

Maths Curriculum

Intent

To ensure that all children from EYFS to Year 6 become fluent and confident in the basics of mathematics, through well-planned engaging activities. Children will develop their understanding, the ability to recall and apply knowledge rapidly and accurately. This in turn is to support children in developing their ability to reason and problem solve through the use of a range of mental and formal written strategies. We actively encourage our parents and carers to become involved in their children's mathematics learning in a variety of ways e.g., parent workshops. Our curriculum enables all children to be confident in applying taught strategies to increasingly complex problems. This includes the use of mathematics in a wider range of subjects across the wider curriculum including science. With this in mind, we encourage resilience, and acceptance that being challenged is often a necessary step in learning. Teachers plan sequences of lessons to suit the needs of all pupils, particularly disadvantaged and SEND, ensuring that all children can reach their full potential. Children will leave with the confidence and ability to tackle mathematical problems and to continue their Mathematical learning in the next stage of their education and future careers.

Implementation

Early Years Foundation Stage

In EYFS, mathematics is interwoven within the learning environment of the children so that children can locate equipment and resources independently. Mathematics within nursery is implemented through a variety of child-initiated learning and adult-directed activities with staff trained in the use of open-ended questions to ensure that no learning opportunity is missed.

The adult-led mathematics within Reception is taught in a more formal manner, when appropriate for pupils, where ability groups are used to ensure that all pupils receive the appropriate teaching. This has a 'sequential teaching focus' to ensure that essential building blocks are achieved and embedded. Alongside this, children continue to have the opportunity to develop their mathematical skills during child-initiated learning. Mathematics is taught through weekly blocks of learning which create a comprehensive long-term plans covering all relevant AREs and learning outcomes from the EYFS curriculum. Staff ensure that the learning of all pupils is underpinned by playing and exploring; active learning and creating and thinking critically.

Key Stage 1 & 2

All learners are provided with at least five lessons each week: four main teaching lessons and one number-based arithmetic lesson. Arithmetic skills will be introduced progressively, supporting learning taught weekly based on blocks from the long-term plan. Fundamental skills are taught and revisited presented in a variety of ways based on on-going formative assessment of pupils. Teachers will use our arithmetic checklist to ensure a range of skills are taught progressively and provide a guide for which skills should be embedded by the end of the academic year.

The mathematics long term plan is a curriculum of blocked units, allowing key arithmetic skills to be re-visited throughout the year and embedded through the different units of work. Year groups refer to the medium-term plan to ensure a progressive sequence of lessons is planned out for each blocked unit. Planning will take account of pupils' experiences and capabilities and the long and medium-term plans ensure that all the requirements in the individual year group's programme of study from the National Curriculum 2014 are taught within each year.

Each lesson will have an OMS (Oral and Mental Starter) which will have a clear Learning Objective to enable pupils to rehearse key mental maths skills, re-visit prior learning, overcome misconceptions. Wherever possible, the OMS will link to learning in the main mathematics lesson as a springboard for pupils' main learning focus. A clear LO and set of STL (steps to learning) are expected for every lesson and for each ability group with classes, which support learners in their independence and allow them to problem solve. All AREs are broken down into smaller, achievable LOs when planning lessons. Staff plan appropriate and engaging activities that enable all pupils to demonstrate their fluency, reasoning and problem solving activities ensuring learners are challenged whilst having the opportunity to embed their skills through carefully selected mathematical challenges relating many to real-life situations.

Multiplication Tables

Multiplication tables are of great importance at Elston Hall and learners' progress is valued and celebrated. The Superhero Times Tables scheme has been carefully developed with learners taking part in individual challenges against the clock progressing through the times tables system and improving their speed and accuracy. This is built alongside quality teaching following the carefully developed Times Table Overview ensuring progression throughout the key stages. Times Tables Rockstars also allows learners regular practice in a safe but individually competitive environment.

IMPACT

Learners will make progress over time, from Early Years to the end of Key Stage 2, reaching aspirational targets and therefore achieving Age Related Expectations as a minimum. Clear, progressive calculation policies and planning systems including monitoring will enable teachers to organise and deliver high quality lessons ensuring all pupils can have the opportunities to achieve in all areas of mathematics. During the learning process, learners will develop their independence and realise the value of mistakes in the learning process showing perseverance to overcome more complex mathematical challenges and succeed. Learners will develop and embed a range of number calculations including fractions, decimals and percentages enabling them to use formal written methods accurately as well as developing their mental strategies. They will be able to use these skills in everyday life situations confidently resulting in learners becoming confident, fluent young mathematicians equipped with the skills to answer a range of mathematical questions and set them on the right path to continue their mathematical journey into secondary school and beyond.