

MATHS POLICY

Reviewed: January 2023

Next Review: January 2025

1. INTRODUCTION

- 1.1 This policy outlines the purpose, nature and management of the mathematics taught and learned in our school.
- 1.2 It has been drawn up as a result of staff discussion and has the full agreement of the governing body.
- 1.3 The implementation of this policy is the responsibility of all the teaching staff.

2. NATURE

- 2.1 Mathematics is a creative and highly inter-connected 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 (National Curriculum 2014).

3. INTENT

Our maths curriculum intends to: -

- *Inspire confidence in core maths skills such as counting, understanding place value, times tables and calculation*
- *Develop competency and fluency in core skills*
- *Develop problem solving and investigation skills which can be applied in a cross curricular way.*
- *Instil the confidence to apply their maths skills and knowledge in real world situations*

4. ENTITLEMENT

- 4.1 Mathematics is a core subject in the National Curriculum. We follow the programs of study for Key Stage 1 and 2 as set out in the National Curriculum in order to implement the statutory requirements. In the Reception class, we implement the requirements of the EYFS Framework where mathematics is a specific area of learning.

5. IMPLEMENTATION

- 5.1 At Tedder School, we use a variety of teaching and learning approaches in maths lessons. Our principal aim is to develop children's fluency in maths, and the ability to reason and solve problems drawing on their growing knowledge and skills.

In KS1 and KS2, we do this through a daily lesson during which children experience:

- A Flashback starter activity where children are required to retrieve prior learning and use arithmetic skills.
- Focussed whole class/year group teaching with clear modelling.
- Opportunities to practice applying new knowledge independently with appropriate scaffolding which is gradually withdrawn.
- Opportunities to practice applying new knowledge in adult supported or guided sessions.
- Instant feedback through live marking throughout the lesson.

- A plenary to assess and consolidate learning.

- 5.2 The use of ICT is embedded in lessons to support teaching and learning and encourage collaborative learning, for example through the use of interactive whiteboards, laptops and iPads. Wherever possible we encourage children to use and apply their learning across the curriculum.
- 5.3 We carry out the curriculum planning in Maths in three phases (long-term, medium-term and short-term). The National Curriculum programs of study detail what we teach in the long term. This is sequenced using the White Rose Maths scheme of learning in all year groups, ensuring that knowledge is developed in a logical way that builds on prior knowledge.
- 5.4 Medium term plans provide details of the teaching objectives to be taught in each block, suggestions for teaching and possible misconceptions.
- 5.5 Class teachers complete a weekly plan for the teaching of maths based on the medium term plans. This includes: learning objectives and success criteria; teaching notes to support the main input; details of independent, guided or supported work (including how additional adults will support individuals or groups; a plenary to assess learning).
- 5.6 We teach maths in the Reception Class in line with the EYFS Framework where mathematics is a specific area of learning. Teaching is sequenced using the EYFS White Rose Maths scheme of learning. Teaching consists of the following: focussed whole class carpet session to introduce new learning; enhanced provision indoors and outdoors to support the new learning; adult-led small group sessions; daily whole class fluency sessions; and readily accessible mathematics activities in continuous provision.
- 5.7 All teachers will be responsible for the planning and teaching of Maths and can refer to the Maths co-ordinator for support.
- 5.8 Teachers will group their children in a variety of ways according to the nature of the activity, including some grouping by ability and mixed ability groups.
- 5.9 Most children will be taught the requirements of the National Curriculum for their year group with appropriate scaffolding; children who understand new content quickly will be challenged to apply their knowledge in greater depth. In a small number of cases where children have specific learning difficulties, it may be necessary for them to access the curriculum for an earlier year group.
- 5.10 Activities are planned in such a way as to encourage full and active participation by all children irrespective of prior attainment or any other characteristics.
- 5.11 Homework in mathematics comprises of TTRockstars and Numbots. This ensures that homework is targeted at developing fluency in the most important number facts.
- 5.12 Intervention groups are sometimes necessary to support some children. These take place outside the main lesson and are closely related to the needs of the children.
- 6. SEND**
- 6.1 We teach mathematics to all children, whatever their ability. It is part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities that are

matched to the needs of children with learning difficulties. Work in mathematics takes into account the targets set for individual children in their Individual Education Plans (IEPs) or EHC.

7. ASSESSMENT, RECORDING & MONITORING

7.1 We assess children's work in mathematics from three aspects (long-term, short-term and medium-term). We make short-term assessments, which we use to help us adjust our daily plans. These short-term assessments are closely matched to the teaching objectives.

7.2 Summative assessments are made three times per year (December, April and June). We use past National Curriculum Test papers in Year 2 and Year 6, and PUMA standardised tests in years 1, 3, 4 and 5. This enables staff to measure progress, set targets and record attainment.

In reception, assessments are made through observations during teaching and continuous provision. Evidence is gathered through adult led activities, activities in the continuous provision and input from parents through the online system Tapestry. Assessment are recorded by the class teacher.

7.3 Results from testing are analysed by class teachers and the progress and attainment of different groups are monitored.

7.4 Children have their individual targets for maths in the front of their maths books. These are reviewed regularly.

7.5 The use of testing helps to inform teacher assessment using KPI (key performance indicator) grids. Class teachers assess each pupil against the criteria and make a best fit level judgement. This is updated regularly.

7.6 End of year assessments are made towards the end of the school year using both testing and teacher assessments. They are used to set targets for the following year and to track progress against school and national targets. Assessments are reported to parents in the end of year report for their child and discussed during parent/teacher consultations throughout the year.

7.7 Moderation meetings take place regularly to assess work against the KPI grids and check judgements across the school.

7.8 Monitoring of the standards of children's work and of the quality of teaching in mathematics is the responsibility of the mathematics subject leader. The work of the mathematics subject leader also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The subject leader produces an annual action plan for the subject and reviews it termly. This sets out areas to develop across the school. The headteacher allocates regular management time to the mathematics subject leader so that they can monitor the subject. Monitoring activities include: looking at planning; work scrutiny; pupil voice activities; and lesson observations.

7.9 A named member of the school's governing body is briefed to oversee the teaching of mathematics. This governor meets regularly with the subject leader to review progress.

8. RESOURCES



- 8.1 There is a range of resources to support the teaching of Maths across the school. All classrooms have an appropriate selection of mathematical equipment. Additional equipment is kept in the main resource room. Each classroom has a range of resource books and teachers have access to appropriate online resources. ICT resources such as laptops and iPads are available to access resources and support teaching and learning.