



## Our Lady & St Edward School Maths Curriculum

### Intent, Implementation and Impact

Children's learning and development is at the heart of all we do.

We appreciate the skills and talents that every individual in our community demonstrates and believe that through establishing strong relationships, all should feel a strong sense of belonging to our school.

Every aspect of the curriculum is valued.

Every moment is a learning opportunity.



#### Intent for Maths

At Our Lady and St Edward's, these skills are embedded within Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

The aims of teaching maths in our school are:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

#### Implementation – sequential, progressive planning national curriculum, knowledge organisers, retrieval, reading, vocabulary, oracy, wider opportunities eg partake, visits, monitoring pupil voice, books, visits, environment

To ensure whole consistency and progression, the school uses the new 'White Rose Maths scheme. New concepts are shared within the context of a fluency type question followed by an initial related problem, which children are able to discuss in partners. This initial problem-solving activity prompts discussion and reasoning, as well as promoting an awareness of maths in relatable real-life contexts that link to other areas of learning. In Foundation and KS1, these problems are presented with objects (concrete manipulatives) for children to use. Children may also use manipulatives in KS2. Teachers use careful questions to draw out children's discussions and their reasoning. The use of mathematical stem sentences supports the children with their reasoning. The class teacher then leads children through strategies for solving the problem, including those already discussed. Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems. Mathematical topics are taught in blocks, to enable the achievement of 'mastery'

- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics.
- The large majority of children progress through the curriculum content at the same pace.

- Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.
- Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
- Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.
- Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up. Children build up using sentence stems to enable them to explain their reasoning.

### Impact – outcomes based on monitoring

The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards, with achievement at the end of KS2 inline with the national average and a proportion of children demonstrating greater depth, at the end of each phase.

Within maths, we strive to create a supportive and collaborative ethos for learning by providing a variety of reasoning and problem solving to enable the children to apply the skills that they have learnt. Emphasis is placed on investigative learning opportunities to help children gain a coherent knowledge of understanding of each unit of work covered throughout the school. **Our maths curriculum is planned to demonstrate progression.** We focus on progression of knowledge, skills and **vocabulary** progression also form part of the units of work.

We measure the impact of our curriculum through the following methods:

- Assessing children's understanding through retrieval in the form of the varied fluency 4 starter questions at the beginning of every lesson.
- Summative assessment of pupil discussions about their learning.
- Images (photographs) of the children's practical learning.
- Interviewing the pupils about their learning (pupil voice).
- Moderation staff meetings where pupil's books are scrutinised and there is the opportunity for a dialogue between teachers to understand their class's work. Moderation across the trust to enable teachers to assess children's work is at an appropriate level.
- Marking of written work in books against the learning objective (by adults and pupils).

All children will use mathematical vocabulary and will use specific stem sentences to enable them to articulate their reasoning. Children will begin to make relevant links from maths to other curriculum subjects, such as science and DT. They will improve their enquiry skills and inquisitiveness linked to everyday mathematics. Children will become competent in using specific vocabulary, skills and strategies to follow and complete a series of steps. All children in our school will be able to **speak confidently** (Oracy) about their mathematical learning, skills and knowledge.