



Mathematics

Mathematics at Ribbon:

At Ribbon, we pride ourselves on being an inclusive school, and this is reflected in our philosophy about teaching and learning mathematics. We have high expectations that all pupils can and will achieve, and this has led to us adopting a 'mastery' approach to planning and teaching maths. The mastery approach is defined by five key principles:

- **Fluency**—speed, accuracy and flexibility with key facts
- **Representation & structure**—the use of representations to help children 'see' mathematical laws/relationships.
- **Variation**—carefully planned examples and questions, to show concepts in different ways
- **Mathematical thinking**—reasoning logically and making connections
- **Coherence**—breaking the maths down into small steps, to ensure deep and sustainable learning for all pupils.

Our Vision for Maths

Maths is an essential skill that enables us to live an independent life.

It teaches us how to make sense of the world around us, whether it be: calculating the total amount of money we need to purchase items, knowing what time to meet a connecting train, or weighing precise amounts of ingredients when following a recipe.

Maths helps us to develop problem solving and reasoning skills that allow us to solve a variety of problems.

What our children say:

Pupils tell us that they feel confident within maths and enjoy the challenges that they are presented with during maths lessons. They understand that 'getting stuck' is part of the process and are happy to help each other and learn from their mistakes. They like the fact that the lesson structure enables them to 'get used to' new concepts and then 'go deeper'.

"When I started in Year 3, I used my fingers to count. Now, we're trying to do it mentally."

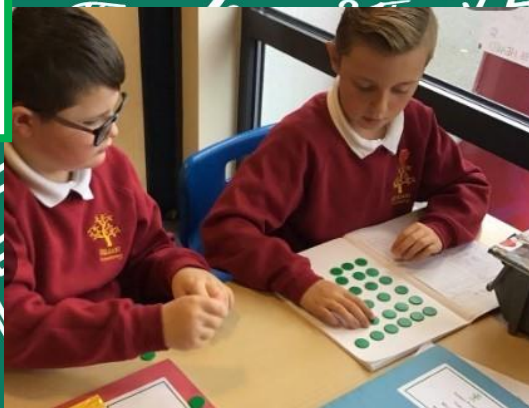
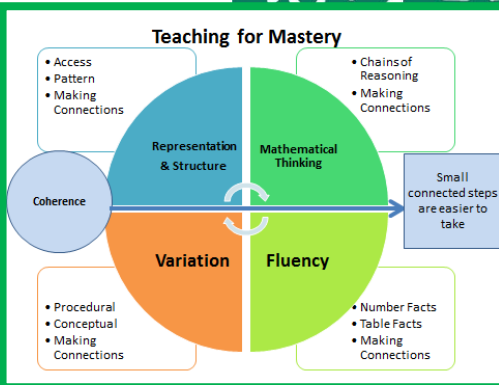
"If I'm stuck, I ask my partner and we help each other."

"I like doing problem solving pit-stops, because they get your brain working a lot."

Examples of learning at Ribbon:

During their school day at Ribbon, children have many opportunities to apply their mathematical skills, across the curriculum.

This could be through applying their knowledge of symmetry or geometry to their art lessons, reading tables and graphs when collecting and interpreting data in science lessons, helping them with their understanding of chronology in history or with their map-reading in geography.



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$$a^0 = 1$$

$$a^1 = a$$
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