

Heron Cross Primary School - Maths

Intent:

At Heron Cross Primary School, maths is viewed as an essential tool in understanding the world around us; we therefore have a clear vision, to provide a curriculum that is ambitious, broad, and balanced. This includes ensuring that all pupils develop a deep understanding of mathematical concepts and acquire the necessary skills to apply their knowledge confidently. The intent is to foster a love for Maths and develop a growth mindset in pupils, enabling them to embrace challenges and view mistakes as part of the learning process. The curriculum design, supported by White Rose Maths, is coherent, sequential, and ensures progression in knowledge and skills from Early Years Foundation Stage to Key Stage 2. It reflects a mastery approach, encouraging all pupils to achieve a high level of proficiency.

The intent also emphasises the application of Mathematics in real-life contexts, fostering cross-curricular links to enhance relevance and engagement. Furthermore, the school promotes a positive attitude towards Maths, celebrating achievements and providing opportunities for children to showcase their mathematical abilities through various avenues such as competitions, displays and assemblies.

In addition, the intent is to instil in pupils the belief that they can succeed in Maths and use it as a tool to solve real-life problems. A strategic, creative and practical approach to teaching maths supports children in discovering that maths is the building block for everything in our daily lives, including mobile devices, architecture (ancient and modern), art, money, engineering, and even sports.

Implementation

Curriculum Design

Our curriculum, following the White Rose Maths scheme, is carefully sequenced and well-structured, allowing pupils to build on their prior knowledge and develop a deep understanding of mathematical concepts. The curriculum is designed to ensure that pupils are exposed to a wide range of mathematical topics, including number, geometry, measurement, statistics, and problem-solving. It incorporates opportunities for pupils to reason mathematically and develop fluency in key mathematical skills. We ensure that arithmetic is taught weekly in order to frequently recap the basic skills needed as a tool to complete more difficult mathematical concepts. In Early Years and KS1, Mastering Number is used to support children with understanding the relationship between numbers and to further develop their 'number sense'.

High Quality Teaching

Our Maths education is underpinned by high-quality teaching that is informed by evidence-based pedagogical approaches. Teachers use a variety of resources, manipulatives, and visual representations to make abstract mathematical concepts more concrete for pupils. They employ effective questioning techniques to probe pupils' understanding and encourage them to articulate their reasoning. Additionally, teachers provide targeted support and extension activities to meet the needs of all learners, including those with special educational needs and disabilities. Teachers also encourage the use of maths outside of the classroom, including when children are at home, by setting up challenges and competitions using online platforms such as: TT Rockstars (KS2), Numbots (KS1), Maths.co.uk (KS2) and Doodle Maths.

Assessment for Learning

At Heron Cross Primary School, assessment is used formatively to diagnose pupils' misconceptions and inform future teaching. Teachers employ a range of assessment strategies, including diagnostic questioning, quizzes, and observations, to gauge pupils' understanding and provide timely feedback. This approach allows teachers to adapt their teaching to address any gaps in pupils' knowledge within the lesson and ensure that all pupils make sustained progress. In addition to this, termly assessments are done to enable teachers to see progress over the term and identify any areas where further support is needed, this in turn supports future planning.

Mathematical Language and Communication

We place a strong emphasis on developing pupils' mathematical language and communication skills. Teachers create opportunities for pupils to explain their thinking, justify their answers, and engage in mathematical dialogue with their peers. This not only consolidates pupils' understanding but also fosters a collaborative learning environment where pupils feel comfortable articulating their reasoning and challenging each other's ideas. Key mathematical vocabulary for each unit is displayed on Working Walls in each classroom and is used by the teacher throughout lessons.

Impact

Attainment

At Heron Cross Primary School, the impact will be seen through both formative and summative assessment. Pupils will make significant and sustained progress in their mathematical understanding and skills. They will develop a secure foundation in numerical fluency, problem-solving, and mathematical reasoning, preparing them for future learning in Maths and other subjects.

Engagement and Confidence

Pupils are actively engaged in Maths learning and will demonstrate a high level of confidence in tackling mathematical challenges. They will approach problem-solving tasks with resilience and perseverance, viewing mistakes as opportunities for learning and growth. The impact will also be reflected in pupils' positive attitudes towards Maths, as they develop a genuine interest in the subject and an appreciation for its relevance in the world around them.

Inclusivity and Equality

At Heron Cross Primary School, the impact extends to inclusivity and equality. All pupils, regardless of their background or starting points, are supported to excel in Maths. Achievement gaps will be narrowed, and pupils with diverse needs are provided with the necessary scaffolding and tailored support to thrive in their mathematical learning journey.

By aligning with the intent, implementing high-quality teaching, and achieving positive impact, an outstanding Maths provision sets the stage for pupils to develop into confident, resilient, and capable mathematicians, equipped with the necessary skills to succeed in their future education and beyond.