



Maths Policy

Review Date	Reviewed Date	Reviewer	Action
September 2020			

Perryfields Primary PRU Numeracy Policy

Introduction

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Perryfields Primary PRU.

The school's policy for mathematics is based on the Primary Framework for Mathematics. The implementation of this policy is the responsibility of all the teaching staff.

Aims and Objectives

Each child should be able to think and solve problems mathematically by using the appropriate skills, concepts and knowledge. They should be provided with rich and enjoyable experiences related to their individual needs.

We aim for each child to:-

- **Have a positive attitude towards mathematics.**
- **Have self-confidence in their ability to deal with mathematics.**
- **Be able to work systematically, collaboratively and show resilience in accordance with our Learning Powers. .**
- **Be able to think logically and independently.**
- **Experience a sense of achievement regardless of age or ability.**
- **Understand the appropriate underlying skills, concepts and knowledge of number, measurement, shape, space and handling data. (Due to the unique needs of Perryfields children, there is a specific focus on the four operations within Number.)**
- **Be able to apply previously acquired concepts, skills, knowledge and understanding to new situations both in and out of the classroom.**
- **Understand and appreciate pattern and relationship in mathematics.**
- **Be able to communicate and reflect on their work with peers and adults, sharing ideas, experiences, questions, clearly and fluently, using the appropriate mathematical language.**
- **Be able to explore problems using the appropriate strategies, predictions and deductions.**
- **Have equality of opportunity regardless of race, social background, gender, disability, or educational needs.**
- **Be aware of the uses of mathematics beyond the classroom and in the real world including future career opportunities and aspirations using mathematics skills.**
- **Encourage the use of mental calculations and efficient strategies to work out the answers.**

For parents to:-

- **Be actively involved in their children's mathematical learning both in school, with homework and remote learning. (see remote learning policy)**
- **Understand and support the school's mathematics and homework policy.**

Perryfields Primary PRU Mathematics Intent

Teachers and children at Perryfields are passionate about mathematics. Through high-quality teaching, we provide each child with the opportunity to develop a love for, and reach their potential in this core subject.

Mathematics acts as a cornerstone in helping our children become resilient, problem-solvers- not just within the subject- but throughout the curriculum and as individuals. When teaching the subject we provide pupils with opportunities to demonstrate our Learning Powers; Reflective, Curious, Collaborative, Independent and Resilient.

Our aim is always to provide children with a relational understanding of the different mathematical strands they experience. Although there are many processes involved in the subject our main aim is to develop mathematical fluency and allow our pupils to use this understanding in reasoning, problem solving and real life concepts. We believe successful mathematicians are those that have a secure, deep understanding of the many abstract concepts.

During their educational journey at Perryfields, number is a principal focus. We believe children who are proficient with number can better access the wider mathematics curriculum and are equipped with a vital, life-long skill. During our many enrichment off-site visits we ensure our children have the opportunity to apply their mathematical skills in a real life and practical context.

Successful reasoning is demonstrated when children make educated decisions, reflect on and justify their choices and understand a process. Opportunities for children to reason are always considered in the medium-term planning, right through to the models provided and responsive questions asked by teachers in a lesson.

School policies and materials such as the Skills Progression Matrix support teachers in making a positive impact on children's learning. They ensure practice is consistent, enabling our unique pupils to make accelerated progress across all classes.

We value our teachers' skills and experience as individuals and their collaborative work. Although policies are to be adhered to, teachers are encouraged to use initiative and insight to seek further well-considered opportunities to expose children to and allow them to explore alternatives. Secure learning happens when the concrete, visual and abstract are effectively interconnected rather than used in isolation or as part of a linear process. This approach is reflected throughout the school, with resources and representations chosen thoughtfully to help children gain a relational understanding.

Children's books are a place to record, showcase and take ownership of their learning. Furthermore, they act as a reference for discussion and help facilitate self, peer and teacher assessment.

Teaching Mathematics

Teaching time

To provide adequate time for developing mathematical skills each class teacher will usually provide a daily mathematics lesson. This may vary in length but will usually last for about 45 minutes in Key Stage 1 and 50 to 60 minutes in Key Stage 2. Within these lessons there will be a good balance between whole-class work, group teaching and individual practice. Links will also be made to mathematics within other subjects so pupils can develop and apply their mathematical skills.

Out-of-class work and homework

The mathematics lessons will provide opportunities for children to practise and consolidate their skills and knowledge, to develop and extend their techniques and strategies, and to prepare for their future learning. These may be extended through out-of-class enrichment activities and homework. These activities will be short and focused and will be referred to and valued in future lessons.

Links between mathematics and other subjects

Mathematics contributes to many subjects within the primary curriculum and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will allow children to begin to use and apply mathematics in real contexts.

How we cater for most able pupils

The most able pupils will be stretched through differentiated work and extra challenges. When working with the whole class, teachers will direct some questions towards the more able to maintain their involvement.

How we cater for pupils with special educational needs

Teachers will include all pupils fully in their daily mathematics lessons. All children benefit from the emphasis on oral and mental work and participating in watching and listening to other children demonstrating and explaining their methods. Teachers will involve all pupils through differentiation and provide necessary support through use of resources and adult help. All our pupils will be supported with an personalized programme in the all parts of the lesson. Targets on their individual education plans (IEPs) will be a focus so the pupils are given steps to success and will achieve well over time.

How we cater for our younger pupils.

We promote social skills and the development of mathematical language and understanding. Teaching will be based on the objectives within the Skills Progression Matrix.

How we cater for pupils in receipt of Pupil Premium

For those pupils who qualify for Pupil Premium they may be allocated extra adult support and/or resources and invention programmes to close the gaps in their learning. If remote learning is required, we will work alongside parents and carers to support the pupils in accessing the curriculum from home.

Planning

Long term and medium term planning is structured following guidance set out in the Primary Framework for Mathematics.

Short term planning is very specific to meet each pupils individual needs.

These may include examples from the Primary Framework, other published resources or the teachers own ideas. Planning will include objectives for the lessons, success criteria, key questions, activities, learning powers, resources, vocabulary, differentiation and use of support.

Assessment

Assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

Teaching a unit of work will need careful initial and ongoing planning, informed by an assessment of children's learning. A cycle that supports this process in the Primary Framework for mathematics is set out below.

assess – plan – teach – practise – apply – review

Informal assessment will be a part of every lesson to check pupils' understanding and give the teacher information, which will help to adjust day-to-day lesson plans.

For permanently excluded (PX) pupils, formal assessments will take place each term to assess and review pupils' progress and attainment. Depending on the individual pupil needs this may include Standard Assessment Tasks (SATs) in Year 2 and Year 6 and the Multiplication Tables Test in Year 4.