Maths Curriculum at Stamshaw Infant School

Intent

At Stamshaw Infant School we believe that children should be instilled with life-long numeracy skills and knowledge that will aid them in their future successes. Through teaching using the mastery approach our intent is that children will have a deep, long term, secure and adaptable understanding of the interconnecting concepts of mathematics, which they will achieve through practise and fluency, that they will then be able to apply to solve a variety of problems. Children should be able to reason about the concepts they master. Children should make steady progress in their learning of mathematics during their three years of infant school that is personalised to each individual. We want children to feel positive and confident in their learning of maths and derive enjoyment from their mastery. We aim to instil this belief in children that if they work hard in maths, they will be successful.

Implementation

Mathematics is taught 4-5 times a week in Key Stage 1. We follow a scheme called Primary Stars to help us structure our learning and ensure we meet the objectives set out in the National Curriculum. This scheme follows the mastery approach which explores concepts concretely, pictorially and abstractly. This approach is designed to ensure that children have a deep understanding of maths that can be applied to a variety of problems as well as becoming fluent in the most efficient procedures needed to reach an answer. A variety of mathematical representations such as bar models, ten frames, part-whole models, number lines and arrays are used throughout the school. These have been shown to cement children's understanding of maths.

All children within a class will work on the same mathematical concept at the same time. The most able mathematicians will be extended through activities that require a deeper level of thinking and application of the key skill being taught. Additional adults are used to scaffold and support children's learning where necessary ensuring all children progress through the curriculum at a broadly similar pace. There is very clear progression across the three year groups. Teachers assess children's understanding and build upon their existing knowledge, constantly extending and broadening within each lesson. Teachers from each year group will meet before a new year begins and give detailed transition information about each child to aid this process. EYFS use the 'Development Matters' document to plan their teaching of maths which is in line with the new Early Years Framework. Activities are linked to current topics to engage children and expected outcomes are differentiated according to ability.

As well as discrete maths lessons, children's mathematical understanding is frequently reinforced throughout the day. This could be through counting practice during the register, reference to the calendar each morning as well as drawing attention to the time at different stages of the day. Children become fluent in key mathematical facts through frequent practice during quick starter activities at the beginning of each maths lesson.

Impact

Children enjoy, and are engaged in their maths learning. They feel supported by staff and activities are pitched with an appropriate level of challenge. Children demonstrate the fluidity required to move between mathematical concepts and representations as well as independently applying their mathematical skills and knowledge across other areas of the curriculum. Children become confident in using a range of appropriate mathematical terminology. Children's progress is assessed by teachers throughout lessons as well as away from the point of teaching. Children will not move onto the subsequent concept until they have mastered the concept they are currently working on. End of Key Stage outcomes show that the percentage of children achieving age related expectations exceeds the national average.