



Maths

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

At Walkergate Primary we set out to achieve our aims by:

- Providing our children with a daily maths lesson and 15 minutes basic skills session.
- Ensuring all teaching comes from an accurate assessment of the children's abilities, with all ability groups being supported and challenged through additional intervention if required.
- Using practical equipment regularly and where appropriate. Children should have access to the equipment in the classroom and should be able to use it to underpin their maths knowledge. This applies throughout Key Stage 2 as well as Key Stage 1.
- Dealing with the big ideas and concepts of Maths alongside the skills needed to do it so that children gain a strong understanding of the concepts of Maths. For example when teaching fractions one must directly teach the concept of splitting a group or shape into equal parts.
- Raising awareness of how areas of maths are interconnected. For example fractions link with division, %, proportion etc. These links need to be explicitly taught and built upon. This is true of the 4 operations and the pairs of inverse operations
- Ensuring a good knowledge and understanding of place value due to it underpinning all mathematical learning where numbers are involved.
- Giving children opportunities to use maths in real life situations whenever possible, including through our Financial and enterprise curriculum, themed weeks and events.

