Mathematics Overview

New Curriculum

The National Curriculum in England is currently in a process of transition. At Stanton Bridge Primary School we are following the timetable for transition, between the National Curriculum (2000) and the National Curriculum (2014), as set out by the Department of Education.

From September 2014, Year 1, Year 3, Year 4 and Year 5 will be following the new National Curriculum (2014) in Mathematics. Teachers have looked at the differences between the new and old curriculums to ensure there will be no skills missed.

Year 2 and Year 6 will continue to follow the old curriculum for Mathematics for one more year. The end of Key Stage SATs test will reflect the 2000 curriculum.

Details of the new Programme of Study for Mathematics can be found here

Rationale

Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind at Stanton Bridge Primary School we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them throughout their lives.

It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society. At Stanton Bridge Primary School we use the new National Curriculum for Mathematics (2014) as the basis of our mathematics programme. We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding which could become barriers to learning as they move through education.

Assessment for Learning, with an emphasis on investigation, cross curricular mathematics, problem solving and the development of mathematical thinking

combined with a rigorous approach to the development of teacher subject knowledge are therefore essential components of our approach to this subject.

Aims

We aim to provide the pupils with a mathematics curriculum and high quality teaching to produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to the full.

Our pupils should:

- Have a well-developed sense of the size of a number and where it fits into the number system.
- Know by heart age appropriate number facts such as number bonds, multiplication tables, doubles and halves.
- Use what they know by heart to figure out numbers mentally.
- Calculate accurately and efficiently, both mentally and in writing and paper, drawing on a range of calculation strategies.
- Recognise when it is appropriate to use a calculator and be able to do so effectively.
- Make sense of number problems, including non-routine/'real life' problems and identify the operations and strategies needed to solve them.
- Explain their methods and reasoning, using correct mathematical terms.
- Judge whether their answers are reasonable and have strategies for checking them where necessary.
- Suggest suitable units for measuring and make sensible estimates of measurements.
- Explain and make predictions from the numbers in graphs, diagrams, charts and tables.
- Develop spatial awareness and an understanding of the properties of 2d and 3d shapes.