

Curriculum Policy: Maths



Every small step combines to a bigger purpose!



Curriculum Intent

Through our bespoke mathematical learning system, children will be given opportunities to develop their knowledge and understanding of a wide range of mathematical concepts.

Every child will experience some form of maths in our school every day, providing them with opportunities to explore all the mathematical concepts they will need to become lifelong mathematicians, giving them all the skills and understanding to succeed in the wider world.



Curriculum Aims

We want children to be able to:

- Apply their skills and understanding of maths to a range of subjects across the curriculum
- Experience a lively, exciting, and stimulating environment
- Acquire Maths knowledge and skills that provide the foundations for understanding the world around them
- Develop mental strategies
- Use their mathematical vocabulary to reason and explain
- Experience partner talk as often as possible to stimulate and develop a curiosity for Maths
- Stretch themselves and take risks in their learning
- Experience a sense of awe and wonder surrounding Maths
- Be secure in their understanding of number and number relationships
- Be provided with consistent opportunity for low-entry, high-ceiling challenges



Lesson structure

In our school, we want maths to be an enjoyable experience for children. We believe that children learn best when there is a clear structure and purpose to their learning.

Our SMART Maths approach is taught in units of work, with each taking place over a specific number of days. The learning is broken down into five distinct strands: Arithmetic 1, Arithmetic 2, Data and Measure, Geometry and Reasoning. All these strands are taught throughout each term. The curriculum is set up in a way that provides opportunities to revisit prior learning both within the same year group and as children progress through school.

In Nursery, children focus on lots of counting and songs, building up their basic skills. Towards the end of Nursery, they are introduced to cups, the unitising object that we use in SMART Maths.

In Reception, children continue to build on these basic skills and start to record work in books. There is a big focus on children's knowledge and use of number during this year.

Using concrete objects such as cups, counters and place value cards, children continue to build on these fundamentals, moving onto pictorial and abstract methods as they move through each mathematical concept.

Fluency is key in SMART Maths, and we make sure that children fully understand a concept using concrete objects before moving on.

As their confidence increases, children begin to explore new concepts as well as building upon their current knowledge and skills, with a key focus on applying these to reasoning and problem-solving type questions.

From Years 1 - 6, we follow this structure:

- On a Monday, children will have a focused Arithmetic lesson
- Daily Practice, a quick-fire warm up encouraging rapid recall of facts and fun maths activities
- **Main Teaching**, the teacher will go through a particular concept with the children, focusing on providing the appropriate amount of support they need for where they are at in their learning
- Independent Work, children will access work adapted to their level, being provided the support they need to succeed
- **Reasoning/Problem solving opportunity,** the children will work on applying what they have learned to encourage deeper understanding



Planning and Resources

SMART Maths is a unique, mastery approach to teaching. It delivers a high-quality mathematics education with an ambition for all children to develop a sense of excitement and curiosity about mathematics. This enables children to become lifelong mathematicians, giving them all the skills and understanding to succeed in the wider world.

We ensure that SMART Maths incorporates all the National Curriculum requirements, as well as supplementing our learning system with quality reasoning and problem-solving content from a range of sources including NCETM.



We teach maths as a discrete subject from Reception to Year 6. In Reception, children partake in a maths lesson 3 times a week, with 'mini' maths lessons taking place on the remaining two days. In Years 1-6, children will partake in a daily maths lesson across school, with other opportunities for mathematical learning taking place throughout the week.

In addition, we provide a range of other mathematical content across the year to promote a love of maths, including celebrating world numeracy day, Maths Shed (online maths app that can be accessed both at home and in school) and cross-curricular opportunities in a range of subjects.



Assessment

Assessment is an integral part of the teaching of maths and is evident in every lesson. Staff make daily assessments based upon the work recorded in books, as well as observations of how children are doing in lessons.

Children in Reception complete the statutory baseline assessment.

In Y2, we use the non-statutory tests that are issued by the DfE.

To prepare children for more formal testing, Rising Stars assessments are taken three times a year in Years 1,3,4, and 5.

In Y4, children complete the statutory Multiplication Tables Check.

Statutory assessments are carried out in Year 6.

All the information from informal and formal testing allows teachers, alongside the subject leader, to assess progress towards any targets set during pupil progress meetings.

Children who are struggling to reach their targets will receive additional support in small group interventions or one to one support.



We teach mathematics to all children, whatever their ability. Mathematics lessons are planned to meet the expectations of each year group, and the individual needs of the children. Those working towards expectations will work on tasks that are adapted to suit their needs. Questions posed within the sessions provide opportunities for all children to be able to contribute.



Role of Subject Leader

- Ensure that the statutory requirements of the national curriculum for mathematics are met
- Ensure appropriate professional development opportunities are provided for all staff
- Monitor their subject to ensure consistency of approach
- Ensure regular and appropriate assessment of mathematics takes place and have a clear overview of who is achieving age related expectations
- Ensure that children who are not making enough progress to achieve age related expectations have been identified, and appropriate interventions put in place to ensure they catch up
- Ensure appropriate resources are available
- Engage with outside agencies and online communities to keep up to date and become the expert in their chosen subject in the school

Date agreed: July 2022

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