



L.E.A.D. Academy Trust

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Forest Lodge Academy

Maths

Policy

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Mathematics Policy

Introduction

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Forest Lodge Academy. The National Curriculum Order for Mathematics describes what must be taught in each Key Stage. Forest Lodge Academy will base its teaching around the Mathematics Primary Curriculum Objectives 2014. These objectives will be used alongside the National Curriculum level descriptors, White Rose materials and a variety of other mathematical teaching schemes to ensure teachers are provided with detailed guidance for the implementation of the orders therefore ensuring continuity and progression in the teaching of mathematics. Every teacher in Forest Lodge Academy has access to all resources needed for teaching mathematics. In Early Years, the curriculum is guided by the Early Learning Goals, which mirror the Foundation Stage Learning Objectives in the NNS Framework. The implementation of this policy is the responsibility of all teaching staff.

Aims and Objectives

The mathematics teaching at Forest Lodge Academy is geared towards enabling each pupil to develop within their capabilities; not only the mathematics skills and understanding required for later life, but also an enthusiasm and fascination about maths itself.

We aim to increase pupil confidence in maths so they are able to express themselves and their ideas using the language of maths with assurance.

We are continually aiming to raise the standards of achievement of the pupils in Forest Lodge Academy.

Teaching and Organisation

To provide adequate time for developing mathematics skills each class teacher will provide a daily mathematics lesson. These lessons will last for 1 hour in Key Stages 1 and 2. The organisation of mathematics lessons will be flexible to allow teachers to teach to the needs of their pupil's. In Nursery and Reception Mathematical activities will be spread throughout the day, with a short daily Mathematic session also taking place within the Reception setting. Throughout the school links will also be made to mathematics within other areas of the curriculum to allow pupils to develop and apply their mathematical skills.

The teaching of maths at Forest Lodge Academy provides opportunities for:

- Class work
- Group work
- Paired work
- Whole class teaching
- Individual work
- Self-assessment
- Peer assessment

Pupils engage in:

- The development of mental strategies
- Written methods
- Practical work
- Investigational work
- Problem- solving
- Mathematical discussion
- Consolidation of basic skills and routines

At Forest Lodge Academy we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. It is expected that Years 2 – 6 will also run a 30-minute arithmetic sessions once a week, with Year 1 doing this in the summer term. Along with other resources teachers use the Primary Framework for Mathematics vocabulary sections when planning to help determine the appropriate vocabulary to use in our teaching; children are expected to use this in their verbal and written explanations. We endeavour to set work that is challenging, motivating and encourages the pupils to talk about what they have been doing.

Equal opportunities

As a staff we endeavour to maintain an awareness of, and to provide for equal opportunities for all our pupils in mathematics. We aim to take into account cultural background, gender and Special Needs, both in our teaching attitudes and in the published materials we use with our pupils.

Intervention

When it is necessary teachers work alongside the SENCO to provide specific mathematical targets for their pupil's passport.

Pupils who are struggling to maintain the expected levels of attainment within mathematics are provided with intervention sessions to enable them to catch up with gaps in their learning. At Forest Lodge we believe in quality first teaching first and therefore where appropriate teachers include intervention strategies within mathematics lessons. More focused one to one or small group interventions take place outside of the mathematics lesson so that children do not miss the teaching of new strategies and techniques. The main mathematical interventions in use at Forest Lodge are the 5-minute Mathematics box and Numicon. @1st number intervention is also used within year groups to support and develop specific groups of pupils. In years 5 and 6 'Sum Up' is used to provide same day intervention for children who need extra time and support to reinforce a new skill.

Homework

The daily mathematics lesson will provide opportunities for children to practice and consolidate their skills and knowledge, to develop and extend their techniques and strategies and to prepare for their future learning. These skills will be extended through out of class activities and homework. Mathematics activities will be a part of the homework choices available in children's 'Learning at Home' books each term. This homework will be focused and will be referred to and valued in future lessons.

Cross Curricular Links

Mathematics is taught mainly as a separate subject but every effort is made to link maths with other areas of the curriculum. We try and identify the mathematical possibilities across the curriculum at the planning stage. We also draw children's attention to the links between maths and other curricular work so children see that maths is not an isolated subject. In the Early Years, these links are more evident because of the less formal timetable.

Information and Communication Technology (ICT)

ICT will be used in various ways to support teaching and motivate children's learning. ICT will involve, among other things, the computer, the interactive whiteboard, calculator and audio-visual aids. These resources will be available to children to be used in mathematics lessons when they are the most efficient and effective way of meeting the lesson objectives.

Planning

Planning is undertaken at two different levels:

Long term planning is based on the Mathematics Primary Curriculum objectives. Each year group within the school has mapped out the progression of statements throughout the year in order to build on and make

links within areas of mathematics. We also use White Rose materials to help structure our teaching.

Short term planning is carried out according to the amount of time children need to spend on each area of the curriculum to ensure their learning is secure. These plans include the learning objective to be covered in the main teaching session, the lesson success criteria, Afl, resources to be used, any differentiation, maths mastery focus and key vocabulary. Short term planning is monitored by the maths co-ordinators and senior management team.

Resources

Resources for the delivery of the maths curriculum are stored both centrally and in classrooms. Everyday basic equipment is kept in classrooms. Additional equipment and topic-specific items are stored centrally.

Forest Lodge Academy uses a variety of published materials to facilitate the teaching of mathematics but recognises the need for the teaching of maths to be 'scheme assisted' not 'scheme driven.' At Forest Lodge the National Curriculum objectives form the basis of Maths planning, teaching and learning. Staff are encouraged to use resources from schemes such as Maths no Problem and White Rose to develop mastery of objectives. Other schemes available within school include Abacus, LCP, Collins New Primary Maths and Numicon, but a variety of other teacher resources are also available.

To assist the development of arithmetic all year groups have access to an arithmetic scheme to develop children's ability to recall and apply arithmetic knowledge rapidly and accurately.

A main focus at Forest Lodge Academy is also times tables, with view towards the Year 4 times table check that will be introduced in 2019. Teachers have a selection of resources within their classroom to assist in this and the school have also subscribed to Times Table Rockstars which includes online and hard resources to aid in their children's development of times table knowledge. Pupils can also access this resource at home. Teaching and Learning materials are constantly updated, as new and relevant items become available. The maths coordinators order new resources after consultation with staff.

Assessment

At Forest Lodge Academy we are continually assessing our pupils and recording their progress. We see assessment as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus

benefiting the pupils and ensuring progress. Assessment is carried out on three levels:

Short-term assessments are an informal part of every lesson and are closely matched to the teaching objectives. These tend not to be recorded on specific assessment proformas because they are for the teachers and pupil's immediate attention and action; however, pertinent comments are regularly recorded on short term planning.

Medium Term assessments take place each half term. Each half term teachers record children's attainment on the school's tracking system, allowing for the monitoring of progress, successful implementation of intervention and for informing future planning. Judgement of children's attainment takes place against the National Curriculum statements (and teacher assessment frameworks in Years 2 and 6). This judgement is based on teacher assessment, with use of White Rose Assessment materials to support this judgement.

Long Term assessments take place at the end of the school year to assess and review pupil's progress and attainment. These assessments will be made through compulsory National Curriculum mathematics test for pupil's in years 2 and 6. This judgement is based on teacher assessment, with use of White Rose Assessment materials to support this judgement. From 2018, GL assessments will also be used to baseline and end of year assess. These results will then be compared to children's assessments in previous year's tests to allow for their progress to be accurately monitored. Teachers will also draw upon their tracking documents and supplementary notes and knowledge about their class to produce a summative record. Accurate information will then be reported to parents and passed on to the child's next class teacher.

Reporting

All parents at Forest Lodge Academy receive two written reports each year on which there is a summary of their child's effort and progress in mathematics, children's specific mathematics targets, next steps for their child's learning and ideas of how to support their child with mathematics at home.

At the end of Key Stage 1 and Key Stage 2 each pupil's level of achievement against national standards is included as part of their annual written report

The Role of the Maths Coordinator

- Monitoring of teachers' assessments
- Inform new staff of the teaching and learning expected for mathematics within the school
- Teach demonstration lessons

- Ensure teachers are familiar with the objectives to be taught in Mathematics and help them to plan lessons
- Lead by example in the way they teach in their own classroom
- Prepare, organise and lead INSET
- Work cooperatively with the SENCO
- Implement and monitor Mathematics interventions within the school
- Advise on good mastery practice
- Ensure appropriate teaching and learning resources are available for the successful teaching of mathematics
- Observe colleagues with a view to identifying their strengths and support they might need
- Monitor Mathematics planning
- Attend appropriate INSET
- Inform parents
- Discuss regularly with the head teacher, senior management team and the Mathematics governor the progress of Mathematics within school