



## Intent

Our intention is that all children will develop mastery and a love of maths. We strive to improve the outcomes for all our children and achieve the aims of the National Curriculum: Fluency, Reasoning and Problem Solving. There will be effective teaching and learning across the school as a result of effective professional development of both subject knowledge and pedagogy.

## Implementation

Maths No Problem (MNP) was introduced across the school from Year 1 to Year 6 in September 2018. MNP is a mastery approach to maths with theoretical underpinning, it facilitates the development of fluency, reasoning and problem-solving. Within the teaching sequences there are a number of 'white days' which allow class teachers to take ownership of the planning and adapt and develop it to meet the needs of the children in their class.

Lessons have a clear structure:

- ❖ Anchor task:
  - Exploration;
  - Structured learning;
  - Journaling;
  - Reflection.
- ❖ Guided and Independent practice.

Additionally, lessons use Concrete, Pictorial, Abstract (CPA) principles which is a highly effective approach to teaching, developed by Jerome Bruner that develops a deep and sustainable understanding of maths in pupils. Within lessons there is a focus on pupil talk and oracy; this gives the children the opportunity to develop their reasoning and make connections in their learning. A mastery approach to maths develops children's long term memory. The Maths Curriculum has a spiral approach so learning is reinforced and revisited, lessons and sequences are constructed in small steps, the CPA approach gives children a strong image and problems are varied which enables them to make connections and links.

Children are taught in mixed attainment year groups with high expectations for all. All children are supported and challenged in their learning through the use of concrete apparatus, questioning and explanations. All planning and teaching is clearly linked to the teaching and learning policy and the Woodlands Park 10 key principles of teaching & learning.

The Deputy Head teacher has attended MNP training and has led CPD across the school and WeST to all members of teaching and support staff, additionally she is accredited as an NCETM Professional Development Lead. The school is part of a mastery hub led by NCETM and the Foundation Stage has developed a mastery approach, again working with colleagues from the maths hub.

## Impact

Children are enthused by the challenge of Maths No Problem. Maths mastery training, monitoring through learning walks and book scrutinies, with SLT and governors, have developed teaching and learning standards for all teachers and reduced the inconsistency of teaching within and across teams.

At the end of 2019, Year 6 attainment at both ARE and GD were above national. Progress was in line with national and ambitious targets have been set for 2020.

Learning walks, books scrutinies and pupil conferencing show children problem solving, reasoning and becoming fluent in their choice of methods. They readily use equipment and images to explain their thinking. Children talk in full sentences and use a range of mathematical vocabulary appropriate to the age and development.

Maths continues to be a focus for School Improvement and is a high priority for SLT and teaching staff. Governors said 'It is evident that there is a commitment to a mastery approach, the use of MNP, the interventions in place and the engagement with parents are all impacting positively on the children.'