



Nettlesworth Primary School Mathematics

Intent

At Nettlesworth Primary School we recognise that Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. We aim to provide a high-quality mathematics education with a mastery approach so that all children:

- become fluent in the fundamentals of mathematics;
- reason mathematically;
- can solve problems by applying their mathematics. (National Curriculum 2014)

Implementation

At Nettlesworth Primary School we use Scholastic Maths in years 1-6, which have been written to support teachers in all aspects of their planning whilst delivering Maths Mastery methods effectively. Teachers also use Testbase to differentiate mental arithmetic questioning and Times Table Rockstars/Numberbots to promote home/school learning. Teachers are provided with an additional three planning days per year in addition to their PPA, to plan. As part of this process, teachers need to plan the following for mathematics lesson.

- Precise questioning to test conceptual and procedural knowledge.
- How and when manipulatives will be used within in each lesson to scaffold difficult tasks.
- Low stake quizzes to support learner's ability to block learning and increase space in their working memory.
- Tasks and challenge questions to challenge pupils to apply and deepen their learning and mathematical reasoning.

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS profile document. Mathematics development involves providing children with opportunities to practise and improve their skills in: **Number** -Children at the expected level of development will: - Have a deep understanding of number to 10, including the composition of each number; 14 - Subitise (recognise quantities without counting) up to 5; - Automatically recall (without reference to rhymes, counting or other aids) number bonds

up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns- Children at the expected level of development will: - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. We continually observe and assess children against these areas using their age-related objectives, and plan the next steps in their mathematical development through a topic-based curriculum. There are opportunities for children to encounter Maths throughout the EYFS (both inside and outside) – through both planned activities and the self-selection of easily accessible quality maths resources. Whenever possible children’s interests are used to support delivering the mathematics curriculum. Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with a structured lesson / activity.

Impact

Our mathematics curriculum is based upon Scholastic Maths resources which are fully supported by the Department for Education as they meet the requirements of the new curriculum. The Scholastic Maths Primary School series has been created specifically for children living in the UK and is fully aligned to the 2014 curriculum. It provides all the elements that teachers need to teach Maths mastery with confidence and encourage children to talk using maths language and use conceptual problem solving. We measure our impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes;
- Termly assessment using Rising Star Assessments, which is a suite of termly standardised maths tests which enable school to track progress, predict future performance and benchmark against national averages;
- Weekly Mental Arithmetic Tests.
- Pupil discussions about their learning.
- TimesTable Rockstar weekly sessions.
- Numberbots weekly sessions.