

Welcome to Our Lady Star of the Sea Catholic Primary.

We are a **Maths Mastery school** and members of the collaborative NNW Abacus Maths Hub www.abacusnwmathshub.co.uk



What is maths mastery?

Maths mastery is a teaching and learning approach that aims for pupils to develop deep understanding of maths rather than being able to memorise key procedures or resort to rote learning.

The end goal and expectation is for all pupils (with very limited exceptions) to have acquired the fundamental facts and concepts of maths for their year or key stage, such that by the end of it they have achieved mastery in the maths they have been taught. At this point they are ready to move confidently on to their next stage of maths.

Mastery of a mathematical concept means a child can use their knowledge of the concept to solve unfamiliar word problems, and undertake complex reasoning, using the appropriate mathematical vocabulary.

Maths mastery is not a quick fix to maths learning but a journey that the teacher and pupils go on together, with regular diagnostic assessment to check the pupils understanding and direct instruction that teaches to any gaps.

What we know about Early Years Maths?

The first few years of a child's life are especially important for mathematics development. Research shows that early mathematical knowledge predicts later reading ability and general education and social progress. Conversely, children who start behind in mathematics tend to stay behind throughout their whole educational journey.

The objective for those working in Early Years is to ensure that all children develop firm mathematical foundations in a way that is engaging, and appropriate for their age. The materials we use in school are those provided by our Hub and the NCETM (National Centre for excellence in the Teaching of Mathematics).

The materials are organised into key concepts (not individual objectives), which underpin early mathematics curricula. The progression followed highlights the range of experiences developed across Reception provision - working with the teacher, in small groups and independently through play.

There are **six key areas** of early mathematics learning, which collectively provide a platform for everything children will encounter as they progress through their maths learning at primary school, and beyond.

The 6 key areas are presented on the next page:



SIX KEY AREAS OF EARLY MATHEMATICS LEARNING



Cardinality and Counting

Understanding that the cardinal value of a number refers to the quantity, or 'howmany-ness' of things it represents



Comparison

Understanding that comparing numbers involves knowing which numbers are worth more or less than each other



Composition

Understanding that one number can be made up from (composed from) two or more smaller numbers



Pattern

Looking for and finding patterns helps children notice and understand mathematical relationships



Shape and Space

Understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking



Measures

Comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later



How can you help at home?

Having fun with number and measure at home is the key. There are so many helpful websites out there for parents. Here are a choice few we would recommend. A short visit to these to help you see how you can help at home will (not may) will have an invaluable impact on your child and their attitude and confidence in maths. The Empowered Parents website celebrates memory games.

Developing our memory and our ability to retrieve information is a crucial skill one we can practise regularly - research shows that playing memory games is effective from the age of three. Memory is not how we learn to understand number— that requires deep exploration of how numbers and the number system are constructed—the job of the teacher. Remembering is only part of the process. Making maths fun at home and seeing it in the everyday makes it relevant and purposeful.



<https://www.nationalnumeracy.org.uk/helping-children-maths/family-maths-toolkit>



<https://www.bbc.co.uk/cbeebies/grownups/help-your-child-with-maths>



<https://empoweredparents.co/memory-games-children/>