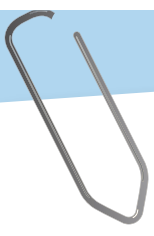


Progression through Written Calculation





This document aims to exemplify the standards expected for children on their journey through calculation. Strategies included in this document are all NCETM and DFE approved strategies and meet the aims and programmes of study set out in the National Curriculum 2013. It is vital that each child, as stated in the National Curriculum 2013, has their learning personalised to their appropriate stage of understanding; not their age. When children conceptually understand the learning and are able to apply the skills in a variety of contexts, they are ready to move on to the next stage.

The responsibility of mathematics education is to enable **all pupils to develop conceptual understanding of the mathematics they learn**, its structures and relationships, and fluent recall of mathematical knowledge and skills to equip them to solve familiar problems as well as tackling creatively the more complex and unfamiliar ones that lie ahead.

While **the best teaching developed pupils' conceptual understanding** alongside their fluent recall of knowledge, and confidence in problem solving, too much teaching concentrated on the acquisition of disparate skills that enabled pupils to pass tests and examinations but did not equip them for the next stage of education, work and life.

Being 'made to measure' might describe schools' perceptions of, and reaction to, the pressures to raise standards. However, the aim for all schools should be to **secure high calibre, 'made-to-measure' mathematics provision to optimise every pupil's chance** of the best mathematics education.

(Mathematics: Made to Measure, OfSTED, May 2012)

It is important that all members of staff, regardless of their career stage, work together to understand and implement the key messages of this document in order to ensure that teaching approaches ensure good progress for all pupils. Senior leaders have a responsibility to provide professional development for teachers and teaching assistants to ensure they meet the new Teachers' Standards to ensure they understand the developing progression and see how the methods in any year build on what went before and feed into what is learned later.

A teacher must:

- Have a **secure knowledge** of the relevant subject(s) and curriculum areas, foster and maintain pupil's interest in the subject and address misunderstanding;
- Demonstrate a **critical understanding** of developments in the subject and curriculum areas and promote the value of scholarship;
- If teaching early mathematics, demonstrate a **clear understanding of appropriate teaching techniques**

(Teachers' Standards, DfE, May 2012)