Curry Mallet C of E VC Primary School

Mathematics Curriculum Overview

Curriculum Lead: Nicola Poulton

Our curriculum approach to mathematics reflects our ethos statement: 'We live life in all its fullness'. In particular, we are keen for pupils to discover their own passion for mathematical learning.

Intent

To be inclusive and engaging for all, constantly building on our children's progression in knowledge, skills and understanding. For all children to become resilient, fluent mathematicians who are able to problem solve and reason mathematically. For children to have the opportunity to develop a sense of enjoyment and curiosity about mathematics. For children to be encouraged to make connections and apply their skills and knowledge across other curriculum areas.

Implementation

All children will study mathematics daily. To ensure consistency, the school uses the DfE approved 'Power Maths' materials. At the beginning of each new maths unit, new concepts are 'pre-taught' in 'starter sessions' to re-awaken previous knowledge and make learning links, revise previous mathematical vocabulary and to explain the meaning of any new mathematical vocabulary about to be visited. The National Curriculum maths objectives are then broken into small coherent steps and are delivered in daily lessons to facilitate understanding. Every new concept is introduced through an initial problem-solving activity that encourages class and group discussion and offers opportunities to reason and problem solve. Great emphasis is placed on using current mathematical vocabulary to strengthen reasoning. In KS1, a focus on responding to mathematical questions with a sentence is a key strategy. All children are supported in their understanding through the use of concrete, pictorial and abstract materials.

To ensure that children progress through the maths curriculum at the same pace, misconceptions and difficulties are identified and same day interventions are used where possible and/or next day intervention starters are used in order to overcome gaps in learning.

Alongside daily mathematics lessons, we use Number Sense which has a systematic approach to developing factual fluency in Reception and also as lesson starters in Years 1 – 3. It is also used as an intervention programme where needed across KS1 and LKS2.

Across the school, number fluency is also improved with the use of Numbots in Year 1 and Times Table Rockstars in Year 2 – 6. The Boolean Maths Hub Times Table Challenges are used twice a day (where possible) to support recall and accuracy of times table and division facts across KS2.

Within our mixed year group and mixed key stage classes, every year group is taught separately by either by the class teacher or teaching assistant under the direction of the class teacher. Teachers rotate year groups taught to ensure that all children receive teacher input. This rotation may happen weekly or mid-way through the week depending on the theme and children's needs.

Adjustments to reflect Covid closures:

Following assessment on return to school, teachers have used Ready to Progress materials to teach areas of missed learning and understanding. Additionally, we use Number Sense and Boolean Maths Hub Times Table Challenges to improve number fluency and the accuracy and recall of times table and division facts.

Impact
At each stage, progress will be monitored to ensure every child has developed secure and deep understanding of mathematical concepts so that they are able to apply these within a range of contexts. Children are able to use correct vocabulary and be able to see relationships and make connections to support their reasoning.

Planning
Year 1 – 6 Maths
Teachers use 'Power Maths' materials to support their planning and delivery of the mathematics curriculum in manageable steps. There are separate yearly overviews for each year group, which reflect the workbooks and textbooks which class teachers use with pupils. These are divided into year groups: Year 1, Year 2, Year 3, Year 4, Year 5 and Year 6.

Reception Maths
'Power Maths' is not used for teaching maths in Reception because we feel that it is too heavily based on work books which we feel is not right for our Reception's Play-based approach to learning. Instead, Number Sense is used as it is written to tie closely to the 2021 statutory framework. It covers all the number elements of the framework, with the exception of counting. The programme's systematic approach provides a coherent teaching sequence to develop a deep understanding of numbers to 10. In addition, the programme suggests a progression for the Early Learning Goal of Numerical Pattern. Alongside Number Sense, Numberblocks (BBC) and NCETM teaching materials are also used. Number Sense have mapped Numberblocks against their scheme to ensure correlation.

Knowledge and skills progression through the school

Teachers use the Power Maths planning guidance materials which shows how our long-term plan for math's feeds into the short-term plans for each term and topic theme. Each theme clearly demonstrates how mathematical learning lesson sequences are increasing the depth of understanding and range of knowledge throughout the primary years.

Recording
Children record their mathematics in individual workbooks. Maths is marked in line with the school marking policy. Not all children will complete the 'Challenge' or 'Reflect' section in their workbooks. The 'Reflect' question may be used by the class teacher to draw a lesson or concept together and form part of their summative assessment.

Assessment
Teachers use children's responses, as well as their workbooks and End of Unit Check Ups as part of their ongoing summative assessment. An ongoing record is kept of the children's responses to the End of Unit Assessment questions in order to highlight any further intervention/follow-up work needed.
Each term, for Years 2 – 5, and at the end of summer term for year 1, a NFER formative test is carried out and teachers use this information to ensure children have secure knowledge and to identify any gaps in learning or misconceptions to be addressed. Likewise, Year 6 children are regularly assessed both during the term and at the end of term using past Statutory Assessment Test materials and gaps in knowledge or misconceptions are identified and addressed.

Reporting

On our annual reports, which are given to parents at the end of the year, a judgement will be made regarding their child's attainment in Maths relating to the national curriculum for their year group. For example, WT (working towards national standard for age), WA (working at national age related standards), GD (working at greater depth for age).

Monitoring

Curriculum leader to work alongside teachers and teaching assistants to ensure consistency and delivery of Power Maths. Evidence in books, learning walks, speaking to pupils about their learning and discussing with colleagues what has gone well as well as any lessons learnt will all help to form picture of the progression of individual children in maths as well as ensuring the coverage of the national curriculum for each year group. Where relevant the implementation of school polices (such as marking) will be reviewed to ensure the workload for maths is both manageable and is making an impact on the children's learning.

Review

October 2023