

Atwood Primary School

Mathematics Policy



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(or to meet new legislation and practices)**



Policy for Mathematics

Mathematics is concerned with viewing and making sense of the world. It is used to analyse and communicate ideas and information; to solve problems requiring judgement and creativity.

Aims

OUR AIMS IN TEACHING MATHEMATICS are that children will develop:

- a positive attitude towards mathematics through a variety of practical, mental and written tasks
- an ability to think clearly and logically
- an ability to work both independently and collaboratively
- an understanding of mathematics achieved through a process of enquiry and experimentation
- an appreciation and enjoyment of pattern in mathematics and an ability to identify relationships
- an awareness of the basic structure of mathematics, through an understanding of number and space;
- an appreciation of the creative potential of mathematics;
- persistence, through work that requires perseverance over a period of time
- mathematical knowledge and skills, alongside an ability for quick recall and application of basic facts
- an awareness of the relevance of mathematics to the world beyond the classroom

Principles of Learning

Mathematics is important because:

- an understanding of mathematics and the ability to use it are vital in the world beyond the classroom
- children can gain satisfaction and a sense of achievement from the subject
- it enables children to develop powers of logical thinking, numeracy and spatial awareness
- it enables children to develop essential skills required for adult life

Mathematics is a core subject in the National Curriculum. The planning structure for each year group is organised into 5 blocks. The structure is the same for each year group. A block is designed to cover 6 weeks or 9 weeks of teaching. Each block has incorporated into it objectives from the Applying and Using Mathematics strand and from two or three of the other core strands. The blocks are:

- Block A: Counting, partitioning and calculating.

- Block B: Securing number facts, understanding shape.
- Block C: Handling Data and measures
- Block D: Calculating, measuring and understanding shape.
- Block E: Securing number facts, relationships and calculating.

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Principles for the Teaching

- a variety of approaches and methods, relevant to the children's needs and experiences, are used
- children will have the opportunity to be taught new mathematical concepts and ideas and practice what they have already learned in a variety of contexts
- children will be expected to record their own work at an appropriate level both formally and informally to support their thinking and learning and explanations
- children will participate in practical, investigative and problem solving activities to develop their ability to question and predict
- mathematical displays will be used to stimulate, inform and challenge understanding through thought provoking questioning :
- children are taught individually, in groups or as a whole class; groups may be arranged by ability
- learning support staff are used to assist
- support for children with special needs will be available

HOMEWORK is used to support mathematics

Pupils will be engaged in both written tasks and interactive tasks using home computers e.g. Mathletics

EQUAL OPPORTUNITIES in mathematics are recognised. Please see the appropriate policy.

Principles for Ensuring Progress and Continuity

PLANNING IN MATHEMATICS is a process in which all teachers are involved, wherein:

- the foundation for curricular planning is the Whole School Five Year Development plan, developed through a process of collaboration between staff and approved by governors.
- Methods of work and progression are shown in the Calculations policy, presented to parents and available online to parents, governors and staff.
- Resources are used which are carefully chosen to ensure full coverage of the national curriculum and the National Numeracy Strategy.
- Schemes of work for mathematics follow the National Strategy and the Renewed Framework.
- staff meetings are used to discuss the mathematics curriculum and ensure consistency of approach and standards

Principles for Assessment

- AfL is an integral part both of teacher's assessment and of pupil's self- assessment.
- FEEDBACK TO PUPILS is through regular marking of work, discussion of work and tests, and reviews of sections of work.
- FORMATIVE ASSESSMENT is used to guide the progress of individual pupils in mathematics. It involves identifying each child's progress in each aspect of the subject, determining what each child has learned and what therefore should be the next stage of his/her learning. Formative assessment is carried out both formally and informally by teachers in the course of their teaching.
- FORMAL SUMMATIVE ASSESSMENT is carried out at the end of each National Curriculum Key Stage (i.e. in years R, 2 and 6) through SATs tests through the use of QCA tests for years 3,4 and 5 and the profile document for Reception.

Principles for Recording and Reporting

- RECORDS OF PROGRESS IN Mathematics are kept for each child using Classroom Monitor.
- REPORTING TO PARENTS is shared at parents' evenings and annually through a written report.

Principles for the Use of Resources

- CLASSROOM RESOURCES IN MATHEMATICS are kept clearly labelled in a mathematics resource area in each room or each pair of year group.
- CENTRAL RESOURCES IN MATHEMATICS is the responsibility of the curriculum leader who has been assigned a designated budget
- INFORMATION TECHNOLOGY is a major resource which is used in mathematics. Programmes are available for use in classrooms and the computer suite. Pupils can access the Maths Zone on Fronter which has links to sites with Mathematical activities and to Mathletics, which may be used for set homework tasks or for personal study and enjoyment. Involved in maths forums open investigations and challenges.