

Intent

Maths is a skill that we use on a daily basis and is an essential part of everyday life. Therefore at Pentland Infant and Nursery it is our aim to provide children with a lifelong love of maths that will stay with them throughout their lives. We promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion. We use a variety of resources and strategies to promote confidence and competence with numbers and the number system. We understand the importance of develop reasoning and problem-solving skills and provide opportunities to develop these skills, allowing them to make useful connections to their prior knowledge and understanding. We want children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. Our curriculum is carefully planned and structured to ensure progression from the Early Years to the end of Key Stage 1. Children will explore features of shape and space and develop measuring skills in a range of contexts

Non-Negotiables

- *Children will have access to manipulatives in every lesson.
- *A maths working wall to be present and kept up to date in every classroom from Reception to Year 2.
- *All children will receive prompt feedback within each maths lesson and an opportunity to implement the feedback
- *Children in Key Stage One to work in mixed ability pairings, following the Mastery approach
- *All lessons will include opportunities for children to talk about their reasoning, using mathematical vocabulary

Maths Interventions

Same day 'keep up' sessions are taught to any children who were not secure with the objective in the daily maths lesson.

Implementation

At Pentland Infant and Nursery School we understand the importance of a variety of teaching and learning styles being used in mathematics lessons. Our principle aim is to develop children's knowledge, skills and understanding in mathematics, alongside their love of the subject. We do this through daily lessons combining of whole class and group teaching. In Key Stage 1 they last for approximately one hour. Teachers of the EYFS ensure the pupils learn through a mixture of adult led activities and pupil initiated activities both inside and outside of the classroom.

From Reception class to Year 2 we follow the White Rose Maths scheme of learning. We have created our medium-term plans in line with the White Rose small steps, but have altered the order to suit and benefit the needs of our children so that connections between units of learning are easier to recognise. Throughout our maths lessons we develop a fundamental understanding of the meaning and composition of each number, enabling children to have a rich understanding and apply this to their future learning. Daily, in the moment assessment is carried out, allowing for children to have the time to rectify their mistakes in a timely manner. Children develop their learning and understanding using a range of concrete resources. Whenever possible we attempt to present children with opportunities to use and apply their mathematical learning in everyday situations outside the discrete lesson to put their learning into context.



Maths at Pentland

'In a Nutshell'



Our priorities to improve maths are:

- *Working walls to be used in all classrooms, kept up to date with current learning and vocabulary
- *High focus on subject specific vocabulary
- *Ensure consistent approach to problem solving and reasoning skills throughout school, beginning in Early Years
- *Purchase PUMA assessment system to enable teachers and subject leader to identify gaps.

Impact

Monitoring of the standards of children's work and of the quality of teaching in Mathematics is the responsibility of the subject leader and senior leadership team. This is done by regular learning walks and the scrutiny of maths books. Timely feedback is then given to all staff to ensure that the teaching and learning of mathematics throughout school is consistently high. Children throughout school can confidently use a range of strategies and resources when tackling maths activities. They make connections and apply mathematical knowledge in other areas of the curriculum as well as in maths lessons. All children make good progress, measured from their individual starting points and the age related National Curriculum expectations. We want all of our children to enjoy maths and talk confidently and enthusiastically about their learning.

How do we assess our children?

Assessment for Learning within lessons is effective and is used to inform subsequent lesson or 'keep up' planning

End of unit/block assessments

Target tracker data input at the end of every half term.

In Maths lessons, you will see/hear:

- Lots of opportunities for the children to use manipulatives to explore and 'prove' their answers
- Lots of mathematical talk
- Problem solving and reasoning activities where all children are able to explain their working out
- In the moment marking and opportunities to make amendments

What do our pupils say about Maths?

"We learn about numbers. I know all about more than and less than" – Year 1

"We do counting, part whole models and fact families" – Year 2