

Mathematics Curriculum Overview

Intent:

At Cockerham, we want learners to develop a life-long love of learning in Mathematics, developing children's ability to calculate, reason and solve problems, through a rich, engaging and inclusive curriculum. Our aim is to develop happy individuals who are growing in knowledge, growing in faith, and growing in God's love. Through a Mastery approach, learning is carefully sequenced through small, coherent steps to ensure all children are able to make connections and master taught concepts. We want our children to grow up with a secure understanding of Mathematics preparing them for the future in whichever career path they take, as well as in their daily lives.

In order to do this, we want our children to:

- Acquire a large repertoire of language through sentence stems, to develop their ability to explain their mathematical thinking.
- Develop their ability to reason and make connections through problem solving, applying their mathematical knowledge to a variety of different contexts.
- Acquire efficient and accurate recall of key number facts and procedures, allowing children to think more deeply about concepts and problems.
- Develop their fluency so that they are able to select the most appropriate methods and strategies to solve a problem.
- Engage in an inclusive learning environment supporting them in making connections between existing knowledge and learnt knowledge.
- Become confident mathematicians who enjoy mathematics and are resilient and persevere.

Implementation:

To ensure full topic coverage, we use a whole-school primary maths curriculum that creates continuity and progression in the teaching of mathematics. Each year group follows the objectives outlined in the National Curriculum as a basis for implementing the statutory requirements of the programme of study for Mathematics.

At Cockerham we have adopted a Mastery approach to the teaching of Mathematics following the White Rose Maths schemes of learning. Teachers plan carefully structured lessons enabling children to acquire a deep, long-term, secure, and adaptable understanding of the subject. Within White Rose Maths, children are exposed to elements of fluency, reasoning and problem solving as the lessons are designed around these three mathematical elements.

At Cockerham we aim to provide all children with an inclusive learning environment where they can all achieve and succeed in their learning. Teachers ensure when planning that learning is scaffolded to meet the needs of all the children, using manipulatives to support understanding and adult support for struggling learners.

Interventions are put in place to support children where necessary. For advanced learners teachers challenge them through deeper questioning and providing deeper learning tasks and opportunities, where children have to use and apply their mathematical understanding in different contexts. All children have access to fluency, reasoning and problem solving as well as opportunities to show greater depth of understanding.

Teachers will plan as necessary for the needs of their classes, ensuring concrete, pictorial and abstract learning is embedded using sentence stems to allow the children to communicate mathematically. All classes have a daily Mathematics lesson with the opportunity within the day to complete a 15 minute `Flashback 4` or fluency activity. Flashback 4 works alongside the White Rose Maths scheme to ensure that pupils have the opportunity to revisit previous learning through 4 daily questions, this gives children an opportunity to regularly revisit concepts taught earlier in the year, in essence helping knowledge to `stick`.

Impact:

As Cockerham follows a Mastery approach to the teaching of Mathematics, our teaching of, and curriculum for mathematics will lead to excellent progress over time across all year groups. It is designed to prepare children for their future in and outside of education so they can become successful in whatever they pursue by leaving our school at least at the expected standard for their age. Our rich and broad mathematics curriculum aims to make the children enthusiastic about learning mathematics and gain an understanding of its importance in everyday life whilst developing a life-long love of learning.

Teachers assess termly on the Lancashire Tracking System. Teachers may wish to keep their own individual records to show how their class progresses throughout the different strands in mathematics. Where children are not making the expected progress, interventions will be provided to support these children. Assessment data is used to inform teachers of future planning to ensure teaching is responsive to the needs of the children.