

Maths**Intent & Implementation**

At Wingrave Church of England School, our aim is that all learners should become fluent in the fundamentals of mathematics and should be able to reason mathematically and solve problems by the application of their mathematical understanding. We endeavour to ensure that children develop an enthusiastic and creative attitude towards mathematics that will stay with them throughout their lives.

Through a Mastery approach, we aim to:

- develop mathematical competency and skills and understanding across key concepts,
- develop fluent mathematicians who are confident and able to apply their mathematical knowledge to a variety of problems,
- develop pupils' ability to reason about mathematical concepts and make connections within the mathematics programme of study, the whole school curriculum and the wider world,
- develop independent problem solvers who perseveres, take risks in their learning, and challenge themselves,
- foster an enjoyment of mathematics and create critical thinkers

By building confidence, resilience and a passion for maths, we can show that whatever their prior experience or preconceptions, maths is an exciting adventure that everyone can enjoy, value and master!

Maths is taught in line with the National Curriculum following the White Rose Scheme of Learning. We teach Maths for Mastery so that pupils develop a deep and adaptable understanding of the subject. Mastery implies being able to use one's knowledge appropriately, flexibly and creatively and to apply it in new and unfamiliar situations.

Through careful planning and preparation, we aim to ensure that children are given opportunities for:

- practical activities and mathematical challenges,
- problem solving,
- individual, group and whole class discussions and activities,
- open and closed tasks,
- a range of methods of calculating e.g. mental, pencil and paper and using a calculator.

We encourage our pupils to become independent learners and to take responsibility for their own learning. Children are always encouraged to challenge themselves, understanding that we learn from mistakes. In Upper Key Stage Two, it is regular practice for pupils to mark their own work and are expected to identify where and how mistakes have been made. Across the school, all children have regular opportunities to explain their reasoning verbally.

At the point in which children have secured their expectations in certain areas of the Maths Curriculum their thinking is challenged and extended through open ended, higher order questioning and problem solving activities.

To underpin our Maths curriculum, we use the White Rose Maths resources which correlate with our views around the important of problem solving, reasoning and appropriate challenge. In this way we can monitor expectations and progress of both skills & knowledge within mathematical elements across the whole school whilst using other materials and resources as appropriate to enhance learning further.

These elements are:

- Place Value – Use & compare, problems & rounding
- Addition & Subtraction – Recall, represent & Use, Calculations, Solving Problems
- Multiplication & Division - Recall, represent & Use, Calculations, Solving Problems, Combined Operations
- Fractions – Recognise & Write, Compare, Calculations, Solve Problems
- Decimals - Recognise & Write, Compare, Calculations & Problems
- Fractions, Decimals & Percentages
- Ratio & Proportion
- Algebra
- Measurement – Using, Money, Time, Perimeter/Area/Volume
- Geometry – 2D Shapes, 3D Shapes, Angles & Lines, Position & Direction
- Statistics – Present & Interpret, Solve Problems,

“The Kingdom of Heaven is like a tiny mustard seed planted in a field. It is the smallest of all seeds but becomes the largest of plants, and grows into a tree where birds can come and find shelter.”

Matthew 13:31-32