide adequate time for developing numeracy skills each class teacher in KS1 provides a daily mathematics lesson. This may vary in length but usually lasts for about 45 minutes. A further 15-minute lesson is taught four times a week to develop maths fluency (Mastering Number Programme).

Reception teachers provide daily mathematics lessons consisting of; 4 short lessons of about 15 minutes and 2 longer lessons of about one hour spread over a week. Cross curricular links are also made to mathematics within other subjects so pupils can develop and apply their mathematical skills.

### Maths Challenge

All children complete a weekly maths challenge to help develop fluency. The children have five-minutes to complete a set of questions. If they achieve a high enough score, they move onto the next challenge. The challenges are organised by colours and each colour consists of 3 challenges; part 1, part 2 and part 3 (a combination of parts 1 and 2). Once all three challenges have been completed, the children are awarded with a certificate.

Reception – 30 (pictorial) questions, with a score of 25+ needed.

Key Stage 1 – 50 questions, with a score of 45+ needed.

To maintain motivation and resilience, children are encouraged to beat their score from the previous week, rather than complete the whole challenge.

### Class organisation

Year 1 and Year 2 children are taught in their class. Within each class the children work in mixed ability groups. During lessons pupils will learn through a combination of whole-class teaching, group teaching and sometimes on an individual basis. All children will take part in the lessons and complete their learning within the classroom.

### Planning

Reception and Key Stage 1 follow White Rose Maths.

In Reception the daily 15-minute lessons follow planning provided by the Mastering Number Programme (NCETM), focusing on number. The two longer lessons each week follow White Rose Maths small steps, focusing on shape and measures. White Rose provides the teaching slides and activities to teach each step.

In Key Stage 1 the daily maths lesson is planned using White Rose Maths, Primary Stars Maths and NCETM teaching materials. A nominated teacher in each year group will plan maths lessons for the whole year group. These are then discussed with colleagues, who can then make adaptations. This allows for consistency across each year group.

The 15-minute number fluency session follows planning provided by the Mastering Number Programme (NCETM).

### **A typical lesson**

All children have a daily maths time. A typical 45 minute lesson in Years 1 and 2 will be structured like this:

- Start with White Rose Flashback 4 or starter retrieval slide (5 minutes)  
This poses a set of 4 questions to retrieve previously taught knowledge and skills.
- The main teaching activity (about 30 to 40 minutes)  
This includes both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work.
- A plenary (about 5-10 minutes)  
This involves work with the whole class to sort out misconceptions, identify progress, to summarise key facts and ideas and what to remember, to make links to other work and to discuss next steps.

All lesson plans include 'I do' (teacher demonstrates their thinking), 'we do' (children work with teacher support), 'you do' (independent child activity) and stem sentences that the children should be using during the lesson.

### **Marking and Feedback**

Teachers mark work by ticking correct answers and highlighting incorrect answers.

When a child has a number of errors and is showing a lack of understanding, further support will be given and the child can self-correct using a green pen.

### **Assessment**

Continuous short-term assessments using observations and questioning of both groups and individual children are an informal part of every lesson to check understanding and give information to inform further planning.

In Year 1 end of unit assessments (White Rose) are undertaken after the following unit has been completed. This allows for spaced retrieval. In Year 2 an arithmetic and a reasoning assessment (White Rose) is completed at the end of each term and relate to the objectives that have been taught.

The outcomes are recorded by the class teacher and attainment is submitted to the school tracking system, Insight and shared with the maths lead. Teachers identify children that are under attaining or under achieving and set up intervention support for them.

At the end of the year, Reception teachers will record assessment levels for the Foundation Stage Profiles. Year 2 teachers will use the support of SATS papers to establish a teacher assessment level at the end of Key Stage 1. Monitoring of maths is undertaken each term as part of the whole school tracking process.

Pupil Progress meetings are held each term to discuss children under attaining or under achieving to ensure these children are receiving support through intervention groups to close the gap.

### **Homework**

All children in Year 1 and Year 2 have a piece of maths to share with their parents each week. This is not new work but consolidates what has been learned during the week. Every child's effort to complete homework is valued during the maths session.

During the summer term Reception children begin to have some maths work to share with parents.

### **Equal Opportunities**

The teaching of mathematics is in accordance with the Equal Opportunities, Disability Discrimination and Anti Racist policies.

If SEN provision is needed, this will be provided through individual or group programmes of work and will be in accordance with the Special Educational Needs Policy.

### **Resources**

All teachers have access to the resources through the school's White Rose Maths subscription and all Key Stage 1 teachers have access to the resources from the Primary Stars subscription.

The majority of practical maths resources are kept in the classroom areas. The class teacher is responsible for maintaining their resources and should report any problems to the maths lead.

Teachers can submit a request for maths resources to the maths lead. It is then the responsibility of the maths lead to refer to the School Development Plan to establish new resources needed to support teaching and learning.

This policy for Mathematics will be reviewed in line with the School Development Plan.

H. K. Collett

Dec 2024