



Amberley CE Primary School



St. James' CE Primary School,
Coldwaltham



Enabling every child to thrive and succeed

At Arun Villages Federation, we care for EVERYONE. We embrace challenges and all opportunities to learn, recognising the value of education and persevering even when it feels difficult.

We are uncompromising in our aspirations, proud of our – and each other's - achievements and look forward to embracing the experiences the wider world offers.

Respect, Kindness, Honesty, Positivity and Teamwork

SUBJECT: Maths

Intent:

Across the Arun Villages Federation, we recognise that Maths is a skill we use on a daily basis and is an essential part of everyday life, as well as being an important creative discipline that helps us to understand patterns in the world around us. We want all pupils to develop a sense of curiosity about Maths but also develop a clear understanding. We aim to foster positive “can do” attitudes and we promote the fact that ‘We can all do maths!’ We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps, using a range of strategies and enhancing our provision through the use of a followed Maths Scheme, both at School and at Home. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems.

Mathematics forms an important part of our broad and balanced curriculum where we endeavour to ensure that children develop an enjoyment and enthusiasm for Maths that will stay with them throughout their lives and empower them in future life. We believe that unlocking mathematical fluency is an essential life skill for all learners and is a pre-requisite to being able to reason and solve problems mathematically. Our aim is to develop a positive culture of deep understanding, confidence and competence in Maths that produces strong, secure learning. Our Maths curriculum is progressive and builds year on year, taking account of key vocabulary and key questions which help to develop a schemata of knowledge in the different domains of Maths.

We aim for all pupils to: become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately; be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios; reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language; have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

Implementation:

Across the Arun Villages Federation, teachers plan maths lessons following the White Rose Maths Scheme of work. Maths is taught daily as a discrete lesson. The use and secure understanding of maths knowledge and skills are also threaded through other areas of the curriculum in order to provide relevant opportunities to use and apply. Children learn using a range of resources, which support a concrete, pictorial and abstract approach guiding them through their understanding of mathematical processes. Children learn in differentiated small group and mixed ability whole class lessons. Their progress in maths is carefully tracked through a range of assessment strategies to ensure teachers identify where children require support or challenge to assist their progress. Timely intervention is provided by the class teacher or support staff to address any misconceptions or gaps in understanding to enable children to confidently progress towards their next lesson. More confident mathematicians are challenged to show their mastery of maths concepts through investigations and problem solving tasks. We use and select from a range of schemes of work including White Rose, Nrich Maths and My Maths and use the Bar Modelling technique to encourage understanding of concrete and pictorial problems solving methods which further support the abstract understanding. Resources, such as Numicon, are carefully selected to enable early understanding within maths and as a tool for intervention work.

Children secure key number facts through our programme of mental maths challenges (including times tables awards/certificates and Times Tables Rock Stars competitions) progressing through levels so that number bonds and times tables facts are fluently recalled and applied. Children are motivated by the opportunity for recognition both in school and at home for successes along their maths learning journey.

By engaging children in whole school challenges we maintain a high profile for the teaching and learning of maths. Through cross-curricular practical activities we make maths relevant to children's lived experiences.

Impact:

Across the Arun Villages Federation children confidently use a range of strategies and resources when tackling maths activities. They make connections and apply mathematical knowledge both within maths lessons and across the curriculum. Children are confident when talking about their maths learning and engage enthusiastically in maths activities—our children enjoy maths.

SUBJECT Overview – Whole School Cycle

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<p>Getting to know you.</p> <p>Match, sort and compare.</p> <p>Talk about measures and patterns.</p>	<p>It's me, 1,2,3.</p> <p>Circles and Triangles.</p> <p>1,2,3,4,5.</p> <p>Shapes with 4 sides.</p>	<p>Alive in 5.</p> <p>Mass and Capacity.</p> <p>Growing 6,7,8.</p> <p>Length, height and time.</p>	<p>Building 9 and 10</p> <p>Explore 3-D shapes.</p>	<p>To 20 and beyond.</p> <p>How many now?</p> <p>Manipulate, compose and decompose.</p> <p>Sharing and grouping.</p>	<p>Visualise, build and map.</p> <p>Make connections.</p> <p>Consolidation.</p>
Key Stage 1	<p>Place Value.</p> <p>Addition and subtraction.</p>	<p>Place Value.</p> <p>Multiplication.</p>	<p>Division.</p> <p>Place Value.</p> <p>Statistics.</p> <p>Measurement-length and height.</p>	<p>Properties of shape.</p> <p>Fractions.</p>	<p>Position and direction.</p> <p>Time.</p> <p>Problem solving and efficient methods.</p>	<p>Mass, capacity and temperature.</p> <p>Consolidation and investigations.</p>
Key Stage 2	<p>Place Value.</p>	<p>Multiplication and division.</p>	<p>Mass and Capacity</p> <p>Percentages</p>	<p>Perimeter and area</p> <p>Decimals</p>	<p>Fractions</p> <p>Decimals</p> <p>Money</p>	<p>Shape</p> <p>Statistics</p>

	Addition and subtraction. Four operations.	Length, perimeter and area. Fractions.		Statistics Ratio Algebra Volume	Time	Position and Direction Negative numbers Volume
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