The Moorside approach to Maths

Our approach is underpinned by the Journey To Mastery model where all students are fluent in the unfamiliar and can apply their skills in any new situation. Mastery of the curriculum requires that all pupils:

- *Use mathematical concepts, facts and procedures appropriately, flexibly and fluently;*
- *Recall key number facts with speed and accuracy and use them to calculate and work out unknown facts;*
- *Have sufficient depth of knowledge and understanding to reason and explain mathematical concepts and procedures and use them to solve a variety of problems.*

The key elements of our daily practice in EYFS and Key Stages 1 and 2

- Within the **Early Years Foundation Stage (EYFS)**, mathematics is taught through practical play activities based on the EYFS curriculum. Opportunities are planned to cover numbers, counting, calculating, shapes, measures as well as lots of investigative and problem-solving experiences.

- **Minute Maths Activity:** when pupils enter their classrooms each morning, they practise a key arithmetic skill in order to develop their fluency and understanding.

- **Do Now Activity (DNA):** at the beginning of each Maths lesson, pupils complete a DNA which revisits and embeds previous learning in four core strands: last session; last week; last topic; and last year.

- **5 Minute Starter:** prior to the main lesson, starters are used to support current learning; to revisit prior learning; or as pre-learning for future objectives.

- **Main lesson**: long and medium term Maths objectives are mapped out using **The Lancashire Grid** which ensures continuity between topics and enables topics to be revisited over the course of the academic year.

- Teachers adopt a **small steps approach** to the teaching of Maths, and use resources from the **National Centre of Excellence in the Teaching of Mathematics (NCETM)**. The NCETM's Curriculum Prioritisation documents outline the small steps that are required for children to meet each National Curriculum objective in Maths.

- At Moorside, we use a **Concrete, Pictorial, Abstract** approach to new learning in Maths. Children begin by using physical resources which expose the structure of the topic being taught; pictorial representations further embed understanding; before the abstract method (usually involving a calculation) is introduced.

- In line with our Mastery approach to teaching Mathematics, children are taught in **mixed ability settings** which expose all children to high expectations.

- The use of **precise and accurate mathematical language** is modelled by the teacher to the pupils, and lessons consist of a well-considered balance between teacher input and children working.

- Teachers use **mini-plenaries** throughout lessons as Assessment for Learning opportunities, whilst **self and peer evaluation** allows pupils to measure their own progress.

- A **no-hands-up approach** is used to secure pupil engagement and teacher questioning allows misconceptions to be addressed.

- **Working walls** in classrooms are used to support teaching and learning and form a part of classroom practice.

- Within all lessons, there are opportunities for children to **think mathematically, reason and problem solve**. Providing **challenge to all learners** throughout a Maths lesson is a crucial element of our approach to teaching Maths.