

## Mathematics Policy



Agreed and adopted by Cheadle Primary School Governing Body

Date: February 2016

Review: February 2019

Maths lessons at Cheadle Primary School are based upon a whole school approach and will follow the new National Curriculum. Teaching will incorporate Practical Exploration, Reasoning, Using and Applying and Recording.

Maths takes on many forms and these are to be taught both discretely, by teaching a range of mathematical skills, and by forging cross-curricular links wherever possible through:

### **Practical Exploration**

- A wide range of resources available and accessible
- Providing a stimulating environment
- Challenging activities and investigations
- VAK/E
- Modelling by children and adults
- ICT

### **Reasoning**

- Explanations - can be oral, with jottings, with formal workings or by 'proving' that a theory or method is to be true/false
- Justification by having time to give alternative examples
- Open questioning techniques
- Pair/share
- Independently and in groups
- Mental recall
- Regular plenaries

### **Recording**

- Practically
- Pictorial
- Mental
- Mental with jottings
- Formal written calculations
- Computing (using: laptops, iPads, photographs, etc)

### **Using and Applying**

- 1-step, 2-step and multi-step problems
- Problem solving involving everyday and 'real life' problems
- Cross-curricular links
- Taking learning to another context and knowing, and understanding, the relevance
- Choosing the appropriate method and becoming independent learners
- Mini plenaries

### **Presentation of Work**

Foundation Stage to initially have books with blank pages, moving on to squared books towards the end of the Foundation Stage, although this is dependent upon fine motor control. All KS1 and KS2 pupils are to use books that have squared paper. Key Stage One are to have larger squares whereas KS2 are to move to the smaller squared books.

**Early Years Foundation Stage** - Initially tasks are practical, usually in the form of exploration of numbers, sequences, mathematical games, repeated counting, one-to-one correspondence, questioning and in their own discovery of a rich, mathematical environment. Activities will take on the various elements, some will be child initiated and others to be teacher initiated and led. Skills and knowledge can then be transferred to a range of contexts and areas of learning will be visited and built upon over time. The outdoor areas and use of continuous provision are used to allow pupils to choose

and undertake learning according to their personal learning styles. Pupils will record their experiences and learning using a wide range of resources, such as, chalking on the floor, recording in books and recording their voices on ‘talking speech bubbles’.

**Key Stage 1** - All pupils are to use books with squared paper. Common format throughout Key Stage 1, top left hand corner is the date, underneath is the learning intention. Each piece of work is to be marked against the learning intention, pupils to begin to mark their own work with the use of a smiley/half-smiley/straight line face in accordance with the marking policy. Teachers are to give feedback relating to the learning intention and individual pupils next steps of their learning. Children at KS1 are to begin to respond to next steps written by the teacher and to formulate their own next steps with the guidance of an adult – children are to be encouraged to articulate their newfound skills and either the child, or teacher, can record this where appropriate. The use of the outdoor environment and continuous provision are to be planned and continually used across Key Stage 1.

**Key Stage 2** - All pupils are to use books with squared paper, there is a common format throughout Key Stage 2. Pupils are to fold the page in half (where appropriate), top left hand corner is the date, underneath is the learning intention (both underlined). Pupils begin using the left hand side of their page for their calculations moving to the right hand side. Each piece of work is to be marked against the learning intention; pupils can mark their own work with the use of a smiley/half-smiley/straight line face in accordance with the marking policy, they are to also write their own next steps in their learning in relation to what they have learnt and need to do in order to progress further. Teachers are to give feedback relating to the learning intention and individual pupils next steps of their learning. Peer assessment is also to be encouraged and embraced. Children are to be encouraged to Make a Difference (MaD) and respond to the feedback of the adult. This will encourage dialogue between teacher and pupil.

### **Delivery of lessons**

All pupils are taught in ability based teaching groups. These are groups across Foundation Stage, Key Stage 1 and Key Stage 2. These groups are reviewed regularly according to the needs of the pupils. Teachers plan collaboratively to ensure coverage, continuity and progression using both statutory and non-statutory guidance.

New skills are taught and built upon daily and are revisited and expanded upon regularly. This allows pupils to apply skills and concepts in a range of lessons and situations and ensures that pupils know that there is a purpose to maths and how these concepts fit into everyday life

### **Assessment**

This is undertaken half termly using teacher assessment, pupil assessment and formal assessment. There will always be ongoing assessment by class teachers in relation to the Early Years Foundation Stage (EYFS) curriculum and National Curriculum. These assessments are to involve assessing using the Statutory Framework for EYFS, Rising Stars assessments, questioning, practical and written work and websites and in using software, such as programmable toys. This formative assessment allows teachers to measure the impact of learning after each lesson and thus inform future planning.

Cheadle Primary School have an assessment week each half term whereby pupils are assessed using both Rising Stars assessments, old SATs papers, where appropriate, and teacher assessments. The data from these assessments feed into Assessment Manager 7 (AM7) which informs teachers of the progress that pupils are making, collates data in regards to assessing without levels and allows teachers to set challenging targets for individuals and groups.

### **Homework**

Maths homework is set on a weekly basis consolidating work undertaken in school in addition to reinforcing skills previously taught and learnt. For further guidelines please refer to the Homework Policy.