

## Meadows Primary School Mathematics Policy

Revised March 2017

### Principles

We aim to develop and nurture our children, so that they become confident mathematicians for the future. We want them to know and understand the purpose, relevance and importance of mathematics in everyday life. Our intention is for every child to be number confident so that they can make a valued contribution for themselves, the wider community and the world around them.

Mathematics at our school has been based on the new (2014) Mathematics Curriculum for year groups 1 to 6. The new curriculum programmes of study are used to give a balanced and broad curriculum to all of our pupils, this includes the statutory and non-statutory aspects of the curriculum.

### Purpose of study

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary in most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, and a sense of enjoyment and curiosity about the subject.

### Aims

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The programmes of study are organised in a distinct sequence and structured into separate domains. Pupils should make 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.

### General Aspects

In our school Mathematics is taught to all children irrespective of gender, race, creed or ability. It is important to us that all children are provided with equal access to all curriculum areas.

### **Children with S.E.N.**

Wherever possible we aim to fully include SEN pupils in the daily mathematics lesson, so that they benefit from the mental oral session and benefit by listening and participating with other children in demonstrating and explaining their methods. Our aim is to provide a first quality teach to all pupils.

Where necessary teachers will, consult with the SENCO, draw up an IEP and use this to provide a differentiated curriculum to meet the individual child's needs. This may be via task or through adult support.

### **Guidelines**

There is a dedicated mathematics lesson for all children at this school.

A typical lesson, will be structured like this

- Oral mental calculation activities (about 5-10 minutes) Whole class work to rehearse, sharpen and develop mental and oral skills.
- The main teaching activity (about 30-40 minutes) Learning objectives shared with the children, new first quality teaching to take place, differentiated activities with children working individually, in pairs or in groups.
- The plenary to round of the class lesson. A time to sort out misconceptions, summarise ideas and key facts and to identify next steps.
- Children to complete their success criteria and personal comment for the session.

### **Planning**

At our school, we have decided to use a whole school program for maths. Since September 2016 we have used the Abacus program of books, interactive resources and planning to ensure we are delivering a high-level mathematics for your child.

The Abacus program has a full set of lesson plans than can be adapted for group and individual learners, they also provide differentiated activities to cater for all abilities.

Teachers use the editable plans to create weekly/daily differentiated planning for their current cohort.

Plans will also contain the key objectives, success criteria, vocabulary and assessment for learning questions that can be used for the plenary.

### **Resources**

Teachers have been provided with a numeracy section in their planning file. The section contains

- Log on details for the Abacus network
- Vocabulary booklet
- Meadows Primary School Calculation Policy (updated to new 2014 curriculum)
- Meadows Primary School Number Sense Policy
- Levelopaedia resources for relevant year groups and Kangaroo maths
- Pitch and expectations resources for relevant year groups
- We also have access to the Testbase on-line resource bank of previous SAT's questions

### **Equipment**

Classrooms have a bank of appropriate age related resources that have recently (September 2014) been replenished. There is also a maths store in the Lower Key Stage 2 shared area. We have purchased new Numicon resources to help children from Nursery to Year 6 understand place value and number bonds. These are valuable resources to develop number fluency.

### **Marking**

All marking is completed in-line with the school's Assessment and Marking Policy.

### **Pupil Target Setting and Tracking**

All pupils are given a target sheet at the beginning of each term (1/2 Termly in year 6). This means that they know the exact level that they are at and where they are working towards.

Each child is also given a personal tracking sheet with their current Step and the next two Steps that they are expected to achieve during this academic year.

From their tracker children can see their progress and know what they have achieved and what they need to do to move their learning forward.

Teachers highlight the trackers once assessments have been completed, these can be completed from daily/weekly or half termly assessments.

### **Assessments**

Assessments are completed with daily/weekly marking, this informs future planning and delivery of the mathematics curriculum.

Assessments of attainment and progress are completed ½ termly with all data being given to the assessment co-ordinator for analysis.

Pupils in year 6 currently complete past SAT's papers each ½ term in preparation for their forthcoming exams. This also supports the planning and preparation that teachers need to complete to meet expectations of the SAT's results.

In Years 1-5 teacher assessment is used alongside two assessment tests from the Abacus program. The two tests are similar in format to the tests undertaken in year 6 for SATs. They consist of an arithmetic test and a mathematical reasoning test. The tests cover the areas of maths that the pupils have completed during that half term.

### **Reporting to Parents**

Parent/careers are invited to attend appointments with their child's teacher each term. Targets are shared and discussed with the child and parent, identifying strengths and any areas of weakness that need to be addressed.

A termly letter to parents is also available on the school website on the relevant class page. This informs parents about the areas being covered in maths for the relevant term.

### **Parent Support**

We are currently working to create and provide learning and support materials for our parents. These booklets will provide the important steps that our children need to learn to become number confident and the mathematicians of the future.