



Elmsleigh

INFANT & NURSERY SCHOOL

Grow to be the best we can be

Mathematics Policy

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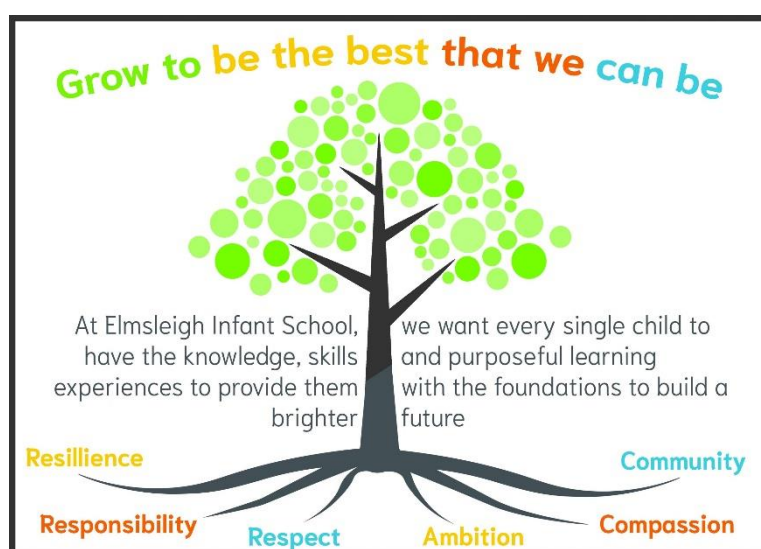
Mathematics Policy at Elmsleigh Infant and Nursery School

Introduction:

Welcome to Elmsleigh Infant and Nursery School's Mathematics Policy. Since September 2018, we have been transitioning to a mastery approach to teaching and learning mathematics. This approach, aligned with the 2014 National Curriculum, ensures that most pupils progress at a similar pace, with opportunities for both support and challenge. Our goal is to develop fluency, reasoning, and problem-solving skills in all students, fostering a love for mathematics that lasts a lifetime. This policy outlines our commitment to achieving mathematical mastery for every child.

Aims/Intent:

The vision of Elmsleigh Infant and Nursery School states:

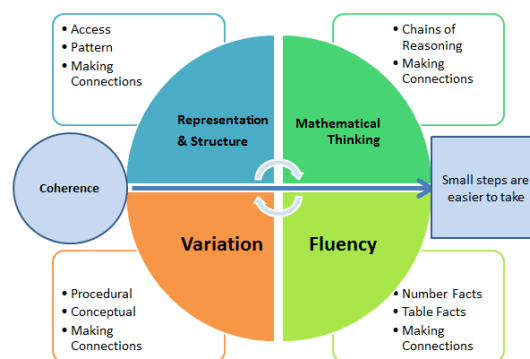


At Elmsleigh Infant and Nursery School, we have adopted a mastery approach to deliver the three aims of the National Curriculum, fluency, reasoning, and problem solving. Underpinning this pedagogy is a belief that all children can achieve in maths. We believe in promoting sustained and deepening understanding by employing a variety of mastery strategies, with teaching conceptual understanding at the heart of everything we do. Our approach aims to provide all children with full access to the curriculum, enabling them to develop independence, confidence, and competence- 'mastery' in mathematics in order to be independent mathematicians who are well equipped to apply their learning to the wider world and be ready for the next phase of their mathematical education.

Teaching Principles:

1. Teachers at Elmsleigh Infant and Nursery School believe in the importance of mathematics and given all children access to the mathematics curriculum.

2. The whole class is taught mathematics together. The learning needs of individuals are addressed through careful scaffolding, questioning and appropriate rapid intervention where necessary, to provide the appropriate support and challenge.
3. The reasoning behind mathematical processes is emphasised. Teacher/pupil interaction explores how answers were obtained as well as why the method worked and what might be the most efficient strategy.
4. Precise mathematical language, often expressed in full sentences, is used by teachers so that mathematical ideas are conveyed with clarity and precision. We value 'mathematical talk' and children get lots of opportunity to talk about and evaluate their mathematics during lessons.
5. Sufficient time is spent on key concepts to ensure learning is well developed and deeply embedded before moving on.



Coherence	Representation & Structure	Mathematical Thinking	Fluency	Variation
Lessons are broken down into small connected steps that gradually unfold the concept, providing access for all children that enables them to apply the concept to a range of contexts	Representations used in lessons expose the mathematical relationships and structure being taught.	Ideas are worked on by the children: thought about, reasoned and discussed with whole class discussions, talk partners and group discussions.	We promote quick and efficient recall of facts and procedures and the flexibility to move between different contexts & representations.	We aim to represent the concept being taught in more than one way. We encourage children to pay attention to what is kept the same and what changes.

Calculation Policy:

All teaching staff at Elmsleigh understands the need for continuity to ensure the best progress for the children's learning journeys. Therefore, we use our own Calculation Policy to inform our teaching of Mathematics. The policy aligns with the White Rose planning documents and the National Curriculum Requirements. The children are encouraged to develop fluency in their recall of key facts and a whole school approach to the teaching of calculation strategies is deployed across the school. This ensures a consistent and progressive approach and prepares our children for the future.

Resources:

The school continues to review and renew the manipulatives they use during lessons.

The following resources are used within foundation stage and KS1*:

- Base 10
- Counters
- Cubes
- Numicon
- Whiteboards and markers
- Numberlines
- Tens frames/place value charts

*this is not an exhaustive list of the resources we use; however, these manipulatives allow continuity and progression across the whole school.

EYFS

In EYFS (Nursery and Reception) we follow the EYFS framework. Teachers ensure the children learn through a mixture of adult led activities and child-initiated activities both inside and outside of the classroom. Mathematics is taught through an integrated approach using material from Number Sense, White Rose Maths and Numberblocks. The children have a wide range of structured play resources available to them throughout the year - this is known as "continuous provision". The adults model the use of these resources

Key Stage 1

In year 1 and year 2, we follow White Rose Maths to teach a broad and challenging curriculum. Our Mathematics curriculum will provide many opportunities for children to develop confidence and fluency within place value to underpin the strands of Mathematics. The use of practical equipment, such as concrete objects and measuring tools, will support the children to gain a deeper conceptual understanding before being challenged through tasks and questions to explain their reasoning and solve a range of problems. The children are equipped with the skills to recognise shapes and their properties and measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

Number Sense

In Key Stage 1, in addition to the children's daily Mathematics lesson we use a systematic and structured programme which ensures children develop visual models of number, a deep understanding of number and number relationships, and fluency in addition and subtraction facts. The children are encouraged to develop fluency in their recall of key facts and a whole school approach to the teaching of calculation strategies is deployed across the school. This ensures a consistent and progressive approach and prepares our children for their next stage in learning.

SEND Provision

For pupils who have been identified with SEND, teachers are required to complete an APDR form at the beginning of each term, with an outline of all the provision to support their learning needs. They set termly targets which are agreed with parents, and reviewed regularly to ensure they are effective and having an impact on the child's progress in school.

In maths, teachers and support staff will ensure that concrete and visual materials are always available to support those that need to spend more time on learning the fundamental concepts.

Marking and feedback

Teachers are expected to adhere to the schools marking and feedback policy when marking books and giving feedback. Every Maths piece of work will have the date and WALT displayed and highlighters are used to mark their work (green and pink). (Please see Marking and Feedback policy.)

Monitoring and Evaluation

Mathematics monitoring includes book scrutinies, lesson observations and/or learning walks, pupil voice interviews/questionnaires in order to ascertain correct curriculum coverage, the quality of teaching and learning as well as the children's attitudes to and retention of maths learning. This information is then used to inform further curriculum developments and provision is adapted accordingly. Data analysis is done termly to identify gaps and common trends across the school.

Assessment

Insight is used to support assessment for learning within Key Stage 1 and Early Years. Teachers review progress after teaching each strand through a mini assessment in KS1. Within the EYFS all children are assessed against the Early Learning Goals at the end of reception. Regular moderation sessions are held within and across year groups. Staff also attend LA meetings and cross school moderation meetings to ensure accuracy in assessments. Statutory assessment is carried out at the end of the key stage 1 in line with STA Assessment and reporting arrangements