



Maths intent –

At Ravensdale, we want our children to adopt a positive, fearless approach to learning Maths. We believe in promoting a sustained and deepening understanding by employing a variety of mastery strategies, with teaching for conceptual understanding at the heart of everything we do. Our children will develop their Mathematical learning through a Mastery approach that involves the use of concrete manipulatives, which support pictorial representations that develop secure, abstract thinking. Underpinning this pedagogy is a belief that all children can achieve in Maths. This helps deliver the three aims of the National Curriculum: fluency, problem solving and reasoning. Our children will be motivated by the subject and excited to learn more through a range of engaging and inspiring learning opportunities. This will mean that upon leaving, our children will have a deep understanding which empowers them with the understanding of a confident mathematician.

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

Lower Key Stage 2:

The principal focus of mathematics teaching in lower key stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number. By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work. Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

Upper Key Stage 2:

The principal focus of mathematics teaching in upper key stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio. At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them. By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages. Pupils should read, spell and pronounce mathematical vocabulary.

The Teaching of Maths at Ravensdale - implementation

Maths at Ravensdale Junior School draws from the scheme of work developed by White Rose Maths. The clear expectation is most children begin on the expected level of work.

- Strategies for teaching Maths should include:**
- Recap on prior learning through use of engaging metacognitive inspired starter activities and working walls.
 - Use of a concrete – pictorial – abstract approach to teaching concepts.
 - Short focussed tasks, which allows for continual teacher-pupil dialogue to take place to support effective formative assessment.
 - The use of assessment questions where necessary to inform the children’s starting point for independent tasks.
 - Work differentiated and colour coded e.g. [WT](#), [EX](#), [GD](#).
 - A focus on developing rapid recall of multiplication facts (strong focus in Year 3 and 4).

Year Group Coverage			
Year 3	Year 4	Year 5	Year 6
Place Value Addition and Subtraction Subtraction Multiplication and Division Division Money Statistics Length and Perimeter Fractions Time Properties of Shape Mass and Capacity	Place Value Addition and Subtraction Multiplication and Division Area Statistics Length and Perimeter Fractions Decimals Money Time Properties of Shape Position and Direction	Place Value Addition and Subtraction Multiplication and Division Area Statistics Length and Perimeter Fractions Decimals and Percentages Converting units of Measure Time Properties of Shape Position and Direction Volume	Place Value Addition and Subtraction Multiplication and Division Statistics Perimeter, Area and Volume Fractions Decimals and Percentages Converting units of Measure Time Properties of Shape Position and Direction Ratio Algebra
<p>Impact of learning Maths for the children should:</p> <ul style="list-style-type: none"> • Instill a confident approach to solving Mathematical problems. • Rapidly recall key facts and methods of calculation. • Develop mathematical enquiry and knowledge application through problem solving skills. • Instill deep mathematical knowledge and understanding. • Articulate ideas using appropriate mathematical vocabulary. • Be able to use mathematical understanding in the wider world. 			
<p>Teachers assess the children’s progress against the intended learning outcomes for each objective. Children are assessed at working towards (WT), reaching the expected standard (EX) or achieving greater depth (GD) for their year group. In Year 6 this is assessed through SATS. Parents are informed of this outcome in the annual summer report.</p>			