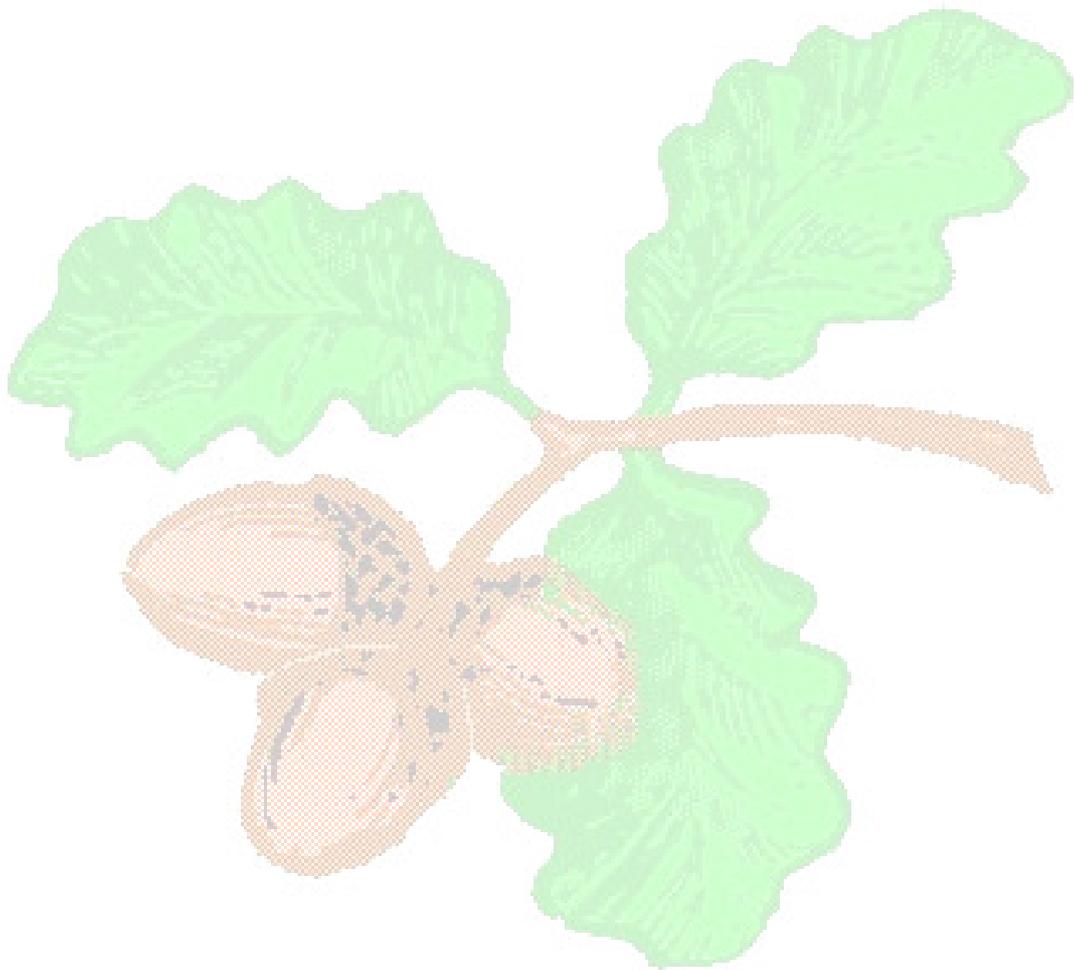


**Churchfields Infants' School,
Nursery Unit
& Language Facility**



**Mathematics
Policy**

MATHEMATICS POLICY

Ginsberg comments on the individuality of children in the context of mathematics...
“Startling contradictions, unsuspected strengths or weaknesses and fascinating complexities”

ETHOS

Mathematics is an essential skill for learning and for economic well-being in future life. It provides an opportunity to become creative and innovative, involving imagination, intuition and discovery. Mathematics is a search for pattern and relationships, a way of solving problems and a means of communicating ideas. By providing rich and varied contexts for pupils to acquire, develop and apply a broad range of knowledge, understanding and skills, the mathematics curriculum should enable pupils to think creatively and critically, to solve problems and to make a difference.

AIMS

The aims of mathematics teaching at Churchfields are:

- **Curriculum**: To provide a broad and balanced mathematical curriculum ensuring continuity in our approaches to mathematics and progression in children’s experiences throughout the school.
- **Enjoyment in learning**: To promote enjoyment of, and enthusiasm for, mathematical learning as a means of encouraging the best possible progress and the highest attainment for all pupils. To stimulate thinking, reason and logic, to promote an enquiring mind, a capacity to think rationally and to encourage an appreciation of maths for its own sake.
- **Learning experiences**: To provide opportunities for children to acquire mathematical skills and strategies, building on their strengths and interests. To develop their confidence to learn and work independently and collaboratively through practical activity, exploration and discussion. To apply their knowledge, understanding and skills to problem solving in everyday real life situations.
- **Communication**: To introduce mathematical language in a planned way, and provide opportunities for discussion, so that children use it with ease and understanding as a form of communication.

OBJECTIVES

Curriculum Planning:

Churchfields Infants School **Foundation Stage** follows the Early Years Foundation Stage and mathematical learning. Planning is built upon the ‘observe > assess > plan cycle with children’s interests and abilities being developed from sensitive observation.

In **Key Stage One** the National Curriculum a statutory framework provides a framework for planning. All year groups plan from these documents and guidelines as appropriate to ensure coverage of the curriculum. Planning is organized in the 'review > teach > practise > use and apply' cycle ensuring pupils have opportunities to acquire, consolidate and apply their skills, knowledge and understanding to solve 'real life' problems. Weekly plans ensure coverage of the curriculum and are modified as necessary.

Teaching and Learning Strategies:

Organisation and activities

Foundation Stage children have regular access to planned mathematical activities and experiences, including mathematic specific activities to meet the demands of the curriculum. For example role play activities provide opportunities for learning, and songs and rhymes form a daily part of the learning experience.

Pupils in **Key Stage One** have a daily mathematics lesson of 30 – 50 minutes, (generally including a mental oral starter activity, a teaching session, planned activities and a plenary or review session.) Whenever possible practical work will precede and reinforce learning. Mathematics lessons in Key Stage 1 are carefully planned to ensure a balance of whole class teaching, opportunities for pupils to work individually and collaboratively in pairs and in small groups. Children are grouped and supported in a variety of ways and work is differentiated to ensure all pupils have appropriate challenge.

Recording

Foundation Stage: Developmental recording of mathematical thinking is encouraged and valued. In addition pupils will be taught to form numbers correctly, through individual and small group activities by the end of the Reception year.

Key Stage One: Practical work and informal recording will precede more formal recorded work. Teachers will teach and encourage the use of drawings and jottings and will model recording. Pupils will have opportunities to explore recording on individual whiteboards prior to recording in books. Pupils will move from the support of calculation frames and printed number lines etc. towards independent recording by the end of year 2.

Resources and Display: The school aims to be consistent in the use of resources, models and images used and displayed to ensure continuity and equal access to learning for all pupils. Each classroom has an Interactive Whiteboard to support interactive mathematical teaching and learning and a rich variety of mathematical resources.

Cross curricular opportunities: Where possible mathematics learning takes place in other areas of the curriculum to provide a wider context for mathematical learning.

- Creativity in mathematics is developed through the use of story contexts.
- Measuring and recording of data takes place through science investigations.
- Conducting surveys and creating graphs and charts takes place in ICT lessons.
- PE lessons provide opportunities to explore shape and the language of position and direction in movement.
- Singing 'mathematical' songs and using rhymes and chants add to the enjoyment of mathematical learning.
- Computer technology, cameras, electronic and programmable toys are widely used throughout the school.

Assessment

Foundation Stage children are assessed on entry to school and their progress is tracked regularly throughout the Foundation Stage. The FS profile is completed at the end of the Reception year and informs Key Stage 1 and the wider community.

Key Stage One

Formative assessment

Assessment for learning opportunities are incorporated in daily lesson plans. This informal assessment is carried out by teachers and support staff through observation, questioning, guided work and marking. Pupils are given feedback and support as appropriate. This assessment informs planning.

Summative assessment

Key Stage One pupils are tested formally each term. The scores give a National Curriculum level, which supports teacher judgement in completing the ISP to ensure each pupil is making progress. Statutory tasks will be used to support teacher assessment of pupil progress throughout year 2.

Reporting

Foundation Stage: Home visits take place on entry to the nursery and information on progress is shared when children leave the nursery. Reception home visits and parental consultation meetings take place in the autumn and spring terms, when relevant information is shared. FS Profiles are reported to parents on completion and the Reception Report provides information about mathematical ability. FS Profile data is reported to the LA on completion in the summer term.

Key Stage One: Parent teacher consultation meetings in the autumn and spring terms provide planned opportunities for teachers to informally report pupil progress, and to discuss ways in which parents may best support their child's learning. Written reports, including progress in mathematics, are given to parents at the end of Years 1 and 2 and an opportunity to discuss the report is offered during the summer term consultation meeting.

A statistical return to the LA, of Key Stage 1 results, is carried out by Year 2 staff as part of the annual review.

EQUAL OPPORTUNITIES

The teaching of Mathematics is in accordance with the current policy for Equal Opportunities. We aim to ensure that all children attain their full potential regardless of ability, religion, race, gender or class. Resources will reflect the diverse population of our multicultural society. Books and displays will portray positive images of men, women, people from different cultures and religions and those with disabilities.

We aim for all children, where possible, to participate in whole class lessons on a daily basis through careful differentiation of resources, activities and questioning. The school uses a variety of methods to identify pupils with particular needs in mathematics and where necessary extra support is in place for children with SEN including an IEP and adult support. The SEND coordinator, EMA teacher and class teacher work together to provide differentiated work and to monitor progress.

HOME AND SCHOOL LINKS

In addition to the planned parent consultation meetings, **Foundation Stage** parents are invited to a Curriculum evening. Target sheets for Mathematics are sent to parents of Reception, Year 1 and Year 2 each term to give guidance. Consultation meetings provide time for discussion for all parents. The school encourages home links to support mathematics through use of web based materials and challenges.

