



Maths at Hanwell

Intent

“Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers.”

Shakuntala Devi, Indian writer and mental calculator

Maths teaching at Hanwell is based upon a fundamental belief that all children can achieve confidence and competence in mathematics, building fluency, a deep conceptual and procedural understanding through prolonged and varied practice.

Mathematics is an interconnected subject in which our pupils move fluently between different representations of mathematical ideas. Lessons are not based around the answer but the process. Using the Mastery approach, our children feel like mathematicians; working collaboratively they explain “how” they know using accurate mathematical language and drawings.

Implement

- As a school we use Power Maths (a mastery approach) as a planning framework to support teacher's own subject knowledge and workload.
- Children have an hour maths lesson and work in mixed-ability pairs.
- The lessons include a warm-up which ensures the children have the prior knowledge necessary to allow them to access the learning.
- Throughout the lesson there will be opportunities for all children to be successful, using scaffolds and small steps to achieve this.
- Each lesson uses a range of representations (drawings) and manipulatives (maths resources such as diennes) to support developing conceptual understanding.
- Children's understanding is deepened throughout the lesson with varied fluency.
- Pre-teaching is used to support developing mathematical language and re-capping key skills to enable all children to access the learning.
- Children have discrete fluency sessions which support children in making connections between known and unknown facts.
- Times tables facts are taught through a mixture of songs, games, repeated practice and opportunities to discuss different methods.
- Live marking, and the use of whiteboards, gives teachers instant feedback throughout every lesson on the progress each child is making.
- ‘Scoop and group’ ensures those not yet able to access the learning are supported by the teacher in their developing understanding in every lesson
- Age standardised tests (PUMA) are used termly to inform teaching and identify gaps in children's knowledge and ensure whole school standards.

Impact

Pupil voice tells us that children at Hanwell enjoy mathematics. They believe that mathematics is important and relish the challenge. Our children recognise the answer is only the beginning and are investigative and methodical in their approach; differing approaches are recognised and valued. Mixed-ability seating enables all children to be successful at the level they are working at, whether explaining their understanding a range of different ways or using resources to show developing knowledge. Children are ready for the rigours of secondary curriculum.