INTENT

Rationale:

At Haxey Primary, we want our pupils to have no limits to what their ambitions are and grow up with a secure mathematical understanding which will assist them in whichever career path they take, as well as in their daily lives. In order to successfully deliver a structured, rich curriculum with a clear progression of skills, we follow the statutory requirements of the National Curriculum for mathematics. Our curriculum is designed to enable our pupils to develop a secure understanding of each area of mathematics, recognising the rich and varied connections between them. It is our intention to ensure that all children are fluent in fundamentals of mathematics. Children are encouraged to be flexible and adaptable, applying their learning to investigate, reason and solve increasingly sophisticated problems. Through mathematical talk, children will develop the ability to articulate, discuss and explain their thinking. We aspire to develop a natural curiosity and love of maths, where children are equipped with the confidence, resilience and resourcefulness needed to use maths within all aspects of everyday life.

Our maths curriculum is a spiral curriculum in which daily lessons cover required curriculum content and re-visit prior concepts to encourage essential learning connections and to consolidate.

IMPLEMENTATION

Teaching in maths follows the Mastery approach and is taught in units of work. Teachers use White Rose Maths to plan the learning journey which is broken into small steps, with pre-requisite skills and possible misconceptions identified. Resources are, usually but not always; WRM, Target your maths, TT Rockstars, CGP, NCETM, NRich and Classroom Secrets in Years 1-6.

Each new concept usually starts with practical activities that develop conceptual understanding through the use of concrete objects and manipulatives. This is then developed with pictorial representations before finally introducing abstract recording. Once a skill has been taught it will then be developed through application and reasoning tasks. Teachers use the calculation policy to ensure consistency and progression in the use of representations and calculation methods.

Because pupils are all being introduced to a new concept, they start at the same point in whole class teaching. As the learning progresses, children with less understanding are supported by the continued use of the visual and pictorial representations in order for them to keep up with the understanding of concepts. In a few cases, where pupils are working significantly behind their peers, children have their own programmes of work, supported by a TA.

Those children who demonstrate a greater depth of understanding within a unit of work are stretched through the use of higher order questions and challenge activities that build on the objectives being taught. As we use the Mastery approach all children are offered the opportunity to reach greater depth without a ceiling being put on their learning.

Daily use of Flashback 4 ensures revision of all work covered as well as rehearsal of the new concepts being taught.

Evidence of work - Maths books and other records of work should include a range of activities and reflect the types of tasks that demonstrate evidence of an individual's level of assessment.

Mathematics in Foundation Stage is taught in three weekly blocks as per the White Rose Maths scheme, which cover the two strands of Mathematical development: Number and Numerical Pattern. Alongside WRM, Numberblocks and Karen Wilding Early Years Maths strategies, with a heavy focus on subitising to embed knowledge of number and number bonds using 5 and 10 frames, are used. Whole class inputs are given daily linked to specific learning objectives and may be followed up by adult led activities and child initiated activities both indoors and outdoors. These activities include exploring numbers, shapes, space and measures through: counting, drawing, painting, singing nursery rhymes, playing games, problem solving, routines and creating patterns.

IMPACT

We will assess the impact of the maths curriculum through ongoing assessments which will inform teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards.

Assessment is through ongoing formative teacher assessment and termly tests (WRM assessments). Pupils are assessed on their depth of understanding, assessing fluency in the skills, their application within problems and investigations and greater depth through more complex problems and reasoning activities. From this, pupils are 'levelled' at E (entering), D (developing) or S (secure) and entered into O'track to monitor and evaluate progress and achievement.