



Bewcastle Primary School

Mathematics Curriculum Statement



Intent

We intend to give all of our pupils a secure understanding of mathematics that will lead to greater success in later life.

We intend that:

- children become fluent in the fundamentals of mathematics, so that they can rapidly and accurately recall and apply this knowledge, seamlessly making links across and between mathematical concepts;
- children can reason mathematically by following a line of enquiry
- children develop the skills and attitudes that enable them to enjoy the puzzle-solving nature of mathematics; finding satisfaction and enjoyment in solving routine and non-routine problems with increasing sophistication;
- children use their mathematical understanding and confidence in all other curriculum areas to help them interpret and make sense of the world around them;

Learning	Vocabulary	Progression	Continuing Professional Development
<p>We intend that children at Bewcastle School will have a range of high-quality, purposeful mathematical learning experiences that allow them to become confident mathematicians. We intend that our children become:</p> <ul style="list-style-type: none"> • visualisers through using the CPA (Concrete, Pictorial and Abstract) approach which helps them to understand and make connections between different representations • describers who place a great emphasis on mathematical language and questioning so pupils can articulate the maths that they are doing and so support them to take their ideas further • experimenters that are able to reason and problem solve by applying their knowledge, skills and understanding. 	<p>At Bewcastle School we intend to expose, explore and model to all pupils, the specific mathematical vocabulary needed to become a confident mathematician. Pupils are expected to use mathematical vocabulary to discuss, reason, explain and communicate their methods and answers.</p>	<p>Teachers plan lessons using the White Rose Maths scheme that cover the knowledge and skills that are expected for each year group, including any consolidation activities for pre-requisite knowledge. Teachers planning and teaching will ensure they are covering the National Curriculum objectives for mathematics, ensuring a clear sequence of learning that allows children to build on their starting points and prior learning, thus promoting and reinforcing the interconnected nature of mathematics.</p>	<p>At Bewcastle School, we intend that all staff have access to high quality CPD through attendance at webinars, face to face training sessions, sharing subject knowledge, staff meetings, professional dialogue, own research and enquiry and cluster support.</p>
Implementation	Mathematics Curriculum	Resources and Learning Environment	Communicating as a mathematician
<p>Inclusive Quality First Teaching</p> <p>Through differentiation and regular assessment and monitoring, all children will be given well matched learning activities. Children who have a secure understanding of a topic will be given the opportunity to apply their understanding to more complex problems, to deepen their thinking and expand their understanding and problem-solving abilities. Children requiring more support will be identified quickly so as to identify gaps in knowledge and misconceptions early. This will be addressed through high-quality teaching providing personalised support and guidance within lessons.</p> <p>Teaching and learning is supported by:</p> <ul style="list-style-type: none"> -Personalised learning activities (to consolidate or challenge, adult support, carefully chosen resources); -Pre-teaching to teach pupils key vocabulary, knowledge and skills; -Access to manipulatives, pictorial representations and methods demonstrated on working walls. 	<p>We use White Rose Maths across the school. In mixed aged classes, we follow the teaching sequence as suggested by White Rose Maths. However, a professional judgement is made by teachers (when planning) as to how sequences of learning are planned to maximise learning opportunities and effective sequencing.</p> <p>This is supplemented by additional learning activities from a range of sources, including (but not limited to):</p> <ul style="list-style-type: none"> - NCETM Number Sense - NCETM/ Oxford Owl Reasoning 	<p>Working walls and modelled examples are used and displayed to support children's independent application and recall. White Rose Maths presentations are used for teacher-led modelling, supported by physical resources that can be used by children.</p> <p>In order to support the recall and fluency in number and multiplication/ division facts, each child (Y2-Y6) has their own Times Table Rockstars account and dedicated X-tables flash cards.</p>	<p>Children will represent and communicate their mathematical thinking, concepts and learning in a variety of ways. This can include (but is not limited to):</p> <ul style="list-style-type: none"> - Work books - Printed activities - Photographs - Pictorial representations/ jottings/ written explanations - Sharing in class/ talking to partners <p>Teachers will deepen thinking by providing opportunities for children to verbally explain, demonstrate, prove or disprove an answer, where the method is often seen as being more important than the final answer.</p>

		<ul style="list-style-type: none"> - Times table rock stars - Hit the button - CLIC – Big Maths - STILE - Topical Resources (Arithmetic) - Target Maths 		<p><u>Mathematics Across the Curriculum</u></p> <p>Meaningful links to mathematics are identified in curriculum planning and allow children to communicate and show their understanding in other curriculum areas. Examples include:</p> <ul style="list-style-type: none"> - History: dates, timelines, chronology - Geography: time zones, climate and weather, distance - DT: measurement, shape
Impact	Knowledge and skills	Pupil Voice	Cultural Capital	SMSC
	<p>Children will demonstrate that they have ‘mastered’ mathematical concepts: ‘mastering’ maths means pupils acquiring a deep, long-term, secure and adaptable understanding of the subject. Through this, children will:</p> <ul style="list-style-type: none"> - will develop curiosity, interest and enjoyment in mathematics; - will be able to apply their mathematical knowledge to solve problems, including those with real-life contexts, by choosing the appropriate operations; - become numerate and tackle mathematical problems with confidence; - develop the skills which are needed to meet the demands of adult life; - develop the ability to think and record logically and clearly; - use mathematical language accurately, effectively and confidently; - develop positive attitudes to mathematics, enjoy mathematics and achieve their potential - use concrete, physical resources and pictorial representations to support calculations and problem solving; - develop a range of mental calculations strategies, aided by informal jottings where necessary; - are confident in the fundamentals of maths and be able to reason mathematically. 	<p>Children will be confident to share their ideas, opinions and critique of what they have been learning in Maths. They will be confident to talk about their Mathematical knowledge to a wide range of people including their fellow pupils and adults such as the governing body.</p> <p>Learning walks with pupils allow them the unique opportunity to share and discuss what it is like to study Mathematics at Bewcastle School.</p>	<p>Children will have been exposed to a rich mathematical learning journey that allows them to explore, interpret and analyse the world around them. They will have an enhanced understanding of key mathematical vocabulary, allowing them to access the wider world more effectively.</p> <p>Through applying mathematical skills to wider curriculum areas, undertaking real-life mathematical learning challenges and ‘seeing’ the maths in the world around them (for example, real-life contexts or problem-solving activities) the children will be better prepared for what comes next in their lives,</p>	<p>Mathematics helps children make informed decisions in life based on the skills they have developed in problem solving. Children are encouraged to question information and use reasoning to reach conclusions. Maths also provides an excellent opportunity for children to understand the lasting impact of different cultures and their numbers systems for example Roman numerals.</p>