

How We Teach Maths

Aim

The aim of teaching maths at Devonshire is to ensure that children leave our school with a deep understanding of maths, and outcomes and progress are above national at the end of key stage 2. To achieve this, we will work on our strategy to develop the core aims of the curriculum. We must meet **all of the core aims** of the curriculum to ensure the child gets a full education, the areas of fluency, reasoning and problem solving.

Concrete Pictorial Abstract (CPA) - Fluency

CPA is central to our approach. By using concrete manipulatives and moving to pictorial representations, the child builds a clear conceptual model in their heads, which translates to a deeper understanding and will enable them to work on more challenging reasoning and problem solving. Before you can solve any problem, you need the knowledge, so this approach scaffolds that.

Reasoning and problem solving

Reasoning should happen throughout the lesson, with lots of opportunities for the children to deepen their understanding of concepts. Odd one out, what if and convince me, among other questioning strategies, are all excellent ways of generating mathematical discussion and identifying misconceptions.

High quality resources are available on the Maths drive on Community Chest

Assessment and feedback

As we teach a mastery curriculum, the aim is that children work through it at the same pace, with some going deeper within the same objective. It is crucial that we do not allow children to be left behind and that they are provided with appropriate support – whether through manipulatives, pace of work, adult support or something else – so that they make good progress.

Multiple choice diagnostic questions are an excellent tool for exploring misunderstandings. Live marking should be used across a lesson, particularly with vulnerable learners to ensure that they are on-task and have developed a good conceptual understanding of the objective.