

Maths Curriculum

Intent

At Iqra Primary School, we believe all children can achieve in mathematics. We believe that all children need a deep understanding of the mathematics they are learning so that future mathematical learning is built on solid foundations. Mathematics is essential to everyday life, critical to science, technology and engineering and necessary for financial literacy and most forms of employment. Our intent is to provide a high-quality mathematics education that provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of mathematics and a sense of enjoyment and curiosity about the subject. We spark curiosity, engage reasoning, secure understanding and deepen learning for all.

A mastery curriculum promotes a deep, long-term, secure and adaptable understanding of the subject, so that children are fluent at mathematics; possess a growing confidence to reason mathematically and the ability to apply maths to solve problems. We endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them throughout their lives.

The intention of the Maths curriculum at Iqra Primary School is for its pupils to become competent mathematicians. We develop children's enjoyment of maths and provide opportunities for children to build a conceptual understanding of maths before applying their knowledge to everyday problems and challenges. We provide challenge for all our children and provide them with the support they need to push boundaries and deepen their understanding further.

Implementation

At Iqra, we recognise that children need to be confident and fluent across each yearly objective. To ensure consistent coverage, our teachers follow the skills progression guidelines as set out by the White Rose Maths Hub. Teachers are also developing their understanding of mastery while working within the maths hub. High quality resources are used in conjunction with White Rose, such as NRich and NCETM to support, stretch and challenge all children within the classroom. In addition, the school's calculation policy is used to ensure a coherent approach to teaching the operations across our school.

All children when introduced to a new concept for the first time are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols. Throughout Iqra School you will see these three methods being used:

Concrete – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.

Pictorial – children then build on this concrete approach by using these pictorial representations, which can then be used to reason and solve problems.

Abstract – with the foundations firmly laid by using the concrete and pictorial methods the children can move onto an abstract approach using numbers and key concepts with confidence.

We are continuously working to improve our teaching techniques and approaches. Teaching time is taken as an opportunity for high-quality teacher talk and guided practice where children are encouraged to verbalise their thought processes and a simple answer is challenged with 'How do you know?' and 'Explain what makes you think that?'. Explicit emphasis and teaching of mathematical vocabulary and appropriate terminology is essential in daily lessons. Children are expected to use this terminology in their verbal and written explanations.

We have introduced a daily '5 a day' arithmetic challenge in order to build number fluency and confidence. Pupils choose mental or written methods to answer the challenges, developing speed and familiarity over time.

Times tables are given a high priority throughout school. Regular teaching time towards the learning and reciting of these facts is balanced with opportunities for children to challenge their achievements through the use of 'Times Table Rockstar' and speed checks.

Iqra Primary School

We Learn, We Lead, We Inspire



Impact

Summative assessments take place at the end of each unit and each term. Children's progress and attainment are discussed by teachers, the Mathematics Lead and Head teacher through formal pupil progress meetings.

Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of their class. In addition, we place a strong emphasis on the power of questioning: this enables us both to explore topics together as a class as well as verbally develop reasoning skills during our lessons. Leaders monitor the effectiveness of teaching frequently through lesson observations, book scrutinises and pupil interviews.

Our impact on how well we are implementing our maths curriculum is evidenced by our external assessments. In 2019 Key stage 2 progress in mathematics (3.1) was significantly **above** national and in the **highest** 20% of all schools. Key stage 2 attainment of the high standard (110+) in mathematics (55%) was significantly **above** national and in the **highest** 20% of all schools in 2019.