

Appendix to Compass Calculation Policy

Horn Park Primary School

Guidance for Teaching & Learning of Maths

Intent

As a school, we follow a mastery approach across our curriculum, ensuring knowledge is interlocking. Through the teaching of mathematics at Horn Park, every child has the opportunity to succeed, ensuring the famous line of 'I'm not good at maths' or 'I'm not a maths person' does not become part of their mindset.

Carefully planned learning sequences allow children to develop mathematical concepts and skills. The small steps required for mastery are taught with precision, allowing children to show application of fluency and their deeper understanding through problem solving and reasoning.

Our teachers are passionate about teaching with mastery in mind. Multiple members of staff have engaged with professional development opportunities with the London South East Maths Hub. This helps enable a school wide approach to using the mastery approach to mathematics.

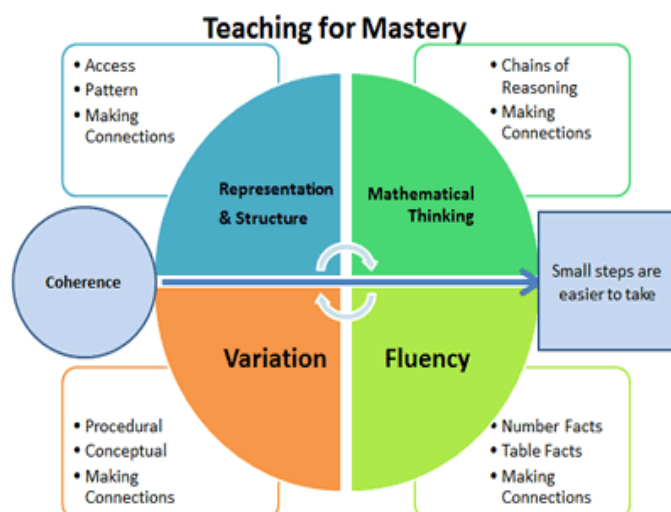
Mastery is not about memorising facts and procedures to answer test questions: it is about enquiry to develop an understanding in and manipulation of numbers to problem solve. This approach gives children the opportunity to acquire a deep, long-term, secure and adaptable understanding of the subject.

Progression

Based on the national curriculum, we have a Compass assessment and progression framework to support planning. Teacher utilise the White Rose scheme of learning, which provides suggested sequences and coverage of a mastery curriculum, that is used to support dialogue between year groups and the maths lead at the planning stage.

This planning of sequences is based on continual teacher assessment, ensuring that knowledge is interlocking with sequences that allow children to build deep conceptual understanding. This is also reflected in the school's medium term planning (MTP) format.

Implementation



A mastery curriculum has been embedded at Horn Park, based around sequential learning, where children have the opportunity to take small steps in any given concept to deepen their mathematical understanding. Through continual professional development, teachers actively plan to use of the mastery 'big 5 ideas' in all lessons.

Regular staff training and continual professional development (CPD) enables staff and leaders to keep their knowledge of the curriculum and mastery approaches up to date.

Planning and Resources

The White Rose provides teachers with a suggested sequence of learning, that is discussed and adapted according to assessment of children. Teachers use a variety of quality resources from White Rose and NCETM, which are readily available to staff through our shared drive. We believe that in order for children to be able to reason and problem-solve comprehensively, they need to see a variety of question styles and problems in every maths lesson.

Teachers use Rosenshine's principles to give children the opportunity to review prior learning, ensuring knowledge is deep and embedded in their long-term memory. Teachers provide high quality modelling, which is seen on learning walls, before children collaboratively solve problems and promote mathematical talk. In addition to this, children are also required to work independently to build confidence and allow teachers to assess individuals.

Early Maths

Our approach to maths mastery begins in the early years. The Early Years Foundation Stage Statutory Framework (2021) requires children to be provided with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; children learn to compare quantities and explore patterns within numbers including evens and odds, double facts and how amounts can be shared. Using Numberblocks (devised by Debbie Morgan), White Rose and the NCETM mastering number, children are provided with opportunities to ensure their knowledge and understanding of number is deep, readying them for the Key Stage 1 curriculum.

Scaffold and support

At Horn Park, we have developed a culture of precise teaching across all learning sequences. Children who have subject specific gaps in their learning receive interventions during assemblies as well as focus groups support during lessons. Within Maths starters, teachers will revisit different concepts and can also use it as a way of pre-teaching ahead of new areas of maths, helping to inform planning also.

Teachers use ongoing assessment in each sequence with regular opportunities for quizzing, as well as giving children opportunities to self-assess and review their own learning.

Whole School Approaches

At Horn Park, we fundamentally know that fluency of number is important for our children and will serve them well in life, whilst also preparing them for end of year 4 multiplication check. Through being part of the South East London Maths Hub Project into the teaching of times tables, the school uses a whole school approach to the sequential teaching of times tables.

This has ensured a sequential approach to times table teaching across the school by agreeing on the order of times table teaching and how to introduce a new times table. Teachers have a bank of high-quality activities to use either for 5 minutes daily or 3 times a week for 10 minutes.

Teachers in EYFS and KS1 have also been part of the mastering number pilot scheme run by the NCETM. This is shaping our approach to the progression in number facts learnt by children from EYFS through to the beginning of KS2.

Feedback

Teachers at Horn Park are advised to follow the Compass feedback policy. Teachers use live feedback during lessons to spot misconceptions and deliver verbal feedback to scaffold children's support.