Maths at Smallwood

At Smallwood, we promote the fact that 'We can all do maths!' Through the mastery approach, we encourage our children to develop resilience and self-confidence in applying their mathematical skills within school, across all subjects, and out in the wider world.

We aim for all pupils to:

- become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios;
- reason mathematically by following a line of enquiry and develop and present a justification using mathematical language;
- have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

Intent

It is our intention that every pupil, irrelevant of needs and ability, acquires the mathematical skills and knowledge to carry out prompt mental calculations, use efficient written methods, understand relationships and patterns, solve real life problems, and make reasoned justifications using correct mathematical vocabulary. We deliver a curriculum which is accessible to all through the use of practical resources and varied visual representations, and which places a key focus on mathematical vocabulary to help children both understand and explain concepts. We ensure children recognise the importance of maths in the wider world and that they can use their mathematical skills and knowledge in different contexts within other subjects and their own lives. Fundamentally, 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.

Implementation

Maths is an important part of our curriculum and is timetabled discretely for a minimum of 5 hours per week.

Planning

Each unit of work is planned in accordance with the national curriculum objectives, using White Rose schemes of work. Within planning, priority is placed on concrete, visual and abstract representations as well as on key vocabulary for each unit of mathematics. Every lesson provides children with the opportunity to develop their fluency, problem solving and reasoning skills through challenging learning tasks.

Teaching/ Learning (KS1/KS2)

In KS1 & KS2 maths lesson are 4 x weekly and comprise of:

- A 15-minute focused response time (an opportunity for consolidation or challenge, as well as to amend previous work based on verbal feedback)
- Flashback 4 (an opportunity to recap on prior learning independently)
- Teacher input (modelling of strategies and ways of thinking mathematically)
- Guided Practice (opportunity to work collaboratively before independent practice)
- Independent Practice (applying skills taught)

Recording of mathematics

- Each child will have a maths exercise book where they will record:
  work completed during response time (including flashback 4), challenges or extension tasks and end of unit/ end of term assessments.
- Each child will also have a White Rose textbook for each unit of maths being studied for independent practice.

Assessment

- Daily Flashback 4 (to show evidence of skills mastered after the point of teaching)
- White Rose end of unit assessments
- White Rose termly assessments
- Weekly times tables tests (KS2 only)