Alexandra Park Primary School
Care, Aspire, Achieve

Maths' Vision Statement

At Alexandra Park Primary School, we aim for every child to become a life-long learner with maths playing a central role. Maths is much more than a school subject and delivers children vital problem-solving, reasoning and logic skills. Each and every child should leave Alexandra Park Primary School with a thirst for knowledge and a desire to learn at every opportunity, having been inspired through maths. Our aim is not simply to teach children how to do mathematics; it is to develop children who can think mathematically and mathematicians.

Care	Aspire	Achieve
Pupils are encouraged to see maths as a stepping stone to becoming a real-world problem solver. We want them to Care about their futures and see how maths can have a great impact on them and all they aim to achieve.	Studying maths enables children develop their thinking and logic skills. These are skills that they can apply to other areas of life and learning and provide them with a foundation and platform from which to Aspire in different ways. Like with Care, this links directly to their future performance and a desire to be all they can be.	Our maths curriculum provides children of all ages and abilities the opportunity to Achieve through a variety of different teaching and learning methods.

Intent

At Alexandra Park Primary School, we see maths as a core subject that can underpin a child's knowledge, success and motivation. It is intended that each child acquires the foundational knowledge required to further develop their reasoning and problem-solving skills, thus allowing them to feel confident and motivated. Each child should be provided the opportunity to gain core facts and concepts upon which they can build their understanding.

Children learn to 'work through desirable difficulty' **(Aspire)** in maths and use what they know to find a way to solve problems and this is an invaluable life skill and one that helps them develop as life-long learners. **(Care)**

Implementation

At Alexandra Park Primary School, teaching is underpinned by carefully sequenced learning that enables pupils to build new learning from prior knowledge. White Rose Mathematics continues to provide the backbone of our curriculum progression, whilst teachers utilise their professional expertise to adapt learning to meet the needs of their pupils, providing a tailored maths' education that is unrivalled. All of what we do is designed using evidenced based pedagogy and research.

Teaching is built around five key principles:

1. Developing Mathematical Thinkers
Pupils are explicitly taught how to approach problems through our Mathematical Thinker framework:
Think → Talk → Do → Check → Reflect
This framework supports pupils in planning, monitoring and evaluating their thinking whilst solving problems.

2. Mathematical Talk
We recognise that thinking and communication are inseparable. Classrooms provide regular opportunities for pupils to:

- Explain reasoning.

	• Challenge ideas. • Justify conclusions. • Refine thinking through discussion. We believe that talking helps thinking and thinking helps talking. **3. Structure Before Procedure** Teachers design learning that helps pupils recognise mathematical structures rather than relying solely on surface features or keywords. Pupils are encouraged to: • Spot patterns. • Notice relationships. • Compare representations. • Make connections across mathematical domains. **4. Representation and Variation** Manipulatives, diagrams and representations are used purposefully to expose mathematical structure and deepen conceptual understanding. Carefully planned variation helps pupils focus on what changes and what remains the same. **5. Metacognition and Problem Solving** Problem solving is viewed as a process of thinking rather than a collection of question types. Teachers support pupils to: • Plan approaches. • Monitor progress. • Evaluate solutions. • Adapt strategies when needed. Our Problem-Solving approach provides a common language through which pupils learn to regulate their own thinking. Where pupils do struggle with a concept or idea, a system of support beyond the classroom is put in place. This comes in the form of pre-teach, follow-up and specific interventions. All of the above is designed to give each and every child the very opportunity to **Achieve**.
Impact	What OFSTED say… *"In mathematics, pupils learn about progressively more complicated relationships between numbers so that they can approach calculations and investigations from a variety of standpoints. As a result, they develop flexibility and inventiveness in their thinking."* Children at Alexandra Park develop as increasingly confident, independent and reflective mathematicians. Evidence of impact can be seen through: • Secure mathematical fluency. • Increased confidence when tackling unfamiliar problems. • Improved use of mathematical language. • Greater willingness to explain and justify reasoning.

	• Stronger connections made across mathematical concepts. • Increased resilience when faced with challenge. • Improved independence during problem-solving activities. Pupil voice demonstrates that children increasingly view mathematics as a subject of thinking, reasoning and exploration rather than simply calculation. Through our curriculum, pupils leave Alexandra Park equipped not only with mathematical knowledge but with the confidence and strategic thinking required to apply that knowledge effectively. We continue our impressive outcomes at the end of KS2, significantly outperforming national statistics. The percentage of our pupils meeting the expected standard has been at 90% or more for the last 4 years, with our greater depth outcomes remaining between 30% to 50%. Furthermore, we were recently in the top 1% of the country for the progress our pupils made in maths through our school. All of this reflects the exceptional hard work and dedication to maths across the entire staff at Alexandra Park Primary School.