

Walmore Hill Primary School

Maths Policy

Date of Ratification:		Signed: Brett Stevenson (HEAD TEACHER) Stephen McMillan (CHAIR OF GOVERNORS) John Henry (CHAIR OF GOVERNORS)
Review date:		Signed: Brett Stevenson (HEAD TEACHER) Stephen McMillan (CHAIR OF GOVERNORS) John Henry (CHAIR OF GOVERNORS)
Review date:		Signed: Brett Stevenson (HEAD TEACHER) Stephen McMillan (CHAIR OF GOVERNORS) John Henry (CHAIR OF GOVERNORS)
Review date:		Signed: Brett Stevenson (HEAD TEACHER) Stephen McMillan (CHAIR OF GOVERNORS) John Henry (CHAIR OF GOVERNORS)

This policy takes into account the recent developments in the National Curriculum and should be read in conjunction with the following school policies;

- Calculation policy
- Teaching and learning policy
- Assessment policy
- Marking policy
- Special needs policy

1. Vision Statement

At Walmore Primary School we believe that a good mathematician will...

- Have a positive attitude towards mathematics and an awareness of the fascination of mathematics.
- Have a well-developed sense of number and where they fit in the number system.
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- Be able to identify mathematical relationships, spatial, numerical and logical, and see their relevance to everyday life.
- Be able to carry out practical activities involving measurement, estimation and calculation.
- Be able to read and record mathematical statements using correct terminology and symbols.
- Be able to use and interpret diagrams, charts, graphs and tables.
- Have an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- Have developed an understanding of mathematics through the process of enquiry and experimentation.

2. Aims

We aim to provide the pupils with a mathematics curriculum and high quality teaching to produce individuals who are numerate, 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 the full. We support the aims of the new National Curriculum (2014) as laid out below:

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 in most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, and a sense of enjoyment and curiosity about the subject.

2014 National Curriculum

3. Teaching and learning

The school uses a variety of teaching styles to cater for the variety of learning styles of pupils in mathematics lessons. Our principle aim is to develop children's knowledge, skills and understanding in mathematics. We do this through a daily lesson that has a high proportion of whole-class and group direct teaching. During these lessons we encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources such as number lines, number squares, digit cards and small apparatus to support their work. Children use ICT in mathematics lessons where it will enhance their learning, as in modelling ideas and methods.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies – in some lessons through differentiated group work, and in other lessons by organising the children to work in pairs on open-ended problems or games.

An ability to calculate mentally lies at the heart of mathematics; therefore, it is important to emphasise mental methods from the early years. All children are assessed and grouped according to their ability to calculate mentally. We then use the Big Maths programme of work to teach and ensure progression in the acquisition of mental maths skills.

Written methods are also important at this stage; however, starting from the mental calculations will enhance imagery and the mathematical thought process. Written calculations are taught in accordance with the calculations policy.

An emphasis on correct terminology and mathematical vocabulary is key to children's understanding therefore we use accurate mathematical vocabulary in our teaching and children are expected to use it in their verbal and written explanations.

4. Planning

Mathematics is a core subject in the National Curriculum, and we use a range of resources as the basis for implementing the statutory requirements of the programme of study for mathematics.

To become proficient mathematicians, all pupils are entitled to mathematical provision that matches their levels of development and personal needs.

All classrooms should;

- have a dedicated mathematics lesson daily
- have a daily mental maths session
- provide a stimulating environment
- have a good variety of resources, easily accessible to pupils. KS1 classes should have practical resources out in every lesson.

All teachers should ensure;

- AfL (Assessment for Learning) strategies are embedded in all aspects of learning and teaching.
- They teach specific basic number skills.
- Mathematics is enjoyable and fun and taught creatively
- They act as a good role model.
- Set high expectations and have the attitude that 'they can't do it yet.'

5. Marking and Assessment

Marking in mathematics is in line with the whole school marking policy. Particular emphasis is put on moving the children on through marking. Teachers use a range of feedback during lessons to ensure that this happens e.g. verbal feedback, questioning, setting a further challenge and consolidation. TA's are expected to provide the same level of feedback as teachers to ensure a consistent approach.

The assessment procedures within our school encompass:

- Making ongoing assessments and responding appropriately to pupils during 'day-to-day' teaching.
- Using knowledge of pupils drawn from ongoing pupil tracking records and key objectives records to guide our planning and teaching;
- Adjusting planning and teaching within units in response to pupils' performance;
- Use of information gained from statutory and optional tests. Analysis is done at both a quantitative and qualitative level. Information gained is used to set focused curricular targets (what to teach) and also to determine which strategies or methods are particularly effective in respect of specific areas of mathematics (the how and why).

Assessment is recorded in a variety of ways. Children undertake a weekly mental maths test. Teachers are then able to identify children who need support or more of a challenge. Teachers

also use the APP style grids on the Primary tracker software to record attainment. This is then used to inform termly and yearly assessment. Targets are set using the tracker and the head teacher and subject co-ordinator analyse the results to monitor levels and ensure that all children are making the appropriate levels of progress.

Children in the Foundation Stage are assessed regularly against the EYFS curriculum. Observation is key in EYFS we observe children as they act and interact in their play, everyday activities and planned activities, where appropriate, we use the development statements to identify possible areas in which to challenge and extend the child's current learning and development and adults 'scaffold' learning. Observing children's play helps us to value their growing mathematical understanding and reveal ways to support this development. Observation helps us plan effectively and assesses the children's knowledge of number.

6. EYFS

We follow EYFS curriculum guidance for Mathematics. However, we are committed to ensuring the confident development of number sense and put emphasis on mastery of key early concepts.

In the Early Years Foundation Stage Development Matters 2012 the area of Mathematics is in two sections numbers and shape and measures.

There are also four themes of the EYFS, A Unique Child, Positive Relationships, Enabling Environments and Learning and Development these areas underpin everything that practitioners do with children from birth to five.

The EYFS recognises that creativity plays a significant role in mathematical thinking and understanding.

We plan opportunities for mathematics in everyday routines such as the calendar and counting children during registration.

Displays in the classroom draws attention to number. Number lines everywhere stimulate discussion about numbers and the children use these within their play and planned activities these help children understand sequence, recognise numbers and counting.

It is important that children have the opportunity to represent their thinking in maths by making marks that are relevant to them.

7. The role of ICT

ICT is used in various ways to support teaching and motivate children's learning. Each classroom has a PC connected to an interactive whiteboard. All teachers are provided with a laptop to support their planning and provision and are encouraged to use ICT to enhance teaching and learning in mathematics where appropriate. Both classrooms are equipped with PC's. The school is beginning to look at the provision of ipads and their role in the teaching and learning of mathematics.

8. Home / school links:

We see the relationship with parents very important in supporting their children's mathematics skills. We involve the parents in their children's learning by:-

- Holding parent's evenings twice a year, which give them verbal and written information on their child's progress and their targets for the future;
- Providing termly reports and an end of year report which outlines progress, attainment and future targets;
- Providing meetings/workshops to inform parents on how we teach mathematics and how they can help;
- Sending home leaflets with activities that can be done at home;
- Sending home maths games when appropriate;
- Providing links to relevant Maths websites through our school website.

9. Monitoring, review and evaluation

Monitoring of the standards of children's work and of quality of teaching in mathematics is the responsibility of the head teacher and link governor supported by the subject leader.

We work closely with Blakeney and Pillowell Primary School Federation. This provides the opportunity to monitor and review the teaching and learning of mathematics alongside colleagues. Termly co-ordinator meetings and staff meetings are planned for to look at specific areas of mathematics according to analysis.

The work of the 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. A subject RAP is written and reviewed regularly throughout the academic year and shared with staff at staff meetings.