

Our Maths Provision

Intent

We acknowledge that our children come from a variety of backgrounds with varying exposure to mathematical concepts and experiences. At Plympton St Maurice our aim is to have children who have a positive and enthusiastic attitude to their maths learning. The teaching of maths is aligned to the national curriculum objectives and supported by the ready to progress documentation that was released following the recent pandemic. We strive for children to be fluent and secure in key concepts across the four operations and wider areas of maths. We strive for these to be used in real life contexts, in reasoning and problem solving in a systematic and mathematical thinking manner.

Implementation

At Plympton St Maurice we use White Rose Maths (WRM) to support the teaching of all maths lessons from Foundation to Year 6. WRM is designed to support the primary curriculum through a whole class, small step teaching mastery approach. Lessons are designed in a variety of ways to engage and enthuse children in all areas of their maths learning. Number is placed at the forefront in all year groups to build competency and fluency in the basics. It is a broad scheme which allows children to revisit their knowledge through a spiral curriculum. Throughout our teaching there are many opportunities for children to work collaboratively and share their learning through talk and practical based learning tasks. Overall, we believe this scheme gives our children the skills they need to become competent mathematicians.

At the forefront of our teaching for maths mastery is the concrete – pictorial – abstract approach. Children are encouraged to use resources to support their learning and then move to problem solving.

Concrete: the 'doing' stage. Children can be hands on with resources in a range of different concepts. It really helps bring the maths to life and forms a fundamental stage in the learning.

Pictorial: the 'seeing' stage. The stage links the concrete to the abstract and really allows children to see the maths, making connections and deepening their level of understanding. Encouraging children to draw bar models and part whole models for example, shows their level of understanding and really can support the learning process across a range of concepts.

Abstract: the 'symbolic' stage. Children are able to take their learning from the concrete and pictorial to use abstract symbols to model and solve maths problems.

Lesson overview

Each lesson will begin with a starter that will link to the learning for that small step lesson. The main lesson is often broken down in to small steps of learning through a 'I do, We do, You do' approach following our Teaching and Learning policy which is influenced by Rosenshein Principles. This allows time for modelling, discussion and practise as a whole class with opportunities for maths talk to explain and explore concept. Independent practise is provided through WRM workbooks and extended through various challenges to ensure depth of understanding can be explored.

Planning

We believe that the key to success is quality first teaching. Teachers follow the WRM scheme and prepare lessons using the scheme's premium resources and ensure these are adapted to mee the needs of the class and individuals within them. Teachers ensure that key questions, sentence stems and vocabulary are part of each learning sequence and model these throughout every lesson. The scheme is adapted to meet the needs of the children with teachers using all opportunities to make links in the learning and reinforce connections when they arise.

Assessment

This is able to take place during most lessons by pupils and teachers and through an early morning 'Flashback 4' task which provides children another opportunity to revisit learning from the previous lesson, unit and term. The use of small steps and teaching styles provides multiple opportunities for assessment for learning. Shortly after the end of each unit, a short assessment is carried out to ascertain the level of knowledge gained and remembered by each pupil. Children are given time to reflect on their learning and understanding during these times. Formal assessments take place three times a year using WRM termly assessments and Hodder PUMA in the Summer Term. Our assessments enable teachers to make informed judgements about the depth and progress of individual learning.

Other termly assessment take place to secure objectives that support the building of confident and fluent children in basic number facts.

Monitoring and evaluation

SLT and the maths subject lead will monitor children's learning from planning, books, pupil voice and classroom practise during learning walks.

Impact

Our pupils will be successful and confident mathematicians who work efficiently and systematically to apply their knowledge in a range of contexts. They will be able to solve problems, fluently recall facts of addition, subtraction, multiplication and division and justify their answers with confidence.