

# Maths Curriculum Statement

**“The essence of mathematics is not to make simple things complicated, but to make complicated things simple” – S.Gudder**

At Merridale, our ultimate aim is to develop confident mathematicians with a deep, conceptual understanding of a range of mathematical concepts. We believe that Mathematics teaches us how to make sense of the world around us and we endeavour to do this through developing our pupils' ability to calculate, to reason and to solve problems.

Our three main aims with regards to teaching mathematics at Merridale are:

- 1) To develop the mathematical knowledge of our pupils:** In developing children's skills through enhancing their factual, conceptual and procedural knowledge, we allow them to deepen their mathematical understanding and be able to apply what they know to help them to solve problems. A fundamental aspect of our maths lessons at Merridale is the use of **powerful models and images** e.g. practical apparatus such as Base 10 or fraction circles to develop a deeper understanding of number and number fluency.
- 2) To develop our pupils' confidence to use their mathematical abilities and skills:** We believe that all children are capable of succeeding in maths. We do this through support and interventions where necessary or through the level of depth at which the tasks are pitched. When children encounter barriers to their maths, the school responds to their needs with a range of interventions during and after school. During maths lessons, children are given ample opportunities to work independently as well as collaboratively to demonstrate their understanding of a mathematical concept/skill. In addition, children are encouraged to reason effectively through modelling and discussion.
- 3) To develop an approach towards problem solving:** Problem solving is an integral part of our maths lessons. The focus is for children to apply what they have learnt to solve routine problems. Children may draw upon a range of strategies to do this, including the **bar-modelling approach** to solving problems.

We believe that one of our strengths in teaching maths is a clear progression in the written calculation methods which are taught across the different year groups. Each classroom displays a **Visual Calculation Policy (VCP)** with relevant images for that particular year group. These are also presented at the front of children's maths books so that pupils can easily refer to the methods when needed. The continuity in building upon children's previous knowledge of calculation methods ensures that our pupils develop good arithmetic based skills as they progress through the school. This is further supported through a dedicated arithmetic based maths lesson at least once a week.

During the school day, some pupils also take on the role of **“Times tables buddies”** with younger children. These pupils are trained in how they can best support other children to develop their times tables knowledge through a range of methods such as times tables based games. Acting as role models, our buddies help to further support children who need extra practise in this area.

The school's partnership with parents/carers is vital in supporting our aims. We expect parents/carers to help their child learn their times tables facts and related division facts as well as supporting their child with weekly maths homework. We also offer maths workshops for parents who would like additional support in helping their children to become confident mathematicians. Staff are always available to answer any questions or queries parents and carers may have regarding their child's progress in maths.

The school has invested in a range of online packages to help motivate pupils and has enabled us to further support their learning at home. These include **MyMaths** and **TimesTables Rockstars**. MyMaths is an online portal where children can access further support with a range of mathematical concepts and practise skills in a specific area of maths. In addition, teachers can set maths homework for pupils through this online portal. TimesTables Rockstars is a fun and engaging online programme which helps to develop children's recall, and more importantly speed of recall, of multiplication and related division facts. Teachers may use this programme in school to help them assess where further support is needed.