



INTENT

Maths is a skill we use on a daily basis and is an essential part of everyday life. Therefore, mathematics forms an important part of our broad and balanced curriculum where we endeavour to ensure that children develop an enjoyment and enthusiasm for maths that will stay with them throughout their lives and empower them in future life. We believe that unlocking mathematical fluency is an essential life skill for all learners and is a pre-requisite to being able to reason and solve problems mathematically.

Our aim is to develop a positive culture of deep understanding, confidence and competence in maths that produces strong, secure learning. As a school, we recognise that the key to unlocking the potential in our children is through the development of mathematical skills and the understanding of mathematical concepts. We therefore place great emphasis on the use of concrete resources and pictorial representations at all ages, to enable children to fully understand the concepts and principals, when presented with abstract calculations and questions.

Our maths curriculum is based on the expectations and aims of the National Curriculum for mathematics. It also incorporates the 'Ready-to-progress' criteria set out in the DfE non-statutory guidance, the statutory framework for the Early Years Foundation Stage (EYFS) and the Early Years 'Development Matters' EYFS document. Our maths curriculum is progressive: in Early Years, our children are exposed to the fundamental number skills through continuous provision and explicitly taught lessons as well as the Early Years Number Sense programme to secure mathematical fluency skills. In KS1, our children use a range of concrete resources to explore mathematical concepts, ensuring that pictorial representations, mental strategies, and formal written methods are taught and practised enabling our children to have the knowledge and skills to progress to KS2. Within KS1, our children are taught the KS1 Number Sense Programme which secures their addition and subtraction fluency by teaching them a range of mental strategies. At KS2, our curriculum is designed to develop competencies to equip pupils for KS3 where they will build on their prior knowledge and understanding, to make connections and solve increasingly sophisticated mathematical problems.

Children will:

- Develop positive and confident attitudes towards mathematics;
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof;
- Solve problems by applying their mathematics to a variety of routine and non-routine;
- Problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions;
- Develop the correct mathematical vocabulary;
- Work independently and collaboratively;
- Use and apply their mathematical knowledge to real-life contexts;
- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, developing conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Have rich and enjoyable experiences in mathematics by providing the knowledge, skills and understanding that enable all our pupils to flourish in society and be fully prepared for the next stage in their learning:

Our Maths curriculum will:

- Ensure that the year group National Curriculum programmes of study and expectations as set out in the EYFS framework are taught and mastered, and that all pupils are given ample opportunity to work at a greater depth within the standard as set out in those programmes of study.
- Provide our children with relevant and engaging maths opportunities
- Create confident mathematicians who will develop a bank of efficient and accurate skills that can be used to calculate effectively.

IMPLEMENTATION

Our Maths curriculum provides breadth and balance, is relevant and engaging and is scaffolded to match the needs and abilities of all our children to ensure that all pupils are able to excel. As a school, we believe in the importance of following the concrete-pictorial-approach as a means to developing a solid understanding of mathematical concepts which can be applied in a variety of contexts through reasoning and problem-solving challenges.

From Reception to Year 6, we adhere to our agreed sequence of learning which outlines the progression of strategies and methods to be taught and we have an accompanying vocabulary progression document which we also follow. We have created our medium-term plans in line with White Rose small steps, but have altered the order to suit and benefit the needs of our mixed-year classes so that connections between units of learning are easier to recognise.

Where children require additional support, 'scaffolds' are used to support children further to ensure that they have secured the small step before moving on. These 'scaffolds' may be in the form of returning to concrete resources or pictorial representations. For children who understand a concept quicker, 'Head Start' challenges are used to deepen and challenge learners further within the curriculum area. Our medium-term plans and progression documents, are carefully used to ensure that children are not being stretched outside their year group but rather deepened within it.

Within daily teaching, children will have the opportunity to revisit previously taught skills through the use of a 'Flashback' activity at the start of each maths lesson.

Daily assessment is incorporated throughout the lesson through live and verbal feedback. Where children require additional support, same day interventions are used to support children ensuring that they are ready for the next 'small step'. Pre unit assessments are used to ensure the pitch and expectation of all children is appropriate, followed by a post unit test to track progress and identify children who require further support. Termly assessments are used as a diagnostic tool to ensure that teachers are adapting learning to meet the needs of all children and ensure that any necessary interventions are targeted specifically to meet the needs of children.

Times tables play an important part in our maths learning, with children developing their fluency in rapid recall of tables up to 12 x 12 by the end of year 4. While the rapid recall of times tables are being developed, children are also learning how to apply and manipulate their understanding of this to reason and solve problems.

IMPACT

By the end of Year 6, transitioning to secondary school, we aspire that a Crudginton mathematician will have developed a bank of efficient and accurate skills that can be used to calculate effectively. These will have been underpinned by the C-P-A process so children understand rather than just do, which ultimately will allow children to identify when answers do not make mathematical sense. Children will be able to apply these calculation skills and understanding of other areas to become confident and resilient problem-solvers with the ability to reason and articulate their ideas mathematically. Due to the embedding of fact sentences, children will have the language to be able to justify, reason and explain their answers.