

Winchelsea



All Individuals Matter

WINCHELSEA PRIMARY SCHOOL RUSKINGTON

NUMERACY POLICY

Winchelsea Primary School Mathematics Policy

Aims and Objectives

_Using the Programmes of Study from the National Curriculum 2014 it is our aim to develop:

- a positive attitude towards mathematics and an awareness of the fascination of mathematics
- competence and confidence in mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately
- initiative and an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to Science and other subjects.

Decisions about when a child will progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent

with earlier material should consolidate their understanding, including through additional practice, before moving on

Teaching and Learning style

The school uses a variety of teaching and learning styles. Approaches need to be related to the topic itself and to the abilities and experience of the pupils. Lessons are divided between whole-class and group-direct teaching, during which the children are encouraged to ask as well as answer mathematical questions. The questions asked within the lesson should include open questions that encourage pupils to explain their methods and processes rather than simply answer a question. The classroom should be a place for conjecture and convincing within a positive environment (an atmosphere of conjecture). Lessons can also incorporate an element of independent learning. All pupils will be offered a curriculum appropriate to their needs, and suitable learning opportunities for all children are matched to the challenge of the task. All lessons are differentiated and Teaching Assistants are used to support the relevant children. Children who are on the Special needs register with a school based or class based plan are given appropriate work aimed at their level. Teaching assistants also facilitate intervention programmes which are identified and implemented as beneficial for either groups or individuals. We aim to identify and support all children following the guidance as laid out in our Special Educational Needs Policy.

Mathematics curriculum planning

- Long Term Planning used in the school is taken from the National Curriculum in England: Mathematics Programmes of Study.
- Medium Term Plans have been produced in line with programmes of study and guidance from the government.
- Short term Planning takes the form of weekly differentiated plans. These give specific learning objectives for each lesson and details of how the lessons are to be taught. Weekly plans also show appropriate support for any children with special needs and any

focus groups. Annotated plans including revisions are handed in to the Headteacher at the end of each week.

Through our immersive approach to learning where cross-curricular links are found, mathematics will be embedded in purposeful activities, with the children experiencing real purposes for using and exploring maths.

The contribution of mathematics to teaching in other curriculum areas such as English - Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems in order to identify the mathematics involved. The children explain and present their work to others during plenary sessions. Younger children enjoy stories and rhyme that rely on counting and sequencing. Older children encounter mathematical vocabulary, graphs and charts when using non-fiction texts.

During science lessons, children are able to use and apply their data handling skills when creating tables and graphs of scientific measurements. Whole class discussion of data also highlights the importance of clear recording of information. Children are also able to use a wide range of measuring devices in a real-life context. Children are required to read the scales on Newton meters, measuring cylinders, weighing scales and a variety of other instruments.

Children use and apply mathematics in a variety of ways when solving problems using ICT. Younger children use ICT to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating repeating patterns, such as tessellations. When working on control, children use standard and non-standard measures for distance and angle. They use simulations to identify patterns and relationships.

Humanities and Arts links are made wherever possible e.g. timelines and geographic data.

The Foundation Stage

We relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals, which underpin the curriculum planning for children aged three to five. We give all the children ample opportunity to develop their understanding of number,

pattern, shape and space through varied activities that allow them to enjoy, explore, practice and talk confidently about mathematics

Assessment and Recording

- Short-term assessment is mostly informal during class or group work and will be used to adjust our daily plans closely matched to the teaching objectives. Amended weekly planning evidences the use of daily assessments through marking and within the immediate lesson context. Children are assessed in ability groups and sheets annotated and dated accordingly.
- Medium-term assessment is used to assess against school and national targets. Rising Stars testing is used termly to back up Teacher Assessment. We also use the national tests for children in Year 2 and Year 6. The Headteacher collects and reviews all assessment data termly to produce year group progress reports which are discussed with staff to enable clear action plans and provision maps to be put into place.
- Reports are issued to parents three times a year which identify pupil progress, achievement and next steps in subjects including numeracy.

Resources

Each class is self-sufficient with mathematical equipment, resources and supporting materials to aid planning. There is a range of resources to support the teaching of mathematics across the school. All classrooms have a wide range of small apparatus to support pupils and staff in the teaching and learning of mathematics, these include number lines, hundred squares, rulers and practical apparatus such as Numicon and base 10. Each class has a display area dedicated to Mathematics. The positive and professional working relationships between staff also means that staff are very happy to share resources when required. The school has also invested in an annual subscription to Mathletics that allows children to access on line numeracy tasks at school and at home.

Monitoring and Review

Monitoring of the standards of children's work and the quality of teaching in mathematics is the responsibility of the Maths subject leaders and the

senior management team. The senior leadership team and the maths coordinator carry out planning reviews, marking and assessment moderation, lesson observations planning of children's work and discussions with children. The work of the subject leader also involves supporting colleagues in the teaching and planning of mathematics. The governing body oversee the school's work in this subject through the monitoring done by teaching and learning and assessment committees.

Equality statement

"The governors and staff are committed to providing the full range of opportunities for all pupils, regardless of gender, disability, ethnicity, social, cultural or religious background. All pupils have access to the curriculum, and the right to a learning environment, which dispels ignorance, prejudice or stereotyping."

This policy is to be reviewed every three years or earlier at the request of the Head Teacher or Governors.

Policy Review date: December 2022

Prepared by James Keetch

18th November 2019