



White Ash Primary School

Mathematics Policy

Curriculum Statement

This policy reflects the school values and philosophy in relation to the teaching and learning of Mathematics. The policy draws together National Curriculum guidelines and statutory requirements for Foundation Stage and Key Stages 1 and 2. It was produced as a result of consultation with all teaching staff and through liaison with the Lancashire Maths team.

The policy seeks to address the individual learning needs of the pupils and sets out a framework within which teaching staff can operate and provides guidance on planning, teaching and assessment.

This policy should be read in conjunction with the Curriculum Overview/Scheme of Work for Mathematics which sets out in detail what pupils in different key stages of different ability ranges will be taught, and also with the Written Calculation Policies for Addition, Subtraction, Multiplication and Division, which are used to encourage appropriate progression and a degree of uniformity in written calculation.

Intent

We believe that it is important to promote a positive attitude towards Maths amongst all of our pupils in order to develop self-confidence and a sense of achievement.

The principles of Maths are:

- Policy and provision are evaluated and reviewed regularly
- Resources are planned and budgeted for in a yearly subject action plan as part of the School Improvement Plan
- The governing body and the school- follow their statutory responsibility in relation to Maths
- Cross curricular links will be highlighted where appropriate

In Mathematics it is intended to promote learning through the following aims:

1. To deliver the National Curriculum for Mathematics differentiated to meet the needs of all our pupils so that their full potential is realised.
2. To be pupil centered, encouraging, success based and promotes a positive learning atmosphere.

3. To develop a broad and balanced curriculum which caters for all pupils and to deliver a broad range of experiences in order to teach the necessary mathematical language and concepts in all areas of the Mathematics curriculum.
4. To promote positive attitudes towards Mathematics and an enthusiasm for Mathematics in school.
5. To use a variety of different teaching methods, styles and resources in order to enhance the learning of mathematical language, concepts and skills in all areas of the Mathematics curriculum.
6. To develop pupil understanding of Mathematics through experience, exploration and enquiry.
7. To develop mathematical reasoning skills and the ability to solve problems logically and systematically.
8. To use a cross-curricular approach to enable pupils to transfer mathematical skills into everyday life.
9. To promote the development of Mathematics through the use of appropriate ICT resources.
10. To encourage pupils to develop the ability to work independently and in co-operation with others.
11. To teach age appropriately considering the resources used at each key stage.

Implementation

The subject of Mathematics is allocated the appropriate amount of time, taking into account National Curriculum guidance, to provide the pupils with a broad and balanced curriculum, which is appropriate for their needs. For pupils with more profound and complex needs the breadth and balance of the curriculum is addressed through individual timetables and our sensory curriculum.

Learning outside the classroom (LOtC)

Opportunities to explore Mathematics are also found across all other curriculum areas and in everyday situations such as snack time, dinner time and play time. Mathematics is also an integral part of learning outside the classroom — children are given the opportunities on educational visits to explore mathematical concepts such as pattern, shape, construction, use of money and time. Mathematics is incorporated into our weekly LOtC sessions through problem solving and reasoning, shape, space and measure work, data handling and understanding of number.

Assessment

At White Ash Primary School, staff have a good knowledge of the standards of achievement of the pupils. Judgements can be made about the progress of individual pupils relative to their needs through:

- Teacher assessment based on National Curriculum Levels and the White Ash Progression Document
- The monitoring and evaluation of Individual Learning Plans and individual objectives, targeted planning and recording using Evidence for Learning.

In addition, through:

- Compiling 'Learning Journeys' for each pupil
- Annual Reviews of a pupil's Statement of Special Educational Needs
- End of term reports
- Regular Parents' Evenings and contact with parents in home-school diaries.
- Observations from parents and other professionals.

These enable the staff team staff to fully monitor, evaluate and record students' progress.

The Role of the Subject Leader

The Maths Subject Leader is responsible for leading Maths throughout the school. This includes:

- Advising on in-service training to staff where appropriate. This will be in line with the needs identified in the Development Plan and within the confines of the school budget.
- Advising and supporting colleagues in the implementation and assessment of Maths throughout the school.
- Responsibility for the requisition and maintenance of resources required for the teaching of Maths. This will be within the confines of the school budget.
- To regularly scrutinise pupil work through planned book scrutinies.
- To analyse Maths progress data termly and suggest interventions if appropriate.
- To maintain a subject leader file with examples of moderated work across the ability range.
- Review and revise subject action plans on an annual basis to contribute to the school development plan.

- To act as a 'Maths Champion' and promote a positive attitude towards mathematics throughout the school.

Role of the Class Teacher

- To develop Maths skills, knowledge and experiences with all pupils.
- To develop and update skills, knowledge and their own understanding of Maths.
- To identify INSET needs in Maths and take advantage of training opportunities.
- To keep appropriate on-going records of pupil progress through the use of EFL (Evidence for Learning)
- To plan effectively for Maths, liaising with the subject leader when necessary.
- To inform parents of pupils' progress, achievements and attainment.

Early Years Foundation Stage: Mathematics teaching is delivered to children in ability groups across the EYFS class, with rotation of groups to ensure that all children get input from teachers and teaching assistants throughout the week. Progress is monitored and recorded according to the Assessment Policy as outlined below.

Key Stage 1: Mathematics teaching is delivered to children in class groups across the KS1 classes, with each class planned for and led by a teacher and supported by teaching assistants to ensure pupil progress and confidence. Progress is monitored and recorded according to the Assessment Policy as outlined below.

Key Stage 2: Mathematics teaching is delivered to children in class groups across the KS2 classes, with each class planned for and led by a teacher and supported by teaching assistants to ensure pupil progress and confidence. Progress is monitored and recorded according to the Assessment Policy as outlined below.

Planning

At White Ash planning is carried out in three stages:

Long Term Planning

- Identifies the main strand and themes to be covered.
- Offers an overview to the breath and balance across the curriculum.
- Ensures continuity and progression.

Medium Term Planning

- Plans in detail what will be taught each half term and are constantly reviewed in line with pupil assessment.

- They will summarise typical activities and show progression in terms of new skills/contexts for practicing existing skills.

Short Term Planning

- To aid the teacher and learning support staff in carrying out the lesson.
- To show differentiation within the class.
- To show links to educational visits etc.

Teachers, Governors and Parents are informed of the breadth of coverage across each year group through Curriculum Mapping Grids/Scheme of Work, which outline what should be covered each week/term. These will be given to all teachers, and also made available to view in the Maths Subject Leader file, on the school website and on the staff shared (T) drive.

Planning is supported through the use of the Progression steps document which was adapted to suit the needs of our school when taken from the Lancashire Maths team. This shows small steps of learning, split into each topic area for teachers to identify any gaps and deliver lessons appropriately.

Staff are encouraged to refer to the written calculations policies, even when dealing with very early calculation, to ensure that language and skills being taught have an element of uniformity. This ensures that pupils are being taught consistent methods and approaches to written calculation throughout school, allowing them to make progression throughout their school life and not be confused by a divergent range of approaches and language.

In early number and calculation, children will be exposed to a wide range of resources and concrete objects, including Numicon and extending to Cuisenaire rods, to encourage them to see patterns and relationships within numbers. When children are ready to begin using written methods of calculation, they should be encouraged to use the Base 10 methods as outlined in the Written Calculations Policies, which are then developed into standard written methods of calculation as children become ready. The progression of these skills is outlined fully in each of the four Written Calculation Policies.

Differentiation

Pupils at White Ash Primary School have a range of learning difficulties — severe and profound multiple learning difficulties, moderate learning difficulties, autistic spectrum disorders and challenging behaviours. They have a wide range of needs and abilities, some of which make it very difficult for them to carry out activities within Mathematics.

Through Mathematics pupils are encouraged to develop social, observational and communication skills and to learn to work both independently and as part of a group becoming confident and competent.

For pupils who have sensory impairments and/or physical disabilities and for those who experience developmental delay Mathematics is based upon a multi-sensory approach, which starts from direct experience and progresses to structured activities and experiences using concrete materials.

Therefore, to enable the staff at White Ash Primary School to fully address the range of needs of the pupils and to enable us to show progression within the activities for the appropriate Key Stage, the Programmes of Study as outlined in the National Curriculum for Mathematics are differentiated into 3 stages through teacher planning, according to pupil need:

Stage 1 Experiential — for children who have profound and multiple learning difficulties and who are generally dependent upon adults.

Stage 2 Participating — for children who have severe learning difficulties who are active participants but who require interventionist teaching to help them learn, develop and apply skills.

Stage 3 Acquiring and Applying — for children with moderate learning difficulties who are developing and learning to apply functional skills, at an age-appropriate level.

Using this differentiated approach, teachers can devise activities in all areas of mathematics, which are planned specifically at the appropriate level of need and ability for all pupils, which also allows for learning outcomes, recording and assessment to be directly linked to learning objectives.

At White Ash Primary School, the statutory guidelines for Mathematics in the Early Years Foundation Stage and Key Stages 1 and 2, and the National Curriculum Programmes of Study have been adapted to ensure that coverage of mathematics is appropriate for pupils with Moderate (MLD), Severe (SLD) and/or Profound and Multiple Learning Difficulties (PMLD). Maths is taught using the White Ash Progression document as a guide to work through each phase of learning. This document also underpins our ILPs (individual learning plans). Within our school we have 5 pathways of learning.

1. EYFS
2. Informal curriculum
3. Pre-semi formal curriculum
4. Semi formal curriculum
5. Formal curriculum

Teachers planning will change and adapt according to the pathway of each learner within their classes.

Equal Opportunities

We incorporate Mathematics into a wide range of cross curricular subjects and seek to take advantage of multicultural aspects of Mathematics. All children have equal access to the curriculum regardless of their gender or ethnicity. This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between groups.

Resources

The whole school development of Mathematics and purchase of resources is planned through the annual School Development Planning cycle and expenditure evaluated as part of that process.

The Subject Leader is responsible for providing a regularly updated audit of resources available for their subject area which is made available to all teachers with a further copy available in the Maths Subject Leader file and on the staff shared (T) drive. Some resources are kept in each class and others are stored in the resource area in Upper School. Staff are responsible for returning any borrowed resources to the resource area when they have been finished with.

Maths resources will be budgeted for and purchased in order to support the teaching of Mathematics as outlined in the Mathematics Curriculum Overviews and the Written Calculations Policies.

If teachers feel the more resources are required, they are encouraged to report this need to the Maths Subject Leader in order that necessary resources can be purchased.

Health and Safety

The Subject Leader for Mathematics has a general responsibility for the application of the LEA and Schools Safety Policies within their subject area and is directly responsible to the Head teacher for the application of all health, safety and welfare measures and procedures within their own department / area of work.

All employees working within the subject area have a responsibility to take reasonable care of their own health, safety (including suitable dress and footwear) and welfare of other persons who may be affected by their acts or omissions while at work. They also

have a responsibility to co-operate with the Subject Leader so that employers can comply with their statutory duties and specific responsibilities in terms of Health and Safety as identified below: -

1. The storage of equipment — each class has some resources which they store in their own rooms.
2. There are also Mathematics resources stored in the resource area in Upper School, which may be used by any member of staff, but should be returned after use to allow use by other classes.
3. Damaged or missing resources must be reported to the Maths Subject Leader, who can then arrange for them to be mended or replaced.

Impact

At White Ash Primary School mathematical development arises out of daily experiences in a rich and interesting environment. Children begin to initiate activities within a carefully planned environment, which promotes and extends learning. Children are encouraged to enjoy mathematical learning and become confident and enthusiastic during purposeful activities and experiences. The learning is consolidated and extended through a range of activities and gives children opportunities to practice their mathematical skills and knowledge.

Mathematics equips children with a powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to use abstract thinking. Mathematics is important in everyday life and is a creative discipline. It can involve moments of pleasure and wonder when a child solves a problem for the first time, discovers other solutions to a problem or finds hidden connections.

Mathematics Policy updated January 2025.