

Progression towards a standard written method of calculation

This calculation policy has been written in line with the programmes of study taken from the revised **National Curriculum for Mathematics (2014)**. It contains the key written methods of calculation that are taught throughout the school. It has been written to give children a consistent and smooth progression of learning when using the four operations. The content is set out in yearly blocks under the following headings: addition, subtraction, multiplication and division.

Statements taken directly from the programmes of study are listed for each year group. These are age-related statements or objectives.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on (National Curriculum in England 2014).

Although the main focus of this policy is on formal written methods, it is important to recognise that the ability to calculate mentally lies at the heart of numeracy. Children will use mental methods where possible and appropriate. For calculations that cannot be done mentally, they will need to use an efficient written method accurately and with confidence.

Aims of the policy

- To ensure consistency and progression in our approach to calculation.
- To ensure that the children in our school develop an efficient, reliable, formal written method of calculation for all operations.
- To ensure that the children in our school can use these methods accurately and with confidence and understanding.
- To develop the three main aims of the Mathematics National Curriculum: **Fluency, Reasoning and Problem Solving.**

The Big Ideas

Place value is important when placing numbers in a calculation.

Children are encouraged to estimate the size of the answer before calculating.

A good knowledge of number bonds is essential in order to calculate successfully.