

Etwall Primary School – Calculation Policy

Background to the policy

This policy contains the key pencil and paper procedures that will be taught within our school. It has been written to ensure consistency and progression throughout the school and reflects a whole school agreement.

Although the focus of this policy is on pencil and paper procedures it is important to recognise that the children have the ability to calculate mentally. The new National curriculum states the importance of children becoming fluent in the fundamentals of mathematics so that they are using and selecting the appropriate written algorithm and mental methods. Mental methods will be taught systematically from Reception onwards and pupils will be given regular opportunities to develop the necessary skills. However, mental calculation is not at the exclusion of written recording and should be seen as complementary to and not as separate from it. In every written method there is an element of mental processing. Sharing written methods with the teacher encourages children to think about the mental strategies that underpin them and to develop new ideas. Therefore, written recording both helps children to clarify their thinking and supports and extends the development of more fluent and sophisticated mental strategies.

During their time at this school, children will be encouraged to see mathematics as both a written and spoken language. Teachers will support and guide children through the following important stages:

- use of manipulatives;
- developing the use of pictures and a mixture of words and symbols to represent numerical activities;
- using standard symbols and conventions;
- use of jottings to aid a mental strategy;
- use of pencil and paper procedures;

This policy concentrates on the introduction of standard symbols, the use of the empty number line as a jotting to aid mental calculation and on the introduction of pencil and paper procedures. It is important that children do not abandon jottings and mental methods once pencil and paper procedures are introduced. Therefore, children will always be encouraged to look at a calculation/problem and then decide which is the best method to choose – pictures, mental calculation with or without jottings or a formal written method of calculation.

Our long-term aim is for children to be able to select an efficient method (whether this be mental or written) that is appropriate for a given task. They will do this by always asking themselves:

‘Can I do this in my head?’

‘Can I do this in my head using drawings or jottings?’

‘Do I need to use a pencil and paper procedure?’

