St Cuthbert's Primary School
Maths Policy

Vision:

In our family school, we strive to be the best for today, for tomorrow, for ourselves, for each other, the wider world and for God.

As a Christian family we nurture an understanding that we are all of equal value and infinite worth.

In the safety of our unique family we will flourish and grow towards being Global Citizens and Courageous Advocates.

('You are now citizens together with God's people and members of the family of God'. Ephesians 2:19)

Mission statement:

Learning to love, loving to learn in the family of Christ.

('Encourage one another and build each other up'- 1 Thessalonians 5:11)

St Cuthbert's C of E Primary School

Policy for Mathematics

Introduction/Rationale

Our school views mathematics as an integral part of life. Children who can calculate, reason and solve mathematical problems will be better equipped to analyse and communicate information and ideas. They will be more prepared to tackle practical tasks and real-life problems as well as appreciating the inherent fascination of mathematics.

Our aims

By implementing the National Curriculum for Mathematics we aim:

- To develop a sound understanding of the number system, in particular the application of number and problem solving.
- To enable pupils to see the relevance of mathematical activity to real life situations and to encourage the effective use of mathematics as a powerful tool in a wide range of activities.
- To develop pupils' confidence in their mathematical abilities so that all pupils are mathematically challenged to achieve their full potential.
- To show mathematics as a process, as a creative activity in which pupils are encouraged to use imagination, initiative and a flexibility of mind.
- To promote activities which develop in pupils an enjoyment of and a fascination for mathematics, as well as to use mathematics as an essential element of communication, be it oral, written or graphical.
- To develop an appreciation of the relationships within mathematics itself.
- To encourage pupils to work in a systematic way.
- To develop in pupils good working habits.
- To encourage pupils to work individually and collectively to a purposeful end.
- To use ICT as a tool to enhance learning.

Organisation

The National Curriculum and our chosen mathematics scheme (White Rose Maths) are at the core of our Mathematics teaching, supported by a number of teaching resources. The curriculum in itself is broken down into strands and the objectives from each strand should be covered in order for the children to progress through the Age Related Expectations for their year group.

The mathematical strands covered are as followed:

- Number and place value
- Addition and subtraction
- Multiplication and division
- Fractions
- Measurement
- Geometry
- Statistics
- Ratio and proportion (Y6)
- Algebra (Y6)

Early Years Foundation Stage (EYFS)

Teaching staff support children in developing their understanding of problem solving, reasoning and numeracy in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. Teachers offer opportunities for these skills to be practised in order to give children confidence and competence in their use.

The EYFS Statutory Framework 2014 sets standards for the learning development and care of pupils from birth to five years old and supports an integrated approach to early learning. This includes seeking patterns, making connections, recognising relationships, working with numbers, shapes, space and measures and counting, sorting and matching.

It states that developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Planning and Teaching

Teachers plan using the National Curriculum and White Rose Maths schemes of learning, using a variety of published and internet resources to support, challenge and differentiate.

Medium-term plans, which can be accessed through the WRM year group schemes, detail the learning objectives to be met and suggested activities to be undertaken by each class. Short-term planning formats are adopted by individual class teachers and show in greater detail the learning objectives for each lesson, as well as differentiation and evaluation of teaching and learning.

Teaching and Learning

The curriculum is delivered by class teachers, with targeted interventions being delivered to children identified as needing extra support or challenge. In all classes, pupils are exposed to high quality maths teaching and work is differentiated in order to give appropriate levels of work to each child. Where appropriate, these groups/individual children are supported by Teaching Assistants.

ICT

Opportunities to use ICT to support teaching and learning in Mathematics will be planned for and used appropriately within school, including the use of programmes such as LBQ and Times Table Rockstars.

Learning Experiences

All children will experience practical, investigative and problem solving activities in oral and written form. These stem from appropriate practical experiences and handling concreate material such as Numicon and Base 10.

For all pupils the development of language as a means of mathematical thinking is important. Within classes pupils will have the opportunity to make predictions, ask and answer questions, describe, explain and discuss their work with their peers and their teachers.

Cross Curricular Links

We recognise that mathematical experiences can be drawn from a wide range of subject areas. Mathematical knowledge can complement, and be complemented by, work in other parts of the curriculum. At present, individual teachers develop opportunities for cross-curriculum links using the school's schemes of work.

Pupils with Special Needs/Inclusion

In accordance with our equal opportunities policy, all of our pupils are given access to the National Curriculum. We endeavour to help all children to reach their full potential irrespective of gender, race, class, ability, age or belief.

Assessment, Recording and Reporting

- Ongoing, formative assessment is undertaken by teachers regularly. It consists of the marking of work, observing tasks and oral or written testing during lessons. Each half term an assessment is made against the key objectives for the appropriate year group. The school uses the termly White Rose Maths assessments to formally assess pupils in KS1 and KS2 The data is recorded, analysed and the results are inputted into Target Tracker.
- The data is used to raise attainment in accordance with the school's policies on assessment and target setting.
- Children's progress in mathematics can be discussed formally on Parent's Evenings. Written reports of progress and attainment are completed and given to parents before the end of the Summer Term.

The Role of the Subject Leader

In Mathematics the subject leader plays a vital role in raising standards of attainment throughout the school. The subject leader is closely involved with the SLT in the analysis of test data and consequently is clear about the standards of attainment and pupil progress across the school. A high profile for mathematics is maintained in school and areas for development are identified and added to a detailed annual action plan to inform the school's improvement planning. The subject leader will be prepared to be a good role model in the teaching of mathematics, demonstrating good practise and supporting colleagues in their teaching. The subject leader must closely monitor continuity and sequencing in the provision of mathematics through book scrutiny's, lesson observations and walkthroughs.

Resources and their location

Each classroom has a small stock of key maths resources such as Numicon, Base 10, shapes, number cards, hundred squares etc.

In Key Stage 1 all other appropriate resources are stored in classrooms or in the cupboard outside of Year 2.

In Key Stage 2 resources are stored in classrooms with all other shared materials kept in a central store opposite the Year 4 classroom.

Health and Safety

At times during mathematics lessons equipment may be in use which, if used improperly, could pose a slight risk to the safety of people in the classroom. At all times safety is of paramount importance and the staff must ensure that all equipment is used appropriately by children and adults. Clear instructions must be issued and the use of such equipment must be closely monitored by the teacher.

Updating Documentation

This policy document will be regularly reviewed to assess its value as a working document. It will be modified as necessary according to experiences and change that may have taken place