

## Mathematics at Merridale

*"The study of number, shape, space and measures, to be able to calculate, reason and solve problems."*

At Merridale, we strive to promote high standards of Mathematics by equipping all children with the knowledge, skills and understanding to become confident and able mathematicians. We believe that Mathematics teaches us how to make sense of the world around us and we do this by developing our pupils' ability to calculate, to reason and to problem solve. We do this by following these 6 guiding beliefs, built on Merridale's six golden threads.

### 1) Communication

All children will develop into confident, articulate communicators.

### 2) Problem-solving and

#### Every child a reader

All children will be challenged.

### 3) Being active

All children will use their creativity.

### 4) Independence

The topic of our curriculum will be hands-on, varied and engaging.

### 5) Inclusivity

Children will be supported.

### 6) Being active

Children are encouraged to know more and remember more.

1) Communication - All children will develop into confident, articulate communicators.

- We focus on 'speaking' maths by teaching important mathematical language at the start of every lesson.
- We encourage children to use the right mathematical vocabulary when they are talking about their learning.
- Classrooms display vocabulary and stem sentences (statements of Maths knowledge) to support children.
- We have a progression in Maths vocabulary so that the children learn the vocabulary most suited for their age.

2) Problem solving and Every child a reader - All children will be challenged.

- Our long-term progression map outlines in year groups when mathematical knowledge will be taught and revisited.
- Our long-term plan is used by teachers to ensure that learning from earlier year groups is built upon.
- We follow a 'Maths Mastery' approach. Mastering maths means pupils acquiring a deep, long-term and secure understanding of the subject. This is done by mastering areas of learning before moving on.
- The majority of pupils will move through their learning at broadly the same pace. Pupils who understand new learning rapidly will be challenged through being offered rich and sophisticated problems before any acceleration onto new content.
- Children are encouraged to use their reading skills to help them identify which operations to use when completing challenging reasoning and word problems.

f) We encourage children to have a 'can do' attitude to Mathematics and to be resilient when they are challenged.

### 3) Being active - All children will use their creativity.

- a) We build on children's natural curiosity with numbers by encouraging them to ask questions.
- b) Children access a range of resources and strategies they can use to solve problems. We encourage children to choose their own method and resources when solving problems.
- c) We give children activities that encourage them to think 'outside of the box' about how to answer it.
- d) We encourage children to take risks and make and learn from mistakes in their learning.

### 4) Independence - The topics of our curriculum will be hands-on, varied and engaging.

- a) Our Maths learning can be divided into three strands: fluency, reasoning and problem solving.
- b) Children are taught new learning by using manipulatives (Maths equipment) and pictorial images before moving onto more abstract representations.
- c) Children are taught important arithmetic skills before applying their methods to a variety of different contexts. We make sure that the interests of the children are reflected in this.
- d) Our curriculum provides pupils with opportunities to work practically, with their peers and independently so that it is a shared learning experience.

### 5) Inclusivity - Children will be supported.

- a) Children have access to a range of manipulatives (Maths equipment) to help them with their Maths learning.
- b) Instant feedback is given through live marking, self-marking, peer-marking and verbal feedback during lessons.
- c) Support staff work closely with children to provide targeted and individual support to children when it is needed.
- d) We 'close the gap' in children's Mathematics knowledge by giving same-day or additional intervention to make sure no child is left behind.
- e) When appropriate, children may be 'pre-taught' key mathematical learning so that they are ready to progress.

### 6) Being active - Children are encouraged to know more and remember more.

- a) Important Mathematical knowledge is revisited before children move on to new learning.
- b) Children have the opportunity to repeat maths activities that will develop their understanding of mathematical concepts.
- c) Each morning, children complete 'Remember Me's' which revisit key mathematical learning from previous year groups to strengthen their memory of this knowledge.

## How can you help at home?

- 1) Encourage your child to use our online platforms and continue their learning in mathematics at home. These include Doodle Maths and Timestable Rockstars.
- 2) Encourage children to use their Maths skills in daily life. For example, telling the time, measuring in grams or millilitres and naming shapes.