For the love of learning, friendship and faith

MELLING (ST WILFRID) CHURCH OF ENGLAND PRIMARY SCHOOL

MATHEMATICS POLICY

Philosophy:

At Melling School we regard Mathematics as a vital and integral part of the whole curriculum. Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

Aims:

Using the programmes of study from the National Curriculum and the Primary Strategy Framework for Teaching Mathematics it is our aim to develop:

- a positive attitude towards mathematics and an awareness of the fascination of the subject
- competence and confidence in mathematical knowledge, skills and concepts
- an ability to solve problems, to reason, think logically and work systematically and accurately
- initiative and an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment
- an awareness of how to make a positive contribution to society through economic well being

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for

- practical activities and mathematical games
- problem solving
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating e.g. mental, pen and paper, using a calculator and working with computers as mathematical tools

Throughout the curriculum opportunities exist to extend and promote mathematics.

Approaches

The approach to the teaching of mathematics within the school is based on 2 key principles

- a clear focus on direct, instructional teaching and interactive oral work with the teaching group
- an emphasis on mental calculation.

All children are encouraged to work tidily and neatly when recording their work. When using squares, one square should be used for each digit. Pupils will use only pencils to record maths work in books.

Marking:

Work in mathematics can generate a great deal of marking and it is recognised that it is not always desirable to mark every piece of work. The children themselves can mark exercises which involve routine practice with support and guidance from the teacher. Where appropriate, children in Years 5 and 6 are encouraged to check computational exercises with a calculator. This can foster independence in the children, who can seek help if they are unable to locate and correct their errors.

Within each mathematics lesson, teachers not only provide activities to support children who find mathematics difficult but also activities that provide appropriate challenges for children who are high achievers in mathematics.

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of multi-cultural aspects of mathematics.

Differentiation:

This is incorporated into mathematics lessons in a variety of ways:

- Stepped Activities which become more difficult and demanding but cater for the less able in the early sections.

- Common Tasks which are open ended activities/investigations where differentiation is by outcome.

- Resourcing which provides a variety of resources depending on abilities e.g. counters, cubes, 100 squares, number lines, mirrors.

- Grouping according to ability so that the groups can be given different tasks when appropriate. Activities are based on the same theme and usually at no more than three levels.

Assessment:

Assessment and recording of mathematics is a continuous process and is used by teachers to inform and plan future work.

Informal Tests of Mental Arithmetic

This involves 20 mixed questions given orally, in KS2, every week.

Formal Written Tests

Teachers use different assessment materials to plan assessment activities and written tasks for one or two days towards the end of each half term.
The work set, combined with a scrutiny of children's recorded work over the previous six weeks, helps to review how well children have taken in the topics taught and identifies any remaining misconceptions.

Formal Assessment

In the summer term the children are formally assessed using optional SATs tests in Y2, 3,4,5 and formal SATs in Y6. Reports are completed before the end of the summer term and parents are given opportunity to discuss their child's progress.

Teachers use the information gathered from their half termly assessments to help them comment on individual children's progress.

- √ Parents are invited into school twice yearly to look at their children's work.
- √ When significant changes have been/are made to the mathematics curriculum parents are invited to a meeting or sent information via the newsletter.

Inclusion:

Children with SEN are taught within the daily mathematics lesson and are encouraged to take part when and where possible (please see the section on differentiation).

Where applicable children's IEPs incorporate suitable objectives from the Framework and teachers keep these objectives in mind when planning work.

Signed (Headteacher):

Signed (Chair of Governors):

Date: October 2015
Review Date: October 2018