



Children First

Maths Curriculum

Intent

At Dovecote Primary School our maths curriculum is intended to empower all pupils with the ability to think and talk like a mathematician. Children experience maths every day within their lives; from getting dressed, travelling to school, playing games, sharing snacks, the list is endless, so we aim to build confidence in maths by reinforcing its relevance and building upon this by offering enriching experiences that connect maths to the whole school curriculum.

We have adopted a mastery approach with the confidence that it will ensure we raise children's attainment in maths at Dovecote. Our curriculum is based on the Maths No Problem mastery programme specifically selected for its alignment with the National Curriculum aims to develop fluency, reasoning mathematically and problem solving but also for its goal to promote deeper thinking and communication. Mastery teaching principles encourage pupils to visualise maths, look for patterns and make decisions without resorting to rote learning.

Our overarching aim is that pupils leave Dovecote having been inspired by a belief in a growth mindset and confidence that everyone can do maths. Pupils will be excited for the wide-ranging possibilities of a future ahead of them, armed with a sound understanding of number and a positive, resilient approach to problem solving.

Implementation

Our Early Years pupils experience their maths learning through a carefully designed programme with a mastery approach based on the Early Learning Goals and our involvement with the mastery projects for Nursery and Reception. Pupils encounter maths all around them within an engaging indoor and outdoor environment¹ and through planned play opportunities. The children develop early number sense through subitising and counting principles. This ensures a smooth transition as they move into Year 1 and begin their Key Stage 1 journey equipped with a deeper understanding of number, familiarity with resources and an expectation to articulate their maths thinking.

Each class in Years 1-6 has a daily 10-15 minute Number Sense session dedicated to reinforcing number fluency, making connections and having fun with numbers. This has been developed in KS1 through the use of ten frames and teaching early addition and subtraction strategies, stemming from our involvement in the Nottingham Number Fact Fluency project.

Maths No Problem is a spiral curriculum for Years 1-6 which builds on previous knowledge and content is revisited to ensure knowledge is embedded. Staff use White Rose and NCETM mastery resources to supplement lesson planning as well as support and challenge activities. A daily 45 minute maths lesson provides opportunities for pupils to work collaboratively as well as independently with an emphasis on clearly explaining their thinking and reasoning in full sentences. This is a current focus throughout school as we work to develop the use of Stem Sentences and promote the accurate use of mathematical vocabulary. Our intention is to improve confidence and oracy skills which will impact positively upon all areas of learning, as well as maths.

Lighthouse² is an immediate and individualised intervention provision we use to support pupils as needed in Key Stage 2. In addition to this we use the expertise of teaching assistants working alongside class teachers within the classroom to offer support and challenge as required.

Special half termly maths days are planned within each year group to provide enrichment by making links to the wider curriculum and real life experiences. Each year we run a STEAM festival; visitors are invited into school and every child has the chance to be creative in their learning by taking part in unique experiences.

Impact

Achievements of children in Nursery and Reception are observed, recorded and displayed on the Learning Walls and then in their Special Books by teachers and teaching assistants.

In Years 1-6 class teachers engage in daily assessment for learning to inform planning and also at the end of a chapter of learning. Children receive positive verbal feedback during lessons which includes careful questioning to support or deepen learning. As needed, additional time is devoted to addressing misconceptions. A MNP mid and end of year check informs teachers of potential areas of weakness and they also assist with end of year teacher assessments. Teachers are involved in a pupil progress meeting each term in which specific individuals needing support and challenge are identified. Achievement teams meetings allow for a collaboration between staff to discuss strategies we may use to carry out this work and to share the impact that it has on the individual learner.

Notes:

¹Our EYFS maths areas within the environment have been temporarily withdrawn to meet the requirements of the guidelines for a Covid-19 response.

²Children who would access this support strategy will temporarily receive additional support within the classroom as part of our adaptations for a Covid-19 response.