

Maths Curriculum Statement

Intent

The National Curriculum for mathematics aims to ensure that all pupils:

*Become fluent in the fundamentals of Mathematics

*Are able to reason mathematically

*Can solve problems by applying their Mathematics

At Archbishop Wake CE Primary School, the intent of our mathematics curriculum is that all children will become resilient, independent, confident and fluent mathematicians. They will develop the skills that they can apply to situations beyond their classroom and within their daily lives. We believe that all pupils can succeed in mathematics and we encourage a growth mind set through the promotion of the culture that, 'everyone can do maths.' We want all children to enjoy mathematics and to experience success in the subject. We celebrate success in our school community through house points, value tokens and special achievers assemblies.

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 2 to help with the development of fluency as well as Number Sense from Year 1 to Year 4. 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. Through this approach, children make rich connections within their mathematical understanding and can talk about these. We want children to 'think' mathematically rather than 'do' maths. We use manipulatives and representations to expose mathematical structure. We ensure that there is a consistent approach to the use of manipulatives and representations across year groups so that children's cognitive demand is lowered as they re-encounter familiar representations - this supports the children making rich connections.

As an inclusive school, we strive hard to meet the needs of those pupils with special educational needs, those with disabilities, pupil premium children, free school meals children, those with special gifts and talents and those learning English as an additional language and we take all reasonable steps to achieve this. Each lesson starts with a prior learning task, which recaps key prior knowledge. This enables pupils to retain and recall key knowledge. Those that need more support are provided bespoke follow up sessions either during the lesson, before or afterwards. Where possible, we pre-teach these groups of children so they are successful in the lessons. During our maths lessons, all children work towards achieving the same learning intention. Scaffolding is provided to enable all children to access the mathematics independently. Greater depth experiences are 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. During learning, links are made, where appropriate, to prior knowledge and given real life context. Children have instant feedback on their work through live marking. Correct answers are indicated by a ✓ and incorrect answers are marked with a cross or a dot. Incorrect answers may be part of the process a child goes through to solve a complex problem. Children are then given time to respond to marking.

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 visual representations. Children are encouraged to refer to this to promote independence and support understanding. The development and use of precise and accurate mathematical vocabulary is important. Teachers use the sentence structures found in the Mathematics Guidance and children are encouraged to reason mathematically in full sentences. Talking maths and 'ping-pong' with the adults and peers is key to learning success.

Impact

As a result of our mathematics teaching, you will see happy, engaged children who are all challenged. Within maths books, a range of activities can be found ranging from fluency, reasoning and problem solving tasks presented in different variations and reflecting CPA approaches. Our follow up and pre-teaching sessions support children to strive to be the best mathematicians they can be, ensuring a greater proportion of children are on track. Through our teaching, we continuously monitor pupil progress against expected attainment for their age and adjust planning accordingly to meet the needs of the class. Each term, we use the NTS Mathematics Assessments 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 Leaders and the SLT the opportunity to see where strengths and weaknesses lie, where additional support needs to be focused and what training requirements there are. Data is entered onto INSIGHT (our school tracking system) and we use this to inform our termly Pupil Progress Meetings.

The SLT and Maths Subject Leaders monitor the effectiveness of teaching frequently through learning walks, work scrutiny and pupil interviews. These factors ensure that we are able to maintain high standards in mathematics, with achievement at the end of Key Stage Two higher than the national average. In the Early Years, children are given a range of opportunities to develop their reasoning and early number work. They are encouraged to recognise patterns and mathematical relationships through quality teacher-led activities which enable the vast majority of pupils to progress seamlessly onto the national curriculum by achieving their Early Learning Goals in mathematics. Upon completion of Year 6, our curriculum enables pupils to be fully prepared and equipped to successfully continue their mathematical learning journey at secondary school and in their later lives.

