Mullion CP School
Mathematics Subject Offer

Intent

It is our intention that our Maths curriculum ensures that the National Curriculum requirements are not only met, but children receive a broad and rich learning experience. Maths teaching and learning provides children with the opportunity to become number fluent and increase their problem solving and reasoning ability. Through quality first-teaching, children experience learning in a variety of ways, using different resources and approaches including concrete, pictorial and abstract methods. Our vision is to equip our pupils with key skills, knowledge and vocabulary that will enable them to be successful at all elements of the maths curriculum, through meticulously planning the content of lessons and providing children with high-quality lesson resources. Children's success is embedded through providing a challenging curriculum; this curriculum is delivered in a variety of high-quality teaching and learning opportunities. These include daily morning maths, daily fluency recall practice and development of Key Instant Recall Facts (KIRFs) and high-quality learning experiences, both during allocated maths lessons and through the wider curriculum. We identify any pupils who need additional support both on a day to day basis and over a sustained period of time; we ensure that suitable strategies are put in place to support these pupils, through 1 to 1 or small group work, targeted, same-day interventions and pre and post teaching or reteaching of key concepts or skills. We celebrate success and provide opportunities to showcase talent, both in individual classes and as a whole school through use of displays and Virtues assemblies.

Implement

The Maths curriculum at Mullion CP School is mapped out by the White Rose Maths Hub schemes of work and is assessed through Star Assessments and White Rose assessments at the end of each term. Teachers also use the White Rose end of block assessments, once a block has been taught in full and embedded. Teachers use a variety of resources to enable pupils to be successful including White Rose Hub, Deepening Understanding, NCETM and Master the Curriculum. High-quality teaching and learning provides children with the opportunity to become number fluent and increase their problem solving and reasoning ability.

Because of this, we teach using a 'top-down' approach with children in mixed-age classes (with the exception of Year 6) and mixed-ability groups and/or pairs. Our focus is on depth rather than breadth, therefore we teach age-appropriate objectives and ensure that they are fully understood and can be consistently applied in varied contexts. More able children are encouraged to challenge themselves through the use clear explanations or self-initiated 'dive deeper' tasks. All children are expected to reason and problem solve regardless of perceived maths ability and not as an additional activity in a lesson. Maths is delivered in a way that enables pupils to regularly practice key skills and apply them in a variety of contexts.

The school are working with the Maths Hub and further schools in the Southerly Point Co-operative MAT in order to create a shared vision and practise new teaching methods. Good practice strategies are shared with staff regularly and staff meetings, shared planning sessions and collaborative working across school allow best practice to be shared.

The teaching and learning of maths is delivered through:

- Daily morning maths activities (10-15 mins per day). These activities are an opportunity for children to consolidate calculation strategies and to revisit areas already taught.
  Weekly morning maths is delivered and structured as follows:

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January 2020

Monday: skills covered in current block of learning (to recap the previous week's learning)
Tuesday: skills covered in previous blocks of learning.
Wednesday: practise of the current half term's KIRFs
Thursday: multiplication/division quick facts; linked to develop fluency (e.g. 12 x 10, 12 x 100, 12 x 11, 12 x 110, 12 x 220, 12 x 1.1)
Friday: fast ten (mixed fluency skills practice)

- High-quality teaching and learning (5 hours per week).
- Practise of KIRFS (in morning maths fluency any short periods of available time). The main focus for these is mapped out in the whole school KIRFs document; these are derived from the National Curriculum and White Rose Maths Hub's small steps guidance.
- Time Table Rockstars is used to practise and consolidate knowledge and recall of times tables and number bonds (at least once per week in Years 3-6)

In children's learning books, you should see a variety of fluency, reasoning and problem solving activities, providing children with an opportunity to apply previously-taught skills in order to embed and excel in mathematics.

Impact

The impact of our Maths offer is measured through our monitoring cycle. This includes book looks, learning walks, pupil voice, lesson observations or drop ins. Once reviewed, the subject lead analyses aspects that are working well and areas for improvement and these are shared with individual staff or the whole school, dependant on which would lead to better practice.

We assess and track maths progress using Star Assessments and White Rose assessments at the end of each term; teacher assessment for learning occurs on a daily basis. We also assess KIRFs at the end of each term, as well as the White Rose end of block assessments.

Below is an outline of the impact we are looking for in our pupils in the curriculum area of Maths:

- Children enjoy maths and see its relevance.
- Children are number fluent and are confident exploring number.
- Children are confident in using the four operations.
- Children are accurate with a range of arithmetic methods.
- Children make links between fractions, decimals and percentages.
- Children are confident to apply their learning in a range of contexts.
- Children have the required skills to apply their knowledge to reason and solve problems.
- Children can use perseverance skills and are determined to be successful.
- Children know which equipment to use to support their learning; when the opportunity arises, they select resources with independence.
- Children are equally confident in abstract, pictorial and concrete learning.
- Children have an ever-increasing knowledge of maths in the real world.
- Children can articulate and explain why maths is important.

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