St. Andrew's CE
Primary School

Curriculum Statement for Maths

Intent	At St. Andrew's, we strive to enable all our children to become competent mathematicians through a curriculum driven by aspiration, curiosity, communication and unity. We aspire to embed the skills and processes necessary to enable children to use and apply their learning in a variety of contexts. We aim to develop children's curiosity of maths and provide opportunities for them to build and secure a deep, sustainable, conceptual understanding of maths. Our approach to the teaching of mathematics develops children's ability to work both independently and collaboratively. Through mathematical talk, children will develop the ability to communicate and explain their thinking and reasoning. By the end of key stage two, children will leave our school as emotionally resilient, lovers of mathematics which will enable them to thrive in their future lives
Implementation	We use the White Rose Schemes of Learning to guide our teaching of maths from EYFS to Year 6. EYFS also use the NCETM scheme, which is also linked to White Rose Hub. In addition to this, we use weekly arithmetic tests from Year 3 to help with the development of fluency. We teach maths through small steps using quality first teaching so that gaps are not created, and any misconceptions are remediated at the early stages. We want children to 'think' mathematically rather than 'do' maths. Through representations and manipulatives, such as Base 10, ten frames, Numicon and place value counters, mathematical concepts and structures are explored and understood. Each lesson starts with a prior learning task, which recaps key prior knowledge, to enable pupils to retain and recall key knowledge. During our lessons, all children work towards achieving the same learning intention. Scaffolding is provided to enable all children to access the mathematics independently. A 'Deepening' activity is planned for children who rapidly grasp new learning so that they have opportunities to generalise their learning and mathematical understanding. Reasoning and problem solving are integral to the schemes and to our approach. Each classroom has a maths working wall which is regularly updated to reflect the area of maths that is being covered with appropriate vocabulary and representations. Teachers use the sentence stems and children are encouraged to reason mathematically in full sentences using accurate mathematical vocabulary. In our Early Years, the children follow the EYFS curriculum. This entails a lot of 'hands-on' learning but, most importantly, we also plan carefully to ensure the children have concrete and pictorial experiences of number. Our intent is for children to become experts in the numbers 1-10. We want them to be confident with counting but it is also key for later mathematical development that they are beginning to add and subtract as well as show a deep, conceptual understanding of place value. One of the ways we do this is by following the NCETM Mastering Number Programme and subitizing (the immediate recognition and recall of numbers/amounts without counting). This is a daily diet of breaking down and talking about numbers they can see.
Impact	As a result of our mathematics teaching, children will be engaged, challenged and have acquired a deep, conceptual understanding of maths. They will be able to make connections between concepts and contexts, and will be able to articulate their understanding confidently. We continuously monitor pupil progress against expected attainment for their age and adjust planning accordingly to meet the needs of the class. Teachers set end of unit quizzes that assess children at the end of a unit of teaching (e.g. place value) based on questions taken from White Rose. Each term, we use the Progress in Understanding Mathematics Assessment tests (PUMA) which enable us to track progress, predict future performance and benchmark against national averages. These tests combined with ongoing teacher assessment allow teachers to evaluate how individuals, groups and the class as a whole are progressing compared to national expectations. They also give an excellent opportunity to see which concepts may need to be given additional time and they give the Maths Subject Leader and SLT the opportunity to see where strengths and weaknesses lie, where additional support or training needs to be focused. The quality of maths is monitored frequently by the SLT and Maths Subject Leader through lesson observations, learning walks, work scrutiny and pupil interviews.