

Northern Parade Schools – Maths Mastery

How we approach mastery at Northern Parade:

We follow the key principles for teaching for Mastery as set out by the NCETM:

- Maths teaching at Northern Parade rejects the idea that a large proportion of people 'just can't do maths'. There is a **positive ethos** surrounding maths and **high expectations of all children**.
- All pupils are encouraged by the belief that by working hard at maths they can succeed.
- Pupils are taught through **whole class interactive teaching**, where the focus is on all pupils working together on the same lesson content at the same time.
- If a pupil fails to grasp a concept or procedure, this is **identified quickly** and **early intervention** ensures the pupil is ready to move on with the whole class in the next lesson.
- Lesson design identifies the new mathematics that is to be taught, the key points, the difficult points and a **carefully sequenced journey** through the learning. In a typical lesson pupils sit facing the teacher and the **teacher leads back and forth interaction** including questioning, short tasks, explanation, demonstration, and discussion.
- **Procedural fluency and conceptual understanding** are developed in tandem because each supports the development of the other.
- It is recognised that practice is a vital part of learning, but the practice used is **intelligent practice** that both reinforces pupils' procedural fluency and develops their conceptual understanding.
- Significant time is spent developing **deep knowledge and key ideas** that are needed to underpin future learning. The **structure and connections within mathematics are emphasised**, so that pupils develop deep learning that can be sustained.
- Key facts such as multiplication tables and addition facts within 10 are learnt to automaticity to avoid cognitive overload in the working memory and enable pupils to focus on new concepts.