

**Maths Policy**

**Edenthorpe Hall Primary Academy: Curriculum Rationale**

**We inspire, believe, challenge and achieve**

**Respect, Resilience, Aspiration, Honesty, Enjoyment**

Our vision statement and five core values are at the heart of our school. We truly believe that all children regardless of any disadvantage they may encounter will be inspired, believed in, challenged and as a result will achieve their full potential. We ensure this by having a broad and balanced curriculum that is knowledge-rich. Our curriculum will inspire children to be aspirational and it will promote engagement and enjoyment through the rich enrichment opportunities that go beyond the academic. At Edenthorpe Hall, we also ensure that children develop their character including respect, resilience and honesty so that they move to the next stage of their education as responsible citizens of the future who contribute positively to society.

**Edenthorpe Hall Primary Academy: Maths Rationale**

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Our aim is for the children to become mathematicians who have a deep understanding of the maths they have been taught. There is a can-do attitude towards Maths at Edenthorpe Hall and children know that they can be successful by working hard and being resilient. We reject the idea that a large proportion of pupils ‘just can’t do Maths’. All pupils are encouraged to have a growth mindset and believe that by working hard in Maths they will succeed.

Pupils are taught through whole-class interactive teaching where the focus in on all pupils working together on the same lesson content at the same time. If a pupil fails to grasp a concept or procedure, this is identified quickly and early intervention is provided. Finally, Key facts such as multiplication tables and addition facts within 10 are learnt to automaticity to avoid cognitive overload in the working memory.

**How we will achieve this: Implementation**

**How is Maths taught at Edenthorpe Hall?**

We use the Maths Mastery (ARK) scheme as a basis for implementing the statutory requirements for the study of mathematics. The Maths Mastery video tutorials should be used by teachers to support their subject knowledge prior to teaching each unit. Over a series of Maths lesson, teachers ensure there are opportunities for children to practise their arithmetic, fluency, reasoning and problem solving.

**Teaching – What a lesson looks like**

**Part 1 – Do Now**

The first part of the lesson is the do now task. This should be a recall/retrieval task where no teaching is needed. It can be content learned previously in the current unit, a previous unit or a previous year group. This section should take no longer than 5 minutes.

Teachers will have the answers available and the children will self-mark. The teacher will do a quick assessment of any questions the children got wrong and ensure that misconceptions are dealt with quickly at a convenient time. This could be straight after lunch, during an intervention slot or as a whole class if needed.

We believe that this plays an important role in the children becoming fluent in the fundamentals of mathematics and develops the children’s ability to recall and apply knowledge rapidly and accurately. It also enables teachers to identify those areas which need revisiting for particular pupils.

**Part 2 – New Learning**

After Do Now, the teacher will share the learning objective with the children. The teacher will then share the key vocabulary for the lesson (star words). Children will repeat this after the teacher (my turn, your turn) to reinforce the importance of correct vocabulary. The words should be added to the working wall with a definition for the children to refer back to as appropriate. There is an expectation that children spell these correctly.

Throughout the lesson, the teacher will guide the children through small steps, leading back and forth interaction, including questioning, short tasks, demonstration and discussion. Children should be sat in mixed-ability pairs so that effective questioning and peer support can happen. Teachers will encourage the children to answer in full sentences:

*Teacher – What is the value of the digit 4 in 489?*

*Child – The value of the 4 is 400*

*Teacher – How do you know this?*

*Child – I know this because it is in the hundreds column meaning it is 4 lots of one hundred not 4 lots of one.*

**Part 3 – Talk Task**

The Talk Task part of the lesson practises the new learning by talking about maths with key vocabulary. Teachers will model the task (with another student/adult if needed) to clearly outline to the children what is expected of them. The teacher will be encouraging children to use the correct vocabulary in full sentences and praising them when doing so. If appropriate, the teacher will ask a pair of children to demonstrate what they have practiced, pointing out what they have done well and addressing any errors or misconceptions.

**Part 4 – Deeper Learning**

The deeper learning segment builds on the new learning and develops a deeper understanding of the maths concepts of that lesson. This section may be used to consolidate new learning if the needs of class demonstrate this.

**Part 5 – Independent Learning**

When children are ready to practise what has been taught, they start their independent learning task. This could be at different times depending on teacher assessment. A challenge will be available for children who have correctly completed the main task.

**Part 6 – Plenary**

Children will come back together as a class once finished the independent learning task. The objective of a plenary is to inform future practice - to discover what worked well, and what gaps in learning may still exist, that need to be revisited.

**Maths Meetings**

Maths meetings are timetabled at least 3x per week lasting 15 minutes per session. Maths Meetings are a vital part of the Mathematics Mastery programme. Their purpose is to consolidate key areas of mathematics or introduce new topics in your class.

A Maths Meeting should cover several curricular areas, broken down into short segments; each segment should take approximately 2–3 minutes. Each meeting should start with a song, rhyme, poem or chant, to ensure full participation and enjoyment.

Maths Meetings should:

• Provide opportunities to develop number sense. This includes exploring conservation of number, ordinality, cardinality and the relationships between numbers (greater than, less than and equal to). Every Maths Meeting should also provide pupils practice of partitioning and recombining numbers within ten (e.g. using a part-whole model), with the goal of achieving fluency by the end of the year.

• Give students repeated practice of basic skills and concepts (fluency, consolidation, mastery of what has been taught)

• Be a whole-class ritual around the Meeting Board or IWB

• Establish a routine for starting mathematical thinking in the day, building classroom culture, and making connections with mathematics in everyday life.

Maths Meetings expectations:

• 100% of the class must be ready to respond

• 100% of the class must look at and listen to the teacher

• Teacher only accepts appropriate responses, including technical vocabulary and full sentences when appropriate.

**Assessment**

A week before beginning a unit, children complete a ‘pre-unit assessment’ and the score is recorded. Teachers should use this assessment information to plan their lessons using the unit narrative document. At the end of the unit, children complete a ‘post-unit assessment’ in books.

In addition to this, all year groups use summative assessments three times a year. In Y6, this is done more frequently as 15:1 assessments where the children sit previous SATs papers to support their preparation for the KS2 assessments in May.

**Vision for our children: Impact**

* **Confident**
* **Articulate**
* **Aspirational**
* **Honest**
* **Respectful**
* **Resilient**
* **Well-rounded**
* **Curious**
* **Ready for their next stage**
* **Passionate about Maths**
* **Fluent in recall**



* **Question**
* **Stand up for their beliefs**
* **Believe in themselves**
* **Communicate effectively**
* **Be successful citizens of the future**
* **Apply their mathematical knowledge to reason and problem solving**
* **Use a variety of methods**
* **Use Mathematical vocabulary**
* **A love of learning**
* **A thirst for knowledge**
* **The ability to self-regulate**
* **Aspirations and ambitions**
* **A secure understanding of basic maths concepts**
* **A clear idea of mathematical careers and how to achieve their goals**