



Mathematics Policy

Introduction

This policy outlines the purpose, nature and management of the mathematics taught and learnt in Grasslot Infant School. The implementation of this policy is the responsibility of all teaching staff and should be overseen and monitored by the subject leader and head teacher.

Mathematics is a way of communicating. It is a language through which ideas can be explained, explored and developed and one through which relationships can be expressed, hypothesis made and tested and pattern identified.

At Grasslot Infant School we follow a mastery approach, embedding the belief that every child can succeed in Maths. We ensure that children are able to recognise the importance of Maths in the wider world and that they are able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy and be excited about Mathematics, ensuring that every child can experience success, with the ability to reason mathematically. We are committed to developing children's curiosity about, as well as an appreciation of, the beauty and power of Mathematics.

We will provide opportunities for the children to develop their basic skills, fluency and recall, building on and nurturing their natural curiosity from the Early Years upwards. Children will be supported in developing their ability to apply their learning to contextual problems, alongside their ability to articulate their understanding using the correct mathematical vocabulary. Our pupils should leave our school well prepared for their next step of mathematical learning.

Our aims for teaching maths (Intent)

General

We aim to provide the pupils with a mathematics curriculum, which will produce individuals who are literate, 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 their full potential.

Specific

Our aims in teaching mathematics are that all children will:

- become numerate and tackle mathematical problems with confidence
- develop the ability to think logically and clearly
- use mathematical language effectively and confidently
- develop positive attitudes to mathematics, recognising that mathematics can be both useful and enjoyable
- be able to use and apply their mathematics skills in other curriculum areas.

Provision

Mathematics is a core subject of the National Curriculum. The knowledge, skills and understanding are set out in The National Curriculum 2014. The programmes of study set out what pupils should be taught year-by-year and the end of year key objectives set out the expected standards of pupils' performance. In mathematics there are four major strands:

- Number
- Measurement
- Geometry
- Statistics

Grasslot Infant School follows the National Curriculum 2014 for Mathematics, which provides detailed guidance for the implementation of the National Curriculum for mathematics. We use White Rose Maths as a basis for maths teaching. Each year group has clear key objectives which should be covered throughout the year. This ensures continuity and progression in the teaching of mathematics across Reception, Year 1 and Year 2.

In the foundation stage the curriculum is guided by the New Early Years Foundation Stage statutory framework 2021.

Organisation of teaching and learning (Implementation)

As a school, we follow the DFE approved, White Rose Maths Hub's 'small steps' planning from EYFS up to Year 2. This splits the maths curriculum objectives into teaching blocks for each term. Each topic is then planned for and taught, ensuring appropriate coverage of the key objectives and continuity and progression between year groups.

Teachers have access to the White Rose Maths resources but can draw on other resources such as Mathswizz, to support their teaching. The children begin with concrete equipment, before moving to pictorial then abstract concepts. Each lesson should incorporate fluency, taught with a mastery approach, allowing all children, including SEND and disadvantaged pupils, to participate and work towards achieving the objectives.

Staff are expected to follow and model the school's calculation policy.

Formative assessment is ongoing and staff are encouraged to use fluid groupings to ensure every child's strengths and weaknesses are catered for with adaptive teaching enabling all children to 'keep up'. This means that every pupil should make good personal progress within each lesson and all children should be working towards achieving the same objectives.

At the end of each block of work the children complete assessments. These are used to assess the impact of maths teaching and identify any gaps in children's learning. At the end of each term, children complete an assessment task. These tests are used to inform the children's individual targets, and as evidence towards the Teacher Assessment Frameworks at the end of Key Stage 1.

The teaching of mathematics at Grasslot Infant School provides opportunities for:

- group work
- paired work
- whole class teaching
- individual work

Pupils engage in:

- the development of mental calculation skills
- written methods
- practical activities and mathematical games
- investigational work
- problem solving activities
- mathematical discussion and the development of mathematical vocabulary
- consolidation of basic skills and number facts
- reflection of their work

Mathematics contributes to many subjects and it is important the children are given opportunities to apply and use Mathematics in real contexts. The skills acquired in the numeracy lesson are applied across the curriculum, where appropriate.

Foundation Stage

The Early Years Foundation Stage is centred around play where mathematics is taught and learned in play situations that are linked to a familiar topic, through a mixture of adult-led and child-initiated activities. Activities and experiences are planned to provide children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces and measures. The topics provide opportunities for many cross-curricular links between mathematics and the other areas of the EYFS Framework as well as opportunities to explore maths in the continuous provision.

Pupils experience mathematics on a daily basis; this early introduction to mathematics will generally be undertaken orally and practically. Long and Medium Term planning is based on White Rose Maths and Master the Curriculum. This is supplemented by Numberblocks activities from the NCETM.

Speaking and Listening

Speaking and Listening is regarded as an integral part of the daily maths lessons. Specific speaking and listening opportunities are provided for children to interact in whole class, small group and paired work. Oral mathematical reasoning is built into daily lessons.

Computing

Computing is a valuable resource that is used within the daily maths lessons. Plasma Screens are located in every classroom and these are used for whole class teaching and small group work where appropriate. Children also use the computers and ipads for independent work linked to the main objectives of the lesson, again where appropriate.

Assessment (Impact)

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher and the foundation stage teaching assistants to assess all pupils in their class or group.

Assessment is carried out:

- orally through questioning
- by observation of children at work ie. focused and incidental
- live marking of children's work
- through planned assessment activities linked to the key objectives
- using White Rose Maths end of term/ block assessments.

Children in the Foundation Stage are assessed regularly and a judgement is made as to whether the children are 'On track' or 'Not on track' for achieving key developmental milestones. In the final term of the reception year, a judgement is made in which children are assessed against the Early Learning Goals whether they are Emerging or Expected.

In Key Stage One we are continually assessing our pupils through teacher assessment of work in books, or putting photos onto Tapestry and making a judgement (developing, consolidating or secure against an objective). We also monitor the children's progress through end of term/ block assessments. We see assessment as an integral part of the teaching process and strive to make our assessment purposeful, allowing us to adapt teaching to the needs of the pupils, thus benefiting the pupils and ensuring progress. At the end of Year 1 and Year 2, the children will be either be working towards the expected standard, working at the expected standard or working at greater depth within the expected standard.

Special Educational Needs

Adaptive teaching which allows children to 'keep up' and achieve the learning objectives together is a key feature of lessons. Children who are identified as needing additional support,

whether less or more able, have the opportunity to work with teaching assistants or the class teacher. Children with specific SEN needs are given appropriate provision to meet their needs and support their IEPs. Where there is a group of children identified, they may also undertake a specific intervention programme such as using the Five Minute Boxes with Year 1 children. Mathswizz is an online personalised learning programme which allows children to access independent work at an appropriate level, but it can also be used as an intervention to address any gaps in pupils mathematical understanding.

Equal Opportunities and Inclusion

All children irrespective of gender, ability, ethnic and social circumstances have access to the curriculum.

Parental Involvement

At Grasslot Infant school we encourage parents to be involved by:

- inviting them into school regularly to discuss the progress of their child and to set appropriate individual targets
- inviting parents into school in the summer term to discuss the yearly report
- encouraging parents to help in classrooms
- sharing information about end of year objectives to enable parents to support their child at home
- holding workshops for parents focusing on areas of mathematics, and ways of helping their children at home.
- Sending maths game/ song bags home in Nursery
- holding parents' information sessions focusing on the KS1 statutory assessments.

Monitoring and Evaluation

It is the responsibility of the subject leader and the Head Teacher to evaluate the working of this policy throughout the school.

The numeracy governor visits the school to talk with the subject leader when possible and monitors the development of the action plan within the School Development Plan.

Policy written September 2023