


**Mathematics at Bickerton Holy Trinity Church of England Primary School**

<b>Intent</b>	<b>Why? and How?</b>	
	<p>'Life in all its Fullness' (<i>John 10:10</i>)</p>  <p>Lifelong Learners Immersive Valuing Diversity Enquiring Minds</p>	<p>Here at Bickerton Primary School, we embrace a Mastery Curriculum approach to our mathematics teaching. This means spending greater time <b>immersing</b> the children and deepening their knowledge in particular areas/concepts as opposed to quickly moving through the curriculum and the year group objectives.</p> <p>We have high expectations that all children will achieve and, to do this, we believe that all children should be given the opportunity to develop <b>enquiring minds</b>. We do this through exploring, pattern finding, reasoning and problem-solving. We use questioning, activities which develop pupils' fluency and a range of manipulatives to support each child to accomplish this.</p> <p>We strive to ensure that the whole class moves through content at the same pace and, when we adapt our delivery, it is through depth rather than acceleration; every child is given time to think deeply. We strive to develop a positive attitude to build <b>lifelong learners</b> who are self-confident, resilient and have a sense of achievement in their work. The school's values of teamwork, fairness, resilience and curiosity are embedded in all that we do.</p> <p>Our curriculum planning ensures that by the end of KS2, all children will have met the expectations of the Mathematics National Curriculum; developed <b>enquiring minds</b> and have secure knowledge, skills and understanding ready for transition into KS3.</p>
<b>Implementation</b>	<b>How we teach Mathematics</b>	
	<p>In EYFS, we ensure that mathematics is part of their daily diet and provide the children with a wide range of experiences and opportunities to apply their mathematical skills to develop the necessary building blocks to excel mathematically. EYFS are taught through the Mastering Number programme and are given structured opportunities to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. These develop positive attitudes and interest in mathematics as pupils look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and are not afraid to make mistakes. For the mastery approach to become successful in KS1 and KS2, we use Planpanion's - Deepening Understanding mathematics scheme, creating a uniform approach to the <b>immersive</b> structure of our mathematics lessons across each year group. Our lessons are structured to ensure a consistent approach to the teaching of mathematics with a greater emphasis on the sequence of learning. Open-ended investigations, mathematical language via stem sentences and standardised working walls contribute to the continued development of mathematical pedagogy and promote <b>enquiring minds</b> in our pupils. Fluency is a key component of our mathematics curriculum and the foundation blocks to become a <b>lifelong learner</b>, encouraging our pupils to confidently enquire and reason further. There are many fluency opportunities outside the main lesson time, where children can learn and apply facts to be more efficient when solving problems.</p> <p>The mastery approach at Bickerton also ensures that there is a greater expectation on all children; little chance for passive learning as there is a greater emphasis on talking mathematically, collaborating, exploring, and investigating. The use of manipulatives is encouraged and there are planned opportunities for children to make connections between subjects. The delivery of our mathematics curriculum is adapted through resources or the deployment of staff to enable all pupils, including those with Special Educational Needs or Disabilities, to engage in the same curriculum.</p>	
<b>Impact</b>	<b>How we monitor standards and the impact of our Mathematics Curriculum</b>	
	<p>Children will make good or better progress from their own personal starting points. By the end of KS2, they are able to fluently recall their times tables up to 12x; they have a great understanding of place value; are secure with the four operations; understand the relationship between fractions, decimals and percentages; use measurements effectively and accurately; understand how ratio and proportion can be used; solve algebraic problems; have a good understanding of geometry and are able to analyse statistics. Recap sessions and retrieval techniques are used during every lesson to ensure that pupils are drawing on their prior knowledge and developing their understanding of new substantive knowledge and their application of disciplinary knowledge. This also identifies any gaps that need to be addressed before moving</p>	

on. At the end of each unit children are assessed using the end of unit NCETM assessments. This is recorded on our assessment tracker. We use the assessments to inform consolidation opportunities and next steps lessons to address knowledge, understanding and gaps in learning.

The impact of using a range of resources, including a mathematics working wall, is seen across the school. The learning environment in classrooms is consistent; with mathematical vocabulary displayed, spoken and used by all learners. We want to ensure that mathematics is loved by pupils across school, encouraging them to build on this wealth of knowledge and understanding, now and in the future.

The Mathematics subject leader is given time to monitor the delivery of our mathematics curriculum through book looks, discussions with staff and pupils and visits to lessons.