



Maths

Intent

For every child to develop a love for the challenges that the subject of Maths brings. We aim to use outdoor learning to enhance mathematical understanding and provide open-ended investigations to promote mathematical reasoning. We strive to ensure that children are provided with opportunities to explore Maths in a real-life context equipping them with the skills in calculation, reasoning and problem solving that they need in life beyond school.

Implementation

Subject expertise allows the intentions of our mathematics curriculum to be executed successfully. CPD is important in maths and all staff are being encouraged to raise any issues they have within mathematics in order to ensure everyone is confident in what they teach. Good practice is always shared between staff and all CPD is used to inform teaching and learning across school.

Resources and equipment are audited and up to date, all staff have opportunity to submit orders to the SLT and these were fulfilled - our maths cupboard also holds many whole-school resources. Our resources allow us to better use models and images to support learning in each area. Children are familiar with these and able to access them independently where needed also supporting learning in different contexts.

Staff have several materials to refer to for short-term planning including White Rose Maths, Classroom Secrets, Mathletics, Enrich and NCETM Teaching for Mastery - these are used across KS1 and KS2 allowing children to be exposed to a variety of different types of learning and problems. Teachers also implement the schools agreed calculations policy for progression in written and mental calculations. Our year group Rising Stars tests help teachers to gather an understanding of their pupil's existing understanding of topics. Formative assessment is incredibly important at Cockfield Primary School where we focus on challenge questions, analysis of learning, extension work, mini plenaries and discussion with peers. There is coherent progression seen in

planning within each unit and activities in EYFS develop knowledge and skills of key learning.

Mathematical vocabulary is continually referred to within lessons and is discussed with children who are encouraged to use it independently. Children are given opportunity to reason and solve problems regularly; learning is varied and allows for deep and secure understanding. Both greater depth and struggling learners are given small group intervention in order to ensure every child is reaching their full mathematical potential. Using the school's tracking system is reviewed termly and target children are selected for further support. Parents are informed of and encouraged to be involved in our school mathematics implementation through maths homework, Mathletics, parents' evenings and yearly reports. Teachers are also all available for parents to speak to both before and after school.

Teachers develop fluency through practicing key skills, repeating, reinforcing and revising which is all built in to formal planning across school. Children are given time to practice and perfect their calculation strategies including giving pupils opportunity to make appropriate decisions when estimating, calculating and evaluating the effectiveness of their chosen methods. Feedback including our whole school 'next steps' system is designed to ensure pupils are well informed and making visible progress.

Discussion is essential to our learning and time is planned into lessons for this, task types are varied to suit different pupils and their learning preferences whilst reasoning in writing remains one of our key focuses. Investigative tasks are designed to allow pupils to follow lines of enquiry and develop their own ideas, justifying and proving their answers. Children work both collaboratively and independently solving problems, which require them to persevere and develop resilience.

Impact

The impact of our mathematics curriculum is that children understand the relevance of what they are learning in relation to real world concepts. We have fostered an environment where Maths is fun and it is OK to be 'wrong' because the journey to finding an answer is most important. Our children have a growth mindset and they make measurable progression against their own targets. Our maths books are packed with a range of activities showing evidence of fluency, reasoning and problem solving. Our feedback and interventions are supporting children to strive to be the best mathematicians they can be ensuring a greater proportion of children are on track. Children 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Children are developing skills in being articulate and are able to verbally, pictorially and in written form, reason well. Our school standards are high; we moderate our books both internally and externally and children are achieving well.