



Maths Curriculum Statement

Intent	Implementation	Impact
<p>Our philosophy for mathematics is replacing an idea that maths is lots of rules and numbers with a study of patterns and connected ideas. In early years they will build a foundation of number understanding and representation through mainly concrete and pictorial representations. The approach will be supported by in depth questioning, throughout the school to develop mastery.</p> <p>Children will start to build their understanding of counting and the how numbers relate to each other. As children move through key stage 1 they will develop a fluency reasoning and problem solving skills through a concrete, pictorial and abstract approach. They will develop skills in 4 number operations and how to apply these skills to a range of problem solving.</p> <p>They will be exposed to a varied and rich curriculum, developing a mastery of the key stage one curriculum. As children move through KS2 children will continue with this approach, developing their understanding and mastery a range of mathematical ideas and concepts needed to success in secondary school and onto later life, with all children achieving age related expectations at the end of Key Stage 2, with a large percentage achieving greater depth. They will continue with a concrete, pictorial, abstract approach to master the key stage 2 curriculum and all learners will success within the curriculum.</p>	<p>The implementation of our maths curriculum is focused around Concrete, Pictorial, Abstract approach. This allows children to fully understand the area of Maths and allows them to further manipulate the number etc.</p> <p>Children have a varied diet of fluency, reasoning and problem solving in lessons to ensure they know the skills and knowledge associated with each mathematical concept and are then able to apply these to a range of contexts.</p> <p>Long and medium term plans use the white rose planning model adapted for Teagues Bridge to build in essential time for the consolidation of key concepts and addressing of misconceptions.</p> <p>Maths lessons start with a section to develop children mental calculation fluency and understanding called CLIC. CLIC is taught through a structured approach across the whole school using Count (counting on, sequences, missing numbers, understanding number, applying count all mathematical concepts), Learn it (multiplication facts and division), It's nothing new(strategies to practice and application to new numbers) and calculate (mental arithmetic and calculation using jottings).</p>	<p>Our approach to teaching and learning in mathematics results in an engaging curriculum for all. Our curriculum provides children with the foundations and knowledge for understanding both the theory of mathematical concepts and how to apply them to reasoning and problem solving challenges.. Our curriculum for mathematics also results in motivated learners with sound understanding of the world around them.</p> <p>Engaging lessons which include real-life links allow children to become independent learners and develop an appreciation of the importance of mathematics in their everyday lives. This have the chance to apply concepts they have learnt through challenges and mathematical problem solving days. The evidences the impact of the curriculum as children demonstrate secure mathematical thinking in a wide range of applications. These also allow teachers the opportunity to observe and monitor children's mathematical thinking through observations of group work and end outcomes of investigations.</p> <p>We track the impact of the mathematics curriculum on children's learnings in a number of ways.</p> <ul style="list-style-type: none">- Marking and informal observations allow teachers to continually assess the impact that lessons are having on children's development of skills and knowledge.

Children are supported through quality first teaching, targeted guided groups, targeted marking to ensure early intervention and challenge/ problem solving within each lesson. Mental strategies are taught and developed through CLIC maths – This is a structured approach to teaching learning and consolidating mental strategies and practices.

Lessons build on knowledge and skills over time and this is constantly revisited to ensure Knowledge and skills are embedded.

Basic number in Early years is taught thoroughly and allows a deeper understanding and manipulation of numbers. This then allows teachers' in KSI to build on this prior learning.

AFL is used to check knowledge; skills are embedded in a child's long-term memory. This is in the form of reasoning and problem-solving type questions. These are also used to check the speed and accuracy of calculation.

Long term planning ensures enough time is spent on each area of mathematics so that children have a secure understanding of the knowledge and skills and can meet their end points.

Verbal feedback, involving the teacher encouraging children to check their work using Ch and a dot for when the children don't understand and need this modelling before trying another question.

- Assessment for Learning reflections take place at the end of lessons and are used to show teachers what children have understood and provide the opportunity to identify misconceptions which need addressing in the next lesson.
- Pre and post unit assessments allow children to show what they know/don't know at the start of a unit of work and then this is revisited at the end of the unit, with children demonstrating what they now know following the series of lessons. This allows real impact to be shown during a series of lessons.
- Formal assessment of mathematics is completed termly using the cornerstones assessment framework. This allows children to demonstrate the progress that has been made against the year's mathematical curriculum and highlights areas to be focused on for individual children and groups of children.
- Ongoing targets are displayed in the front of children's books generated from the pre unit assessments. These outline specific targets for individual children to work towards during a series of lessons and show impact of the lessons when the child achieves these, evidenced in books.
- Children frequently access child friendly targets in the back of their books which evidence which areas of the curriculum they have achieved and which areas they are working towards next.

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