

Principles Of Effective Maths Teaching

When our pupils leave Whittingham, they will have established a love for mathematics with a solid foundation to enable them to use their mathematical skills and knowledge confidently in a range of different contexts. Therefore, when teaching mathematics, our curriculum aims to deliver the National Curriculum with a focus on developing mathematical fluency, reasoning and problem solving at its core with the use of White-Rose Maths and Rosenshine's Principles to support our planning and implementation. We adopt a 'mastery' approach to teach Maths; pupils learn in small steps through whole-class interactive teaching and all pupils are provided the opportunity to practise and deepen their understanding of a mathematical concept to secure their knowledge and foster their independence.

How we teach Maths

Review

The Review allows pupils to revisit previous learning and practise a skill that they will be using in the lesson.



Learning Intention and Steps to Success

Teachers share the learning intention and steps to success with pupils so that they are aware of their learning outcome and how to be successful.



Direct Instruction

Teachers use explicit teaching techniques to teach the mathematical skill to their students. This is teacherdirected and includes **metacognitive modelling**.



Guided Practice

Pupils use **Kagan Structures** to work collaboratively with their peers to practise the mathematical skill.



Independent Practice

Pupils complete a range of fluency, reasoning and problem-solving questions independently with scaffolds available to be used by pupils as required through assessment for learning.



Mini-plenaries and plenaries

Teachers use these opportunities to address misconceptions and model challenging questions.

Curriculum

The curriculum is structured coherently using a CPA (concrete, pictorial, abstract) approach to develop understanding through small steps.

Planning

White-Rose Maths scheme is adapted to ensure coverage as well as opportunities to model and teach problem-solving explicitly.

Questioning

Questioning is planned and used throughout the lesson to assess, scaffold and challenge. Hingepoint questions are used to assess understanding before pupils begin their Independent Practice.

Assessment

Teachers use formative assessment during lessons to provide pupils with addition support, modelling or scaffolds to enable them to be successful.

Additional practice

Spaced retrieval practice during Early Morning Work is used to practise previous learning twice a week. Additional, daily arithmetic sessions are used to practise times tables and/or number bonds.