



Mathematics at Smallwood CE Primary Academy

Mathematics should help children make sense of the world around them by developing their ability to calculate, reason and solve problems. It should enable them to understand relationships and patterns, and in doing so give them the capacity to predict. It should allow them to tackle everyday practical tasks, as well as gather and communicate information.

To these aims, the maths taught should not only be relevant and useful, but should also be a source of pleasure and excitement and offer pupils intellectual stimulation.

It enables children to understand relationships and patterns in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

Our objectives in the teaching of Mathematics are:

- to promote enjoyment of learning through practical activity, exploration and discussion;
- to promote confidence and competence with numbers and the number system;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- to develop a practical understanding of the ways in which information is gathered and presented;
- to explore features of shape and space, and develop measuring skills in a range of contexts;
- to help children understand the importance of mathematics in everyday life.

Maths Working Walls are evident in all classrooms, displaying addition, subtraction, multiplication and division facts along with vocabulary and age related expectations. We have also implemented and embedded a daily 20 minute Maths session (Monday to Thursday) immediately after lunch for every

class in school. This aims to focus on the 4 operations and the solving of problems.

Every child receives "Two Stars and a Wish" in their Maths books at least once per week and success criteria is used to support the constructive feedback offered by teaching and support staff. We have introduced the use of peer- and self-assessment techniques in Years 5 and 6 and this is gradually being filtered down through the school. Six Year 6 children have been attending fortnightly Maths sessions at Congleton High School.

We have also:

- Developed integration of Maths across pupils' learning so Maths is not seen as a separate subject
- Use of Maths books in Key Stage One
- Observed outstanding practise in other local schools
- Introduced greater opportunities of investigations and AT1 Maths
- Continued a Year 6 Enterprise Project, where 3 teams have launched their own "business."

The Academy uses a variety of teaching and learning styles in mathematics. In all classes, children have a wide range of mathematical abilities. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child and by ensuring that work is matched to the needs of individuals. We achieve this through a range of strategies - in some lessons through differentiated group work, and in other lessons by organising the children to work in pairs on open-ended problems, games and investigations.

Our principal aim is to develop children's knowledge, skills and understanding. During our daily lessons, we encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources, such as calculators, number lines, number squares, digit cards, white boards and small apparatus to support their work. Mathematical dictionaries are available in all classrooms. ICT is used in mathematics lessons for modelling ideas and methods. Wherever possible, we encourage the children to apply their learning to everyday situations.