Calculation guidance

This calculation guidance has been written for **Pensans School** in line with the programmes of study from the revised National Curriculum for Mathematics (2014). It outlines the progression of calculation strategies and sets out agreed approaches to addition, subtraction, multiplication and division across each year group. The aim is to support clear progression and consistency in the teaching and learning of mathematics throughout our school.

At Pensans School, this guidance is designed to develop, model and explain key mathematical understanding and build confidence as children move through their learning journey. While there are many effective concrete, pictorial and written calculation methods that can be used, the strategies outlined in this document have been chosen as our **main agreed approaches** so that children experience a consistent method as they move through the school.

Children will use mental strategies as their first approach whenever appropriate. It is important that these strategies are carefully taught and clearly linked to written methods. When calculations cannot be completed mentally, pupils will be supported to use efficient written methods accurately and with confidence. Throughout all stages, the use of concrete resources and pictorial representations is recognised as essential in developing secure conceptual understanding before moving towards more abstract methods.

The overall aims of this guidance are that, when children leave Pensans School, they will:

- have a secure understanding of the four operations, supported by strong fluency and knowledge of the fundamentals of mathematics

- have developed efficient, reliable written methods of calculation for all operations

- be able to use these methods accurately with confidence and understanding

- apply known facts in a range of contexts and choose effective strategies when solving problems

- use concrete and pictorial representations to support calculation before moving to more abstract approaches

- explain their thinking and justify their answers using mathematical reasoning