

Maths – School Overview at William Austin Infant

At William Austin Infant School, we are actively participating in the NCETM's Teacher Research Group through our local **Enigma Maths Hub**. We are currently in the *Sustaining Phase* of the Work Group.

Maths subject leader: Mrs Stanley



Maths learning at William Austin Infant School:

At William Austin Infant School, we provide children with *high-quality* daily maths lessons that are *creative, engaging* and *inclusive*. Key skills are taught and developed in carefully planned sequenced lessons. Our *ambitious* Maths curriculum is implemented through lessons which incorporate a '**Concrete, Pictorial, Abstract**' approach in order to support children in mastering the National Curriculum objectives:

- **Fluency** – becoming familiar in the fundamentals of mathematics
- **Reason mathematically** – following a line of enquiry, conjecturing relationships and generalisations and developing their use of mathematical language
- **Problem solving** – can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

Lessons are planned using guidance and resources from White Rose Maths and NCETM. We believe this ensures we implement a 'mastery' led curriculum working with a progressive scheme.

The majority of learners are taught together, all learning at the same pace and given the same opportunities to excel in the area of Maths. The needs of all our learners are supported through the use of resources and manipulatives, guided support in lessons and additional group or one-to-one interventions when and where required.

Through our Maths curriculum, we ensure that children develop a *love of learning, enjoy mathematics* and *strive to achieve their best*. We develop *resilient learners* who recognise that learning is all about the journey to reaching an answer. Through our approach, children will achieve their own individual potential and be fully prepared for the next stage in their learning. We also aim to develop mathematicians that can make connections across the wider curriculum as well as in the real world.

What we use to support our Maths Curriculum:

- National Curriculum led following a 'mastery' approach.

Supported by:

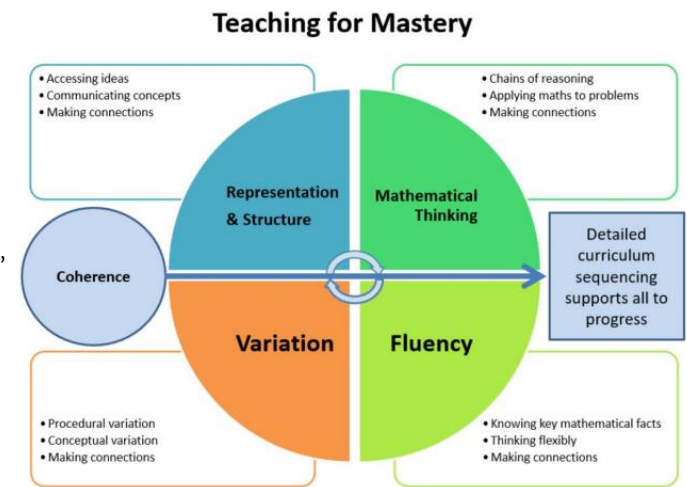
- White Rose Maths.
- NCETM PD Materials.
- NCETM Prioritisation materials.
- NCETM Exemplification of Ready-to-Progress materials.



Features of 'Teaching for Mastery' -

The 5 Big Ideas.

- Fluency,
- Mathematical Thinking,
- Representation and Structure,
- Variation,
- Coherence.



What you will expect to see in daily Maths lessons.

The design of our Maths lessons include:

- Flashback 4
- Review
- Main teaching and learning input
- Independent learning tasks
- Plenary activities.

-Clear Learning Objectives and Success Criteria.

-Carefully **sequenced lessons** that include **small steps** which are displayed on **learning journeys**. These are explained and shared with the children at the beginning of every lesson to highlight the **progression** in their learning and skills.

-**Mixed ability** seating with children '**Speaking to Succeed**' throughout the lesson.

-Development of children's use of **Mathematical Vocabulary and Language** through careful modelling, daily **Vocabulary Stars** and use of **STEM Sentences**. These encourage our children to respond in **full sentences**, by providing them with a clear **scaffold** and helps to reduce our children's cognitive overload. This supports our learners to **reason** and **explain** their understanding.

-Adults drawing children's attention to intended aspects of learning, including in relation to particular **mathematical structures**.

-Children **confidently explaining** their **reasoning**, **proving** their answers and **making connections** within their maths learning.

-Adults **scaffolding** learning, including through use of different **manipulatives**, to help children **secure and deepen** their understanding.