

# SUBJECT OVERVIEW: Mathematics



INTENT: What we want to achieve	IMPLEMENTATION: How we will achieve it	IMPACT: What the outcome will be
<p>At South End Infant School, we intend to provide an ambitious, progressive maths curriculum which caters for the needs of all individuals.</p> <p>We are committed to fostering a love of maths. Many young children are by nature curious and inquisitive. It is our intention to provide daily opportunities for children to explore mathematical concepts, make connections for themselves, notice patterns and better understand the world around them.</p> <p>The 2014 National Curriculum for Maths aims to ensure that all children:</p> <ul style="list-style-type: none"> <li>• Become fluent in the fundamentals of Mathematics</li> <li>• Are able to reason mathematically</li> <li>• Can solve problems by applying their Mathematics</li> </ul> <p>These skills are embedded within maths lessons and developed consistently over time. With our mastery approach, we incorporate sustained levels of challenge through varied and high quality activities</p>	<p>Through high quality teaching, we are able to deliver appropriately challenging work for all individuals using a CPA (Concrete, Pictorial, Abstract) approach.</p> <p><b>Concrete</b> - children have the opportunity to use concrete objects and manipulatives, such as Numicon, Diennes and counters, to help them understand and explain their learning.</p> <p><b>Pictorial</b> - children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems.</p> <p><b>Abstract</b> - with the foundations firmly laid, children can move to an abstract approach using numbers, symbols and key concepts with confidence.</p> <p>Teachers reinforce an expectation that all children are capable of achieving success in maths. The vast majority of children will progress through the curriculum content at a similar pace. Differentiation is achieved by individual and group support and intervention. All children, when introduced to a new concept, will have the opportunity to build competency by taking this CPA approach, however some children will be ready to move towards the pictorial and abstract stages quicker than others.</p>	<p>Our practical approach to mathematics ensures we are able to meet the complex needs and wide range of abilities of the children within our school.</p> <p>As a result of engaging in high quality mathematical talk on a regular basis, children will become more confident in using mathematical vocabulary to explain their thinking.</p> <p>With a focus on problem-solving and reasoning, we will see mathematical resilience improving across our school. Challenging children to explore their work in greater depth will support our children to become more reflective and interested in exploring their learning yet further.</p> <p>There will be evidence across the school of children working towards becoming fluent in the fundamentals of maths. Children will quickly and efficiently recall facts and procedures. Having used concrete resources on a regular basis, children will be able to visualise mathematical concepts and work out answers mentally. They will have the flexibility of thought to move between different contexts and representations of mathematics.</p> <p>Children at the end of Year 2 will take the KS1 SATs, which includes two mathematics papers.</p>

<p>with a focus on fluency, reasoning and problem solving. Children are required to explore maths in depth, using mathematical vocabulary to reason and explain their workings. We encourage resilience and perseverance and aim to create a learning environment where children have the confidence to take risks with their learning.</p>	<p>Teachers implement the school's agreed Calculation Policy for progression in written and mental calculations.</p> <p>Planning in both EYFS and KS1 is aligned to the White Rose Maths and to further enhance the learning experiences for the children, teachers sometimes also use planning materials and activities from NCETM, Active Maths, NRICH and Purple Mash.</p> <p>Teachers use precise questioning and continuously monitor pupils' progress. Formative and summative assessments are used to inform future planning, as well to inform discussions in Pupil Progress Meetings and also to update Target Tracker.</p> <p>The main purpose of all assessment is to always ensure that we are providing excellent provision for every child.</p> <p>The subject leader will support and monitor the planning, teaching and assessment of the mathematics curriculum across the school.</p>	<p>The percentage of pupils working at ARE within each year group will be at least in line with national averages.</p> <p>The percentage of pupils working at GD within each year group will be at least in line with national averages.</p> <p>There will be no significant gaps in the progress of different groups of pupils.</p>
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