

Caton St Paul's C of E Primary School Mathematics Curriculum Statement

INTENT	<p>At Caton St Paul's C of E Primary School, we aim to provide a broad and balanced Mathematics curriculum with high-quality teaching at the core. With recognition of the importance of Mathematics to everyday life, other subjects, financial literacy and future employment, teaching and learning in lessons will be enriching and purposeful. Mathematics at Caton St Paul's will equip children with the ability to reason mathematically, an appreciation of mathematics, and a sense of enjoyment and curiosity about the subject. We intend that all pupils: ❶ Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. ❷ Can solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. ❸ Can reason mathematically by following a line of enquiry and develop and present justification, argument or proof using mathematical language.</p>																					
	<p><u>Vocabulary:</u> Our intent for vocabulary in mathematics is to expose all pupils to year-group specific mathematical language Teachers will share with the pupils the vocabulary that will be required to be used at the start of the lesson. Pupils will be expected to use the vocabulary both verbally and in written form to discuss, reason and communicate their methods and answers. Teachers will allow children time to verbalise their thought processes and will encourage correct use of mathematical vocabulary when doing this.</p>	<p><u>Knowledge/Skills:</u> The intent of mathematics in school is to create a knowledge and skill led mathematics curriculum. Throughout their time at CSP, pupils will be given regular opportunities to practise and apply their mathematical skills. Pupils at CSP will be able to draw upon their mathematical knowledge, both in mathematics and across subjects in our curriculum through a range of practical, collaborative and written work.</p>	<p><u>Progression:</u> Teachers will plan lessons that cover the knowledge and skills that are expected for each year group. Teachers planning and teaching will ensure they are covering the NC POS for each year group, knowing what has been taught the previous year and what are the next steps in K&S for the next year group. Teachers will use Lancashire KLIPS documents, as well as Learning and progression steps, to plan lessons that build upon K&S and ensure there is a deep understanding so that all children master the learning. Mixed-age planning will incorporate K&S for each specific year group, meeting the needs of all children.</p>	<p><u>Concepts:</u> Mathematics at CSP will offer children a powerful way of communicating. The intention is they learn to explore and explain their ideas using symbols, diagrams and spoken and written language. Studying mathematics in CSP will stimulate curiosity, foster creativity and equip children with the skills they need in life beyond CSP C of E School. The intent is that all children have a solid understanding of the main areas of Mathematics and can use these concepts to reason and apply their learning.</p>																		
IMPLEMENTATION	<p><u>Inclusive teaching and learning:</u> In Mathematics, all teachers will implement adapted and personalised teaching approaches, materials and resources that accommodate the learning needs of all pupils.</p> <ul style="list-style-type: none"> - Personalised work (adult support, challenge, resources) - Pre tutoring to teach pupils key vocabulary, knowledge and skills - Access to manipulatives to support their acquisition of maths knowledge and skills - Support programmes to ensure all children are secure in mathematics (Power of 2) and are keeping up with their peers. - NCETM challenge materials for HA children. 	<p><u>Subject coverage/curriculum:</u> The programmes of study set out within each domain in the National Curriculum will be used to ensure children are exposed to the objectives required. Teachers implement teaching using the Lancashire Mathematics planning units. We implement a 'spiral' approach in our curriculum – deeper understanding, connections, revisiting, recapping,. It is important that children can explore Mathematics and present their findings not only in a written form but also visually and verbally. Lessons will consist of concrete, pictorial and abstract approaches to teaching and learning, based around the needs and ability of the children. EYFS teachers embed conservation of number, ensuring children understand numbers and can manipulate these.</p>	<p><u>Resources:</u> The implementation of higher quality teaching and learning in mathematics is supported by all teachers having access to online tools to support their teaching of the Lancashire planning units. White Rose Hub and other online resources are utilised where appropriate. Teachers also have access to high quality texts Every classroom has access to maths resources that enable children to access high quality manipulatives to support their development of mathematics concepts. Maths working walls allow children to access written and pictorial resources to aid their independent learning.</p>	<p><u>SMSC:</u> The moral development of our pupils is an important thread running through the mathematics curriculum. Students are provided with opportunities to use their maths skills in real life contexts, applying and exploring the skills required in solving various problems. Problem solving skills and teamwork are fundamental to mathematics through creative thinking, discussion, explaining and presenting ideas. Students are always encouraged to explain concepts to each other and support each other in their learning. In this manner, students realise their own strengths and feel a sense of achievement. Over time they become more independent and resilient learners.</p>																		
	<p><u>Local context:</u> Mathematics is important because of its real-world context. Context in maths for our children is especially critical to enable children to make sense of Maths. Teachers will integrate or relate mathematics into other subject areas across the school's curriculum. "Making the maths visible" in other subjects requires teachers drawing attention to, or providing a verbal explanation of, how mathematics is used across in other academic disciplines as and when we are teaching them.</p>	<p><u>Adaptations and Prioritisation:</u> We have recalibrated our Maths curriculum to take account of missed learning, and to secure firm foundations before moving on to new learning. Maths planning will consider disrupted schooling in the past two academic years, and focus on ensuring basic skills and knowledge are secure. Linked topics can be addressed together, starting with those from the year below. We will prioritise key topics, without narrowing the Maths curriculum. Informal assessment at the start of each lesson/topic will guide the teaching for that unit.</p>	<p><u>Evidencing teaching and learning:</u> All children will be encouraged to represent their mathematical thinking, concepts and methods in a variety of ways. We want our pupils to understand the mathematics behind the maths using their books as jotters when needed and using the indoor and outdoor learning environment. Teachers will encourage children to understand the answer is only the beginning and they need to evidence their methods and reasoning both visually and verbally. Teachers will use photos, videos, verbal explanations, worksheets and maths books to evidence the work completed by the children. Learning will be extended by open-ended questions.</p>	<p><u>Primary and Early Years overview</u></p>																		
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">EYFS</th> </tr> <tr> <td style="width: 33%; text-align: center;">Number</td> <td colspan="2" style="text-align: center;">Numerical patterns</td> </tr> <tr> <th colspan="3" style="text-align: center;">Primary National Curriculum</th> </tr> <tr> <td style="text-align: center;">Number and place value</td> <td style="text-align: center;">Fractions, decimal and %</td> <td style="text-align: center;">X and ÷</td> </tr> <tr> <td style="text-align: center;">Measurement</td> <td style="text-align: center;">+ and -</td> <td style="text-align: center;">Statistic</td> </tr> <tr> <td style="text-align: center;">Ratio</td> <td style="text-align: center;">Geometry</td> <td style="text-align: center;">Algebra</td> </tr> </table>	EYFS			Number	Numerical patterns		Primary National Curriculum			Number and place value	Fractions, decimal and %	X and ÷	Measurement	+ and -	Statistic	Ratio	Geometry	Algebra
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IMPACT	<p>By the end of the Early Foundation Stage and each Key Stage, pupils are expected to know, apply and understand the skills and processes specified in the subject of mathematics (EYFS and National Curriculum)</p>																					
	<p><u>Pupil voice:</u> Our whole-school curriculum approach means listening to the voices of everyone in the school community. Mathematics questionnaire will be sent to all children and staff to canvass opinion about our Maths curriculum. These responses will be used to assess the impact of our current curriculum and make any changes necessary to continue to engage and inspire our children.</p>	<p><u>Knowledge:</u> A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations. All children will be able to retrieve mathematical knowledge and be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.</p>	<p><u>Skills:</u> All children will have the skills and the resilience to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar context, in other curriculum subjects and to model real-life scenarios</p>	<p><u>Cultural capital:</u> Our children face unique economic, environmental, and humanitarian challenges. The problem solving required to address these challenges requires so imaginative solutions. In order to tackle these problems, our teachers must challenge the traditional problem-solving methodologies used in math lessons and encourage new problem-solving strategies through incorporation of facilitating of creative problem solving/puzzles and real-world investigations.</p>																		

