



## MATHEMATICS POLICY

At Northrepps Primary School we teach mathematics because we believe it is an essential tool for understanding and solving problems in a wide range of situations in everyday life. It provides a powerful means of communication and is essential to the study of other subjects.

### Aims and Objectives for the Early Years Foundation Stage

Mathematical learning in the Early Years Foundation Stage will include counting, sorting, matching, seeking patterns, making connections, recognising relationships and working with numbers, shapes, space and measures. Mathematical understanding will be developed through stories, songs, games, computer programmes, imaginative play and outdoor learning so that the children enjoy using and experimenting with numbers.

### Key Stage 1

For children in Years 1 and 2 class teachers will provide a daily Mathematics lesson, which lasts at least 45 minutes or the equivalent of four hours per week. Children will use Mathematics as an integral part of classroom activities.

### Key Stage 2

The class teacher will provide a daily Mathematics lesson, which should last approximately 1 hour.

All children will grow in confidence and succeed at mathematics by:

- discussing mathematical work and explaining their thinking;
- drawing simple conclusions of their own and giving an explanation of their reasoning;
- recording their work in a clear, organised way and checking their results are sensible;
- rehearsing and knowing thoroughly their number bonds and tables appropriate to their age;
- identifying and obtaining necessary information in order to carry through tasks and solve mathematical calculation problems;
- trying different approaches and finding ways of overcoming difficulties that arise where they are solving problems;
- using and interpreting mathematical symbols and diagrams;
- showing they understand a general statement by finding particular examples that match it;
- developing their own strategies [mental and written] for solving problems and using these both in working within maths and in applying maths to practical content;
- showing understanding of problems by describing them mathematically using symbols, words and diagrams; and by
- learning how to use mathematical equipment and when it is appropriate to do so [including ICT].

### Planning, Assessment and Record Keeping

At Northrepps we use the Primary Mathematics Framework [alongside the Proposed National Curriculum for Mathematics KS1 and KS2] as the basis for our school's identified end-of year expectations for achievement in mathematics.

We carry out our planning in mathematics in three phases (long-term, medium-term and short-term). The Primary Mathematics Framework gives a detailed outline of what we teach in the long term, while our yearly teaching programme identifies the key objectives in mathematics that we teach with each year group. Our medium term mathematics plans, which are adopted from the Framework, give details of the main teaching objectives for each unit and so define what we teach. They ensure an appropriate balance and distribution of work across each term. These plans are kept and reviewed by the subject leader. The class teacher completes the weekly plans for the teaching of mathematics. These weekly plans list the specific learning objectives for each session and are shared with all staff.

Assessments are made by teachers at the end of each unit's work and include assessment against individual targets. Individual 'I can...' statements are set for each child and verified as they progress. Targets can be found at the back of the child's mathematics books on a target sheet and major targets are formally recorded on their annual written report.

Statutory on-going assessment and informal observations of child initiated learning take place across the Reception year and are recorded in each child's Learning Journey and end of year Early Years Foundation Stage assessment.

Statutory assessment takes place in Years 2 and 6. Non-statutory QCA test papers are also completed in Years 3-5. The results are scrutinised by the Head and class teachers; any gaps in pupil knowledge are identified, as are cohort trends and progress against school and national targets. From this data the next year's targets are also set, and each child's progress is monitored, analysed and discussed with parents/carers.

Informal, on-going assessment takes place continuously through teacher observation and marking of written work in order to inform future teaching and learning. Progress will be communicated to the parents at 'Meet the Teacher' sessions and via their child's annual written report.

### **Resources**

We have a range of resources to support the teaching of mathematics at Northrepps School. All classrooms have a wide range of appropriate small apparatus; additionally there are labelled trays of mathematical apparatus in the upstairs staff resource area and class outdoor stores. Mathematical dictionaries are available in the classrooms, as are calculators and a range of measuring equipment. A range of software is available to support work with the computers; the school currently purchases 'Espresso' and 'Education City' licences to enable children to rehearse and test their mathematical skills via the internet both at home and in school.

### **Other Related Policies and Documents Include:**

- Curriculum Statement*
- Early Years Foundation Stage Curriculum Guidance*
- Homework Policy*
- Inclusion Policy*
- Marking Policy*
- More Able Children Policy*
- SEND Policy*
- Teaching & Learning Policy*

**Dated:** January 2013

**Agreed by:** Terrie Clifft, Maria Gray, Heather McEwen, Gill Leah, Kathryn Leigh, Sue Gibson, Michelle Uddin and Mel Scarff.

**Agreed by the Governing Body on:** ..... [Date]

**Signed by the Chair of Governors:** .....