



Higher Lane Primary School

Mathematics Policy

January 2017

Date	Review Date	Coordinator	Nominated Governor
January 2017	January 2018	Peter Wheeldon / Anna Van Hecke	Christian Campbell

Mathematics is a method of communication. It is a specific language through which ideas are explored, explained, and developed, and one by which relationships can be described, patterns identified and hypotheses made and tested.

It is a way of organising and managing information gathered practically in everyday situations, through the use of measures and spatial measurement.

Mathematics includes the development of numeracy skills; a proficiency that involves confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of computational skills and an inclination and ability to solve number problems in a variety of contexts. Numeracy also demands practical understanding of the ways in which information is gathered by counting and measuring, and is presented in graphs, diagrams, charts and tables.

We wish to work closely with the School Council and to hear their views and opinions. We as a school community have a commitment to promote equality.

Aims

- To develop an enthusiasm for and fascination with mathematics.
- To equip pupils with a powerful mathematical tool that provides:
 - i) a precise means of communication using numbers, symbols and shapes;
 - ii) an universal language used to explain, predict and tackle problems.
- To increase the confidence of each pupil in mathematics to enable them to apply the knowledge and skills with assurance.
- To work with other schools to share good practice in order to improve this policy.

Objectives

- To enable all pupils to achieve their potential according to their ages and abilities.
- To provide training and support that will develop an expert staff that provides a balanced and broad curriculum suited to the development of appropriate knowledge and concepts.
- To ensure management systems and structures provide support for the aims and objectives for mathematics.
- To provide appropriate resources to ensure a rich and diverse curriculum.
- To ensure teaching and learning styles are varied and suited to the pupils being taught and the areas being studied.
- To ensure full coverage of the National Curriculum in mathematics in all year groups.

Teaching Guidelines

Mathematics in the first place is a practical subject, which develops the concepts of shape, space, number, pattern and problem solving. In the early Foundation years children have

activities that develop these concepts and prepare the children for further mathematical studies when they are ready.

From Reception to Y6 the school follows the National Curriculum for mathematics, which provides detailed guidance for the implementation of mathematics in the school, and targets to be achieved by each year group by the end of each school year. Higher Lane pupils use a combination of schemes of work as a structure for their learning. This includes, but is not restricted to, Abacus and Maths – No Problem! Furthermore, long-term planning is informed by research conducted by the National Centre for Excellence in the Teaching of Mathematics (NCETM).

At the start of every morning, children consolidate their learning by completing a morning challenge activity, informed by the previous day's learning. Mathematics is taught as a discrete subject but is also integrated into the other subject areas. Mathematics is combined into the planning of all subjects and applied across the whole curriculum. In this way, pupils learn the place of mathematics in the world around them. Similarly, the Singapore approach to maths ensures that children are taught problem solving in real-life contexts and are able to apply their learning. This is further consolidated by homework activities; learning logs provide opportunities for children to apply their maths learning through a problem-solving style question.

Teachers use a range of learning and teaching styles, incorporating individual, pair, class and group work into lessons. Children are taught through discussion, practical activity, games, investigations, problem solving, recording and practice, consolidation, and through the use of computing. The teaching style and methods are targeted according to the subject matter and the pupils being taught.

Pupils develop mathematics through using a variety of methods: mental strategies, practical activity, written calculations, problem solving, discussion, and application of basic skills.

Pupils of different levels of ability are catered for through the differentiation of activities provided for them. The pupils work in ability groups that are flexible and allow for transition between the groups as pupils improve their skills.

Additional support is provided for pupils with additional learning needs. Pupils on the Additional Educational Needs register are catered for according to the Additional Educational Needs policy.

Planning and organisation

Curriculum planning is managed in three phases.

- **Long Term Planning**

This is based on the National Curriculum which details what is to be taught over the year and provides teaching guidelines and overall objectives for each year group for the whole year, informed by NCETM research.

- **Medium Term Planning**

This organises the teaching of mathematics into termly or half-termly sections. The planning is more detailed and the objectives are more specific in nature. This planning is developed by the teachers, who respond to the needs of their pupils. It also ensures a balanced distribution of work is undertaken across each term.

- **Short Term Planning**

This details the mathematics curriculum over the week. Lessons are planned in appropriate detail and specific class objectives are set, in accordance with the National Curriculum. Individual learning goals are also set for each pupil. Planning is adapted from the Abacus and Maths – No Problem! schemes of work, but also informed by teacher assessment and guidance from the NCETM.

The teachers collaborate on the planning of mathematics to ensure parity in provision and to share expertise.

Monitoring and Assessment

Mathematics provision is monitored by the mathematics co-ordinator who has classroom release time once each week to undertake this. They examines pupils' work and monitor classroom practice. They also ensure all members of staff have opportunities to choose appropriate training to enable them to deliver the curriculum to the expected standard of excellence. The Mathematics co-ordinator receives training from the local authority to support them in their role of co-ordinator. The co-ordinator meets with the Head teacher regularly to review mathematics provision in the school.

Pupils are assessed externally in mathematics at the end of Y2 and the end of Y6, by means of National Curriculum assessment. These are the summative "snapshot" assessments of their attainment at a specific time required by law. Teachers assess pupils continuously on a less formal basis through resources such as Classroom Monitor; these assessments inform the teacher of the pupils' current achievements, and guide the teacher in planning the pupils' future learning.

There is no legal requirement for pupils to be measured against the external National Curriculum levels until the end of a Key Stage. However, in Key Stage Two, all pupils are assessed according to their curriculum level in mathematics at the end of each year. This allows targets to be set for pupils' end of Key Stage attainment for the next three years, as required by statute.

Additional Educational Needs

All classes consist of pupils of varying abilities and with varying needs, and our classroom practice ensures that most of these needs can be met within the classroom organisation.

However when a child has very specific additional needs, support is provided firstly by the school's internal organisational structure, which gives personal assistance and additional practice and is administered by support assistants within the school, often within the classroom,

during the lessons. In some cases the EPS provides tutors who visit the school to support pupils with specific learning difficulties such as dyslexia or dyspraxia.

Pupils with Additional Educational Needs are placed upon the Additional Educational Needs register, which records the support given, and provides each child with an individual education plan (IEP). Parents are given opportunity to meet with the class teacher each half term, and when the pupil has achieved the necessary standard s/he is removed from the register. More details about this can be found in the school's Additional Educational Needs policy.

Equality Impact Assessment

Under the Equality Act 2010 we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation.

This policy has been equality impact assessed and we believe that it is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

Monitoring the Effectiveness of the Policy

Annually (or when the need arises) the effectiveness of this policy will be reviewed by the coordinator, the Headteacher and the nominated governor and the necessary recommendations for improvement will be made to the Governors.

Headteacher:	Ms C McLachlan	Date:	January 2017
Chair of Governing Body:	Mr D Lester	Date:	January 2017