

Subject Intent

Our Mathematics curriculum aims to ensure that all pupils become confident mathematicians, who can solve real life problems and reach their full potential in qualifications work. The curriculum is based on the Maths Mastery principles. Pupils are encouraged to build their fluency by securing their knowledge of mathematical facts and models, and then use this understanding to solve a wide range of problems. Pupils in Years 1 – 4 secure their understanding of number and place value up to 20. They participate in a range of short, practical activities that develop their play and social skills alongside key mathematical concepts. Assessment at this level is largely collected from practical activities and is moderated periodically in whole school meetings and through subject leader work scrutiny. Mathematical skills are further embedded through the foundation subject curriculums, and the leaders of these subjects contribute to the assessment of pupils in areas such as measures, money and statistics. We also plan multiple opportunities for our pupils to use mathematics in real world situations through, for example, role play, enterprise projects and visits out of school.

Year Group	1-4	Week/s	Topic/Theme <i>Key vocabulary including Tier 3 subject specific words</i>	Learning Outcomes Knowledge and Skills To know, to use, to apply...	Links to: Links Literacy and Numeracy SMSC and British Values Gatsby Benchmarks Learning Behaviours/Skills Builder
Term					
Autumn		1-3	Introducing Numicon Shapes Number, digit, count, more, less, forwards, backwards, Numicon, odd, even, sequence, pattern.	<ul style="list-style-type: none"> Introducing Numicon Shapes. Introducing number rods and ordering Numicon Shapes. Introducing Numicon Shapes and patterns, and ordering number rod trays. RPS – missing number opportunities	Literacy Use new vocabulary, make marks on materials, speak coherently
		4-5	Numicon and Numerals Order, number, numeral, digit, sequence, compare, odd, even, missing, value	<ul style="list-style-type: none"> Linking Numicon Shapes with numbers and numerals, and comparing number rods. Securing links between Numerals, Numicon Shapes and patterns, and ordering number rods. RPS – missing number opportunities	Literacy Take part in a discussion, make marks on materials
		6-7	Teen numbers Group, order, number, numeral, value, equal, compare, pattern	<ul style="list-style-type: none"> Finding how many by grouping, and teen numbers. Using Numicon Shape patterns and teen numbers. RPS – odd one out opportunities Prior Level: <ul style="list-style-type: none"> demonstrate an understanding of the concept of 1:1 correspondence. demonstrate an understanding of the concept of transaction (e.g. by exchanging a coin for an item, or one item for another, during a role-play activity) Enrichment Activities Ideas: Maths Trees, counting objects for a reason not just for the sake of counting e.g. coats on a peg, make an interactive number book. Key Questions:	Literacy Make marks on materials, use new vocabulary

			<p>Can you find...? Can you point to....?</p>	
	8-12	<p>Exploring shape and colour</p> <p>Circle, triangle, square, rectangle, heart, star, oval, round, curved, straight, corner, side.</p>	<ul style="list-style-type: none"> Naming common 2D shapes. Sorting objects by shape, colour and size. Making sequences with colours and shapes. <p>RPS – odd one out opportunities</p> <p>Prior Level:</p> <ul style="list-style-type: none"> identify the big or small object from a selection of two. copy and continue simple patterns using real-life materials (e.g. apple, orange, apple, orange, etc.). Show an interest in 2D shapes. <p>Enrichment Activities Ideas: Shape hunt, Shape weaving with sticks and natural resources, shape printing</p> <p>Key Questions: Where is...? Which one....?</p>	<p>Literacy Use new vocabulary SMSC and British values Participate positively in art, enjoy learning about the world around them. (Individual liberty)</p> <p>Careers Describe what you are like, what you are good at and what you enjoy doing</p> <p>Gatsby Benchmark 4</p>
Spring	1-3	<p>Adding and taking away</p> <p>Add, total, combine, equal to, same as, subtract, take away, plus, more, less</p>	<ul style="list-style-type: none"> Adding with Numicon shapes. Adding one more. Taking away with Numicon Shapes (prior level - taking away one). Subtracting one and adding one with number rods. <p>RPS – true/false opportunities</p> <p>Enrichment Activities Ideas: Under the flower pot (find, count and add), using a pair of dice.</p> <p>Key Questions: Can you...? What is....?</p>	<p>Literacy Use new vocabulary</p>
	4-6	<p>Halving and sharing</p> <p>Equal, part, whole, divide, share, half, halves</p>	<ul style="list-style-type: none"> Representing halves in a variety of contexts. Sharing equally. <p>Prior Level:</p> <ul style="list-style-type: none"> Recognise when two quantities are equal. Recognise when two groups are unequal. <p>RPS – true/false opportunities</p>	<p>Literacy Use new vocabulary SMSC and British Values Socialise with other pupils and other people, cooperate with others, enjoy learning about the world around them. (Mutual respect)</p>

	7-8	<p>Understanding parts and wholes</p> <p>Part, whole, partition, combine, cherry model, equal, add, subtract, split.</p>	<ul style="list-style-type: none"> • Adding - parts and wholes. • Subtracting - parts and wholes. <p>RPS – visualisation opportunities</p> <p>Prior Level:</p> <ul style="list-style-type: none"> • distinguish between ‘one’ and ‘lots’, when shown an example of a single object and a group of objects <p>Enrichment Activities Ideas: Sharing foods, looking at flowers and splitting them into parts, breaking objects.</p> <p>Key Questions: How can...? Show me...</p>	<p>Literacy Use new vocabulary</p>
	9-12	<p>Exploring measures</p> <p>Measuring cylinder, jug, scales, metre stick, ruler, weight, bigger, smaller, heavier, lighter.</p>	<ul style="list-style-type: none"> • Exploring capacity, mass and length. • Comparing measures (bigger, smaller, heavier, lighter). <p>RPS – visualisation opportunities</p> <p>Enrichment Activities Ideas: water play, throwing things e.g. wellies, the longest squirt, biggest bubble.</p> <p>Key Questions: Can you select...? Can you find....?</p>	<p>Literacy Take part in a discussion, speak coherently Gatsby Benchmark 4</p> <p>Careers Explain how to get what you want</p>
Summer	1-4	<p>Exploring number lines</p> <p>Difference, less, more, order, count, add, subtract, total, equal, number line.</p>	<ul style="list-style-type: none"> • Connecting adding, subtracting and number lines. • Subtracting - finding the difference. • How many more, how many fewer, how much less. <p>RPS – word problem opportunities</p> <p>Prior Level:</p> <ul style="list-style-type: none"> • demonstrate an understanding that the last number counted represents the total number of the count. • use real-life materials (e.g. apples or crayons) to add and subtract 1 from a group of objects and indicate how many are now present 	<p>Literacy Use new vocabulary</p>

			<p>Enrichment Activities Ideas: Maths Trees, counting objects for a reason not just for the sake of counting e.g. coats on a peg, make an interactive number book.</p> <p>Key Questions: Can you find...? Can you point to....?</p>	
	5-7	<p>Halving and doubling</p> <p>Share, halve, double, equal, parts, whole.</p>	<ul style="list-style-type: none"> Halving and doubling small numbers in a range of contexts. <p>RPS – word problem opportunities</p> <p>Enrichment Activities Ideas: doubling using natural objects, cutters and breaking in half, stacking and knocking items down, scavenger hunt.</p> <p>Key Questions: Where is...? What happened....?</p>	<p>SMSC and British Value Enjoy learning about the world around them, cooperate with others. (Mutual respect and Tolerance)</p>
	8-10	<p>Sequences</p> <p>Repeat, continue, circle, triangle, square, pattern, sequence</p>	<ul style="list-style-type: none"> Exploring adding and subtracting within sequences. Describing and extending patterns and sequences. <p>RPS – using charts and diagrams opportunities</p> <p>Enrichment Activities Ideas: find and use natural objects to make a pattern, foot and hand print patterns, sandpit patterns.</p> <p>Key Questions: What come next...? Find the next....?</p>	<p>Literacy Take part in a discussion</p> <p>SMSC and British Values Participate positively in art, Enjoy learning about the world around them (geometric patterns around the world) (Mutual respect and Tolerance)</p>

Intended impact:

Pupils will develop their fluency and reasoning skills so they can fully access the National Curriculum objectives covered in later years. They will be able to work cooperatively with other pupils in practical activities and will understand how to use a range of models and images appropriately. In addition, the focus on play-based learning and group activities will have helped them to develop as team workers, effective participators and self-managers.