

Mastering mathematical language

Mathematics Mastery lessons provide opportunities for pupils to communicate and develop mathematical language through:

- Sharing essential vocabulary at the beginning of every lesson and insisting on its use throughout
- Modelling clear sentence structures using mathematical language
- Paired language development activities
- Plenaries which give a further opportunity to assess understanding through pupil explanations

Tracking Pupil Progress

In maths mastery the assessment procedures are continuous. From the beginning of each lesson, teachers and teaching assistants will be assessing what the children are or not

understanding . This information is then used to scaffold each part of the lesson. Interventions will be both planned and timely meaning that any misconceptions are dealt with at the point of need. High attaining children are challenged in their thinking on a daily basis .

This approach is used consistently from Nursery through to Year 2.

Bar modelling



Stocksbridge Nursery Infants

Maths Mastery

Information Leaflet for
Parents & Carers





What is maths mastery?

The Curriculum

The Mathematics Mastery Curriculum has been developed to ensure every child can achieve

Excellence in mathematics. It provides pupils with a deep understanding of the subject through a concrete (real objects), pictorial (pictures & images) and abstract (symbols) approach.

Key Features of our maths mastery curriculum :-

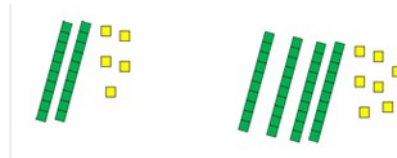
- ◆ High expectations for all children
- ◆ Fewer topics studied but in greater depth
- ◆ Number sense and place value come first (how much a digit is worth)
 - ◆ It is a research based curriculum
- ◆ Objects and pictures always used before numbers and symbols
 - ◆ Problem solving is central
- ◆ Calculate with confidence—children have a deeper understanding of how things work

Maths mastery embeds a deeper understanding of maths by utilising a concrete, pictorial, abstract approach so that pupils understand what they are doing rather than just learning to repeat learnt strategies without really understanding what is happening.



An example of 'concrete' use of objects (Dienes) at the first stage of learning (see above). Y1 and Y2 children learning to partition (split) numbers into tens and ones using a calculation mat. E.g. $24 = 2 \text{ tens and } 4 \text{ ones}$.

The children will then partition numbers using pictures of the tens and the ones



The children will then learn to represent with number and symbols

$$24 = 20 + 4 \text{ or } 20 + 4 = 24$$



Learning to make odd and even numbers with Numicon pegs

What's new about the maths mastery approach?

There's really nothing 'new' in the individual aspects of the maths mastery curriculum. We use tried and tested successful approaches that the best teachers and schools have been using for years. However, what is special about the new approach is that it brings together all the effective techniques in a systematic and rigorous way.

