

Sutton in Craven C.E (V.C) Primary School

Mathematics Curriculum Statement



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to

matl *Flourish together, in the love of God, to live life in all its fullness.* the children to achieve the knowledge and skills by the end of each year group following the 2014 the National Curriculum for Mathematics.

We aim for all children to:

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- Become fluent in the fundamentals of Mathematics and develop strong number sense
- Have the ability to reason mathematically using the correct and appropriate vocabulary
- Solve problems by applying their Mathematics knowledge, skills and concepts

The principal focus is to ensure all children develop confidence and mental fluency with numbers, develop solid conceptual understanding of operations and number relationships. Through working with numbers, the four operations and with the support of hands-on manipulatives, pupils can carry out mathematical calculations, problem solving and investigations. They become adept in using their rich mathematical vocabulary to reason and explain, find connections and patterns. They are taught to apply their mathematical knowledge and understanding to a variety of problems by breaking them down into smaller steps and working methodically.

Our mathematics curriculum carefully sequences knowledge, concepts and procedures to build mathematical knowledge and skills systematically over time.

We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically once fluency skills have been secured. We are committed to developing children's curiosity and love of the subject to create enthusiastic, life-long mathematicians.

Implementation

Children at Sutton in Craven C of E VC Primary are taught the mathematics curriculum for their appropriate year group. In our mixed age classes, children are taught a shared area of mathematics, for example, number and place value yet will be covering all learning objectives /knowledge and skills for their specific year group. The result of this is that children in a year group will move through the curriculum at broadly the same pace, achieving all end of year expectations.

We use a CPA (concrete- pictorial-abstract) approach ensuring children see the connections in maths; by encouraging them to model, show and prove using concrete manipulatives and/or pictorial representations, children strengthen their understanding and grasp. We ensure all children are encouraged to not only use mathematical equipment to support their understanding but also to demonstrate and explain their mathematical thinking, therefore mastering a concept.

To ensure whole school consistency and progression, our curriculum follows the NCETM Ready to Progress criteria and sequencing of lessons as well as the White Rose Maths small steps framework. This provides sufficient opportunities for revisits of previously learned knowledge, procedures and concepts before progressing to new material. It also breaks down each mathematical area into small steps in order to make learning progressive and cumulative.

Children are taught;

• To use appropriate and specific vocabulary in maths lessons.

- The skills to use methods independently and show resilience when tackling problems.
- To move between different contexts and representations of maths.
- To show a high level of pride in the presentation and understanding of their learning.
- To recognise mathematical relationships and make mathematical connections in maths lessons.
- To know how and why maths is used in the outside world and in the workplace.
- To know a concept or skill is mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

In EYFS, a range of Mathematics activities are provided for the children to access independently, in order to practise their skills, or through an adult led activity, in order for children's understanding of Mathematics to be strengthened. It is important to ensure that the children see and use mathematics in as many practical and real -life contexts as possible e.g. outdoors and through role-play. Throughout the curriculum, opportunities exist to extend and promote mathematics. Teachers seek to take advantage of these cross-curricular links which are detailed in their long-term plan.

Key Stage 1

There is an additional 15 minute lesson three times a week on Mastering Number (Reception, Year 1 and Year 2) Using a Rekenrek efficiently and accurately, this is to allow children to gain greater number sense to develop fluency and flexibility of number facts and relationships in order to apply successfully in calculation strategies and beyond.

Assessment and Impact

Teachers assess children's learning in mathematics in three phases. In every lesson, teachers formatively assess children's understanding through verbal feedback and marking in books which informs teachers' planning to ensure challenge but equally to support understanding and address misconceptions.

Our mathematics long term plan shows coverage throughout the year and within units there are concepts that are revisited. For example; in number and place value children will apply their knowledge and skill through measure, in number facts, measure will also be taught, measure can also be seen when fractions are taught.

Teachers use pre-unit assessments to establish children's prior knowledge and support with planning the unit of work. Post-unit assessments enable teachers to see where support of key objectives is still needed and may require more focused intervention, provision and support. This enables gaps in knowledge and skills to be identified effectively and in a timely fashion so that children can catch up and keep up.

Children complete termly summative assessments known as Progress and Understanding Maths Assessments (PUMA) which assess against yearly learning objectives. Teachers use these end of term assessments alongside their continual teacher assessment to pinpoint gaps in learning for the class or for individual children. Children in EYFS are assessed through adult-led activities and observations.

Children undertake the national tests at the end of Year 2 and Year 6, plus assessments at the end of Years 1, 3, 4 and 5. All assessments are recorded for analysis by senior leaders and the subject leader.

Pupil voice

Through discussion and feedback, children talk enthusiastically about their maths lessons and speak about how they love learning about maths. They can articulate the context in which maths is being taught and

relate this to real life purposes. Children show confidence and believe they can learn about a new maths area and apply the knowledge and skills they already have.