"Love God Love Learning Love Life"

MATHEMATICS POLICY STATEMENT

'Whoever heeds instruction is on the path to life'
(Proverbs 10:17)

Mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem-solving skills and the ability to think in abstract ways.

Mathematics is essential to everyday life, critical to science, technology and engineering, vital for the environment and necessary for financial literacy and most forms of employment.

Mathematics is a creative discipline. It can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time, discovers a more elegant solution to that problem, or suddenly sees hidden connections.

AIMS

Mathematics teaching and learning at Corvedale CE Primary School is geared towards enabling all pupils to develop the numerical skills required for later life, and to fostering a fascination about maths itself.

We aim for our pupils to become confident, enthusiastic mathematicians so that they use mathematical strategies with joy and are skilled problem solvers.

We are continually aiming to raise the standards of mathematical achievement of the pupils in Corvedale CE Primary School.

Mathematics at Corvedale is based on the three main aims of the 'Primary Mathematics Curriculum 2014' from Foundation Stage to Year 6. These aims are:

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

TEACHING METHODS AND APPROACHES

We use a programme based on 'Singapore Mathematics' that focuses on Key Fundamentals and the **Concrete, Pictorial and Abstract** approach. The aim of this is to make children better mathematicians for life.

The core part of lessons aim to teach and develop mathematical skills in interesting and exciting ways. The children will not only practise **written skills** but be involved in many **practical activities and investigations** using manipulatives (equipment), which also help develop their skills of **problem solving** and **logical thinking**. They will usually be involved in working actively with others to develop their **reasoning** skills on a daily basis.

Throughout the school in all Maths lessons, there is an emphasis upon using the correct **mathematical language**. Children are encouraged to be able to talk about the Maths they use and explain their ideas. More and more, they should also be able to raise questions about what they see or do and use this language to also prove or make a mathematical justification.

At Corvedale CE Primary School we recognise the importance of establishing a secure foundation in **mental calculation** and **recall of number facts** building what we are calling 'a sense of number' before **standard written methods** are introduced. We use a scheme called NumberSense and our own devised programme called Key Recall Facts. They are designed to support the development of the mental skills that underpin mathematics. When children have quick access to such a bank of facts which incur little cost to working memory, they have more capacity to think about more complex problems that draw on these facts. We believe fluency and conceptual understanding should be developed in tandem because each supports the development of the other. Each year group is allocated key facts to focus on throughout the year, in line with age related expectations.

RESOURCES

Everyday basic equipment is kept in classrooms. Additional items are stored centrally in the Resources Cupboard next to the staffroom.

The main published scheme we use to support the teaching of mathematics is **White Rose Maths**. However we use a variety of other published materials to facilitate the teaching of mathematics where we deem fit as we recognise the need for the teaching of maths to be 'scheme assisted not scheme driven.'

IT is used to support the teaching and learning of Mathematics throughout the school to present lessons and to reinforce learning through apps such as NumberGym and Times Table Rock Stars.

We recognise the important role visual prompts have in the teaching and learning of mathematics by having them displayed in the school. Every class has such prompts displayed in the main teaching area, which has number grids/lines, vocabulary and other materials that provide a visual support for the children's understanding of maths.

ASSESSMENT

Statutory end of Key stage tests are administered in Y2 and Y6.
We use a variety of assessments for mathematics which are informative and manageable including:

- On-entry assessments
- End of Key Stage tests
- End of unit tests
- Termly maths tests during assessment week, for example, NFER.

All of the above tests inform judgements on the performance in mathematics of:

- Individual pupils
- Cohorts of pupils
- Small groups of pupils

This policy was written in November 2021 and amended in January 2023

Review date 2024

Signed …… Headteacher

Signed …… on behalf of the Governing Body