St Cyprians Greek Orthodox Primary Academy – Maths Curriculum Intent

Intent

St Cyprians seeks to inspire curiosity and fascination about how the world around us involves mathematical skills. We aim to provide children with a maths education of the highest quality in a supportive learning environment that will enable them to achieve their full potential. We intend for children to develop problem-solving and reasoning skills that allow them to solve a variety of problems in school, which can then be transferred to other curriculum areas and enable them to apply those skills in everyday life.

At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this over time.

The deep and deepest levels are what we are aiming for by teaching maths using White Rose Maths, a Mastery approach.

We intend to do this by:

- Ensuring our children have access to a high-quality maths curriculum that is both challenging and enjoyable and builds upon previous learning.
- Providing our children with a variety of mathematical opportunities, which will enable them to make the connections.
- Ensuring children are confident mathematicians who are not afraid to take risks.
- Providing children with the opportunity to apply their mathematical knowledge across other curriculum areas.

Implementation

At St. Cyprian's, we use the White Rose Maths units to structure the learning across the year groups, ensuring learning is carefully scaffolded to enhance current understanding. The small steps approach allows teachers to ascertain the children's current understanding within a unit and build from there. Following the structure of the White Rose Scheme allows leaders to carefully monitor the teaching and learning of maths across the year.
The structure of the Mathematics curriculum shows clear progression in line with age related expectations. Teaching curriculum content in blocks allows children to explore skills and knowledge in depth and gain a secure understanding by moving through the small steps with their current understanding as a starting point. Key knowledge and basic skills are revisited regularly allowing repetition to embed learning in morning activities but also planned into units.

The children's acquisition of knowledge and understanding of Mathematical concepts is supported using the Concrete, Pictorial and Abstract representations approach. Objects, pictures, words, numbers and symbols are everywhere. The mastery approach incorporates all of these to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding. Together, these elements help cement

knowledge so pupils truly understand what they've learnt. All pupils, when introduced to a key new concept, should have the opportunity to build competency in this topic by taking this approach. Starting with concrete resources allows the children to see a physical representation of the maths concepts they are learning. Being able to manipulate the resources allows them to begin to build a picture of the mathematical process. Moving onto pictorial representations of the same models aids the children to move their understanding onto the more formalised and abstract representations of mathematical concepts.

<u>All teachers:</u>
1. 'Know where their children are' through the use of summative assessment, prior learning, assessment, maths talk
2. 'Understand where their children need to be' through a secure understanding of year group expectations and/or pre key stage expectations and ongoing, formative assessment
3. 'Know how they are going to get them there' through the use of a range of strategies to promote independence, mastery, and high expectations of ALL.
4. Effectively deploy adults, specifically during introductions, plenaries & catch-up sessions
5. Plan for progression during and between lessons.

Children's understanding is assessed on a day-to-day basis, with teachers using the evidence in books and from speaking to children to ascertain their current level of understanding. This would also highlight any gaps in understanding or lost learning. This informs the teachers planning to ensure there is an opportunity to fill any gaps either through whole class teaching or intervention.

<u>Impact</u>

At St Cyprians, children will have an appreciation of the power of mathematics while having a deep contextual understanding of the foundations of the world around us. Our pupils persevere and seek solutions when faced with problems, for instance, by breaking it down into a serious of simpler steps.

Pupils will leave us prepared for the next stage in their lives with:

- Quick recall of facts and procedures
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Confidence and belief that they can achieve.
- The knowledge that maths underpins most of our daily lives.
- Skills and concepts that have been mastered.

A mathematical concept or skill has been *mastered* when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations and this is the goal for our children.