

Mathematics at Ellwood Community Primary School

<p>Intent</p>	<p>At Ellwood Community Primary School, we believe that a high-quality mathematics education, that is both challenging and enjoyable, provides a foundation for understanding the world, the ability to reason mathematically and a sense of curiosity about the subject.</p> <p>We aim to develop lively, enquiring minds, encouraging pupils to become self-motivated, confident and capable in order to solve problems that will become an integral part of their future. The children should become fully independent mathematicians who are not afraid to take risks.</p> <p>We provide our children with a variety of mathematical opportunities, which will enable them to make the connections needed to apply their understanding of mathematics across the curriculum.</p> <p>We aim to ensure that all pupils meet the requirement of the National Curriculum for mathematics by becoming fluent in the fundamentals of mathematics and able to reason mathematically and solve problems by applying their mathematics to a variety of routine and non-routine problems.</p>
<p>Implementation</p>	<p>Planning</p> <ul style="list-style-type: none"> • Long term: National Curriculum and Development Matters • Medium term: Yearly overview, based on Focus Maths, up-dated annually in response to data and in house monitoring of teaching & learning. • Short term: Daily lesson plans include a clear lesson intention ‘I can’ and clear success criteria or ‘Steps to Success’. Planning is supported by a range of resources eg Target Maths, Focus Maths, White Rose Hub Maths resources, our school calculation policy and NCETM Teaching for Mastery. <p>Teaching and learning</p> <ul style="list-style-type: none"> • Daily Maths lessons in discrete year groups, supported by Teaching Assistants. • Fluency developed through practicing key skills, repeating, reinforcing and revising. • Children use a range of manipulatives and move through concrete, pictorial and abstract stages. • Children given time to practice and perfect their calculation strategies including giving pupils opportunity to make appropriate decisions when estimating, calculating and evaluating the effectiveness of their chosen methods. • Children given opportunities to reason and solve problems regularly; learning is varied and allows for deep and secure understanding. • Investigative tasks designed to allow pupils to follow lines of enquiry and develop their own ideas, justifying and proving their answers. Children work both collaboratively and independently solving problems, which require them to persevere and develop resilience. • Feedback including our whole school ‘next steps’ system is designed to ensure pupils are well informed and making visible progress. • Weekly practice of mental maths facts through Maths passports (Reception to Year 6) and Schofield and Sims Mental Maths practice books (Year 2 – 6). • Class challenge giving regular practice of times tables, recorded on an interactive display. • TT Rockstars used to support learning and assessing of times tables. • Mathematical vocabulary is explicitly written in planning – this is discussed with children, who are encouraged to use it independently.

- Both greater depth and struggling learners are given small group, 1-2-1 and/or timetabled intervention in order to ensure every child is reaching their full mathematical potential.
- Assessment**
- Ongoing assessment during lessons and activities informs planning for lessons and interventions, recorded on Insight Tracker.
 - Prior & Post learning – informs future planning, demonstrates progress in books, celebrates effort and achievement.
 - Summative assessment – Testbase carried out December, March and June.
 - Pupil progress meetings
 - Monitoring of teaching and learning by subject lead will include planning scrutinies, book looks, pupil conferencing and lesson observations to ensure appropriate coverage of curriculum and differentiation is in place

Impact

- ✓ Children are capable and confident mathematicians, who are not afraid to take risks
- ✓ Children understand the relevance of what they are learning in relation to real world concepts
- ✓ Maths books show a range of activities with evidence of fluency, reasoning and problem solving
- ✓ Feedback and interventions are supporting children to strive to be the best mathematicians they can be, ensuring a greater proportion of children are on track
- ✓ Children ‘have a go’ and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem
- ✓ Children are able to apply the mathematical skills they have learnt to solve a range of written and practical problems
- ✓ Children are developing skills in being articulate and able to reason verbally, pictorially and in written form
- ✓ Attainment and progress scores recorded on Insight Tracker show improvement through and across years
- ✓ Improving end of KS data

	2016		2017		2018		2019	
	School	National	School	National	School	National	School	National
KS1	67%	73%	82.5%	75.3%	75%	76%	80%	76%
KS2	55%	70%	59%	75%	76%	70%	80%	79%