The Ryde School

Calculation Policy

Reviewed: June 2022
Next Review: June 2024

The Ryde School Calculation Policy

This policy has been adapted from the White Rose calculation policy and scheme of work as well as NCETM guidance. At The Ryde School we follow the concrete, pictorial, abstract (CPA) method, which firstly involves using actual objects for children to add, subtract, multiply or divide. They then progress to using pictorial representations of the object, and ultimately, abstract symbols. This is an essential technique of maths mastery that builds on a child's existing understanding, and is based on research by psychologist Jerome Bruner.

This document identifies progression in calculation as well as which method should be taught in a particular year group. By the end of Year 6, children should be able to choose the most appropriate approach to solve a problem: making a choice between using jottings (an extended written method), an efficient written method or mental method.

At The Ryde School we also follow some key points from the NCETM guidance, when teaching calculation methods and strategies these are the priority areas that have been identified:

- Develop children's fluency with basic number facts
- Develop children's fluency in mental calculation
- Develop children's fluency in the use of written methods
- Develop children's understanding of the = symbol
- Teach inequality alongside teaching equality
- Don't count – calculate
- Look for pattern and make connections
- Use intelligent practice
- Use empty box problems
- Expose mathematical structure and work systematically
- Move between the concrete and the abstract
- Contextualise the mathematics
- Use questioning to develop mathematical reasoning
- Expect children to use correct mathematical terminology and speak in full sentences
- Identify difficult points/misconceptions

This policy has been adapted from the White Rose Maths Hub Calculation Policy. It is a working document and will be revised and amended as necessary.

See attached documents:

Addition and Subtraction Calculation Policy

Multiplication and Division Calculation Policy