

Maths - Keyworth Primary School

Intent, Implementation and Impact Statement

Intent:

At Keyworth Primary School, we believe that mathematics is an incredibly important and valuable part of children's development throughout school from an early age. We also recognise that mathematics underpins much of our daily lives. Our maths curriculum is driven by our key values: engagement, creativity and challenge, and is designed to provide extensive learning opportunities for all children so they can achieve their full potential and develop a life-long love of learning for the subject. Through our daily maths teaching, we intend to:

- provide stimulating, exciting and engaging maths lessons which cater for the needs of all individuals;
- support all children, regardless of their previous learning opportunities and experiences, to explore and achieve their full potential;
- •set pupils up with the necessary skills and knowledge to be successful in the future and within the real world;
- support children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems, as well as giving all children the confidence and resilience to achieve this;
- provide equal and varied opportunities for our pupils to be able to apply their mathematical knowledge across other subjects, as well as to real-world experiences and wider opportunities within the community;
- · give each child a chance to believe in themselves as mathematicians!

Implementation:

At Keyworth Primary School, our maths curriculum is designed to develop children's knowledge and understanding of mathematical concepts from Early Years Foundation Stage through to the end of Year 6. We follow the White Rose Scheme of Work which uses the expectations outlined in the National Curriculum to ensure coverage and progression in mathematical knowledge and skills. In addition, we always consider real-world opportunities to further embed the children's love and curiosity of the subject. Teachers have the confidence to adapt the scheme where necessary to ensure objectives are achieved and to ensure it is suitable for our school community. At Keyworth Primary School, our maths curriculum is delivered through the following ways:

- daily maths lessons delivered through quality-first teaching, which are engaging, fast-paced and challenging for all pupils and built upon prior learning;
- the majority of children all begin with the same work with a focus on fluency. When it has been completed, they peer mark. This gives them the opportunity to consolidate, question and improve their work. When they have finished marking, they will complete some further fluency or reasoning and problem solving depending on their understanding in the first task. The reasoning will get increasingly more challenging to ensure all pupils first consolidate their learning then deepen their understanding. This gives all pupils the chance to reach their full potential;
- opportunities to use concrete manipulatives and pictorial representations are given to support conceptual understanding and to make links across topics; all children have access to concrete manipulatives should they need them;
- ·clear modelling to support and develop knowledge and conceptual understanding of topics;
- children's progress is regularly monitored through various assessment opportunities, both formative and summative and outcomes of these inform teacher's future planning;
- •use of Maths Rockets. The mental maths scheme is based on Ready to Progress criteria and weaker areas based on assessments. Each year group will teach the steps from their rocket card and years 2-6 will set weekly homework based on the step they are working on in class;
- White Rose end of unit assessments used to support children in understanding test style
 questions and to inform teacher and coordinator of areas for development;
- problem solving lessons used to ensure children can apply concepts taught in a practical way;

Impact:

The impact of our school maths curriculum can be seen in children's books, in learning outcomes and in discussion with our children. Furthermore, the impact of our maths curriculum is demonstrated by the children...

- mastering and applying mathematical concepts and skills. This is demonstrated when they can show a particular concept in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations;
- demonstrating a quick recall of facts and procedures, including multiplication and division facts, and applying this knowledge and understanding to real life situations with ease;
- using appropriate mathematical vocabulary in maths lessons with increasing confidence,
 ease and accuracy;
- demonstrating a secure understanding of how to reason mathematically, using stem sentences to support pupils with their answer and explanation;
- demonstrating a secure understanding of how to problem solve, using appropriate methods and being resilient;
- recognising mathematical relationships and making connections within concepts;
- having an increasingly positive attitude towards learning maths and showing excitement about challenging themselves.