Subject on a Page MATHS

'Mathematics knows no races or geographic boundaries; for mathematics, the cultural world is one country'

INTENT WHAT DO WE AIM TO DO?

Develop children who love mathematics, ask questions, believe that everyone can succeed and be active participants in discussion and discovery.

Support children to become fluent in their procedural knowledge and develop proficiency in their application and develop transferable skills with the mentality of "keep up not catch up".

Provide opportunities for children to find patterns and make generalisations through exploration of number and beyond.

Deliver high-quality teaching for every child with well-thought through lessons, high-quality resources and a comfortable environment to take risks and deepen understanding.

Expose children to a wide range of mathematical language and opportunities to use this within mathematical discussions.

IMPLEMENTATION HOW WILL WE ACHIEVE OUR INTENT?

A SEQUENCED CURRICULUM

From Nursery to Year 6, we implement the White Rose scheme of work to guide well-structured units emphasizing fluency, reasoning, and problem -solving. Units build on prior learning, briefly revisiting previous knowledge before introducing new concepts aligned with curriculum expectations. We prioritise developing fluency in each skill, essential for applying knowledge to complex reasoning and problem-solving. This approach ensures continuity across year groups. Dedicated time is allocated to building declarative and procedural knowledge, fostering automaticity. Additionally, focused efforts on conditional understanding enable students to make connections, apply skills in diverse scenarios, and deepen their subject knowledge. Greenfields CPS is committed to enhancing "number sense and mastery" and through our participation in the NCETM Maths Hub group, we continually review our curriculum and how it is taught to ensure constant improvement to provide high-quality lessons for all children.

GROWTH MINDSET

At Greenfields, we actively promote a culture where questioning and risk-taking are celebrated, as they serve as catalysts for cultivating a genuine love for mathematics while fortifying conceptual understanding. This approach is grounded in the belief that there is no one-size-fits-all solution in mathematics; rather, we aspire for students to identify what resonates with them, thereby fostering a sense of ownership and confidence. Through these experiences, children develop a growth mindset, instilling in them the belief that success is not only attainable but a continuous and evolving journey.

VOCABULARY DEVELOPMENT

We are dedicated to cultivating fluency in mathematical vocabulary among our students. We immerse children in a diverse array of mathematical language, skillfully modeled by our educators. Beyond mere exposure, we provide ample opportunities for exploration and discovery, allowing students to unearth mathematical rules and grasp essential vocabulary. Our teachers are adept at modeling precise and effective language in their explanations and class discussions, creating an environment where the language of mathematics is not only understood but embraced by every student.

DAILY RETRIEVAL

In YR & KSI daily retrieval is completed through Mastering number. Within this, the children have dedicated time each day to practice and perfect their foundational mathematical knowledge, In KS2 the daily retrieval lessons are shared as:

	LKS2	UKS2
Monday	Times Tables	Times Tables
Tuesday	Fluency	Fluency
Wednesday	Algebraic Thinking	Algebraic Thinking
Thursday	Times Tables	Fluency
Friday	Fluency	Fluency

TEACHING CPD

At Greenfields, we steadfastly acknowledge the pivotal role that staff development plays in shaping positive pupil outcomes. Understanding the direct correlation between the professional growth of our teaching and support staff and the success of our students, we prioritize and invest in high-quality Continuous Professional Development (CPD). Specifically tailored to enhance proficiency in teaching the mathematics curriculum, our CPD initiatives are designed to equip our educators with the latest pedagogical strategies, innovative teaching methods, and a deepened understanding of subject matter.

VARIETY

We are committed to providing an enriching educational experience for our students. Recognizing the importance of hands-on learning and a diverse set of tools, we ensure that children are exposed to a comprehensive array of high-quality math resources, manipulatives, and mathematical representations. Including a large variety within our maths coverage prepares children for the diverse mathematical challenges they may face in the future.

EXPLORATION

Our classrooms are equipped with a variety of tangible materials that facilitate interactive and engaging learning experiences, allowing students to explore mathematical concepts in a concrete and visual manner. By fostering a dynamic and resource-rich atmosphere, we aim to instill a deep understanding and appreciation for mathematics in our students, laying the foundation for lifelong mathematical proficiency.

INCLUSION & INTERVENTION

Teachers will continually assess children's ability and progress using information from lessons, observations and assessment. Swift intervention will be made where necessary. Teachers will use strategies such as pre-teaching, scaffolding, a targeted intervention (particularly for areas of declarative and procedural knowledge).

IMPLEMENTATION

HOW WILL WE ACHIEVE OUT INTENT?

Our students love maths, driven by a deep belief in their ability to succeed. In our culture, they embrace challenges, take risks, and enjoy autonomy in their mathematical pursuits, fostering not just a love for the subject but also empowerment and confidence.

Our students possess robust declarative and procedural knowledge, skillfully applying it across a diverse array of question styles.

In our mathematics lessons, children actively explore, inquire, and discern patterns. This approach not only nurtures their curiosity but also cultivates a profound understanding that extends across the entire curriculum.

Our students benefit from high-quality instruction featuring carefully planned lessons, premium resources, and a supportive environment that encourages them to take intellectual risks, fostering a deep understanding.

Our students are immersed in a diverse array of mathematical language, providing ample opportunities for them to engage in meaningful discussions and actively apply this rich vocabulary.

IMPACT

HOW DO WE KNOW WE HAVE ACHIEVED OUR AIMS?