LETHBRIDGE PRIMARY SCHOOL

MATHS POLICY

INTRODUCTION

This policy outlines the teaching and learning of mathematics at **Lethbridge Primary School**.

The schools policy for mathematics is based on the documents 'Development Matters in the Early Years Foundation Stage' and 'The 2014 National Curriculum' from Foundation Stage to Year 6.

It has the full agreement of the Governing body who approved it. The implementation of this policy is the responsibility of all the teaching staff.

AIMS

To ensure that all pupils become:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **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.

TEACHING AND LEARNING

The curriculum will be delivered through the implementation of 'Development Matters in the Early Years Foundation Stage' and 'The 2014 National Curriculum' in both discrete lessons and through other subjects areas where appropriate.

Teachers should teach mathematics every day through a discrete mathematics lesson, generally lasting between 45 and 60 minutes for Key Stage 1 and Key Stage 2 with shorter sessions in Early Years. This time will vary according to age group. However, where appropriate, some mathematics lessons may be taught in a cross curricular manner. This may either be in addition to the children's daily lesson or occasionally it may replace it.

Lessons should:

- provide opportunities to practice mental calculation and for children to orally explain their methods and strategies
- have clear focus; children should be aware of the learning objectives
- be interactive and incorporate all learning styles
- include both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work

- include a plenary which involves work with the whole class to address misconceptions, identity progress, to summarise key facts and ideas and what to remember, to make links to other work and to discuss next steps.
- be enjoyable and relevant

Pupils engage in:

- Problem solving
- Practical work
- Investigational work
- Mathematical discussion
- The development of mental strategies
- Written methods
- Consolidation of basic skills and routines
- Appropriate calculator and computer work (where appropriate)

PLANNING

Lessons are planned weekly and saved on the school server. Connections are made across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

Work in mathematics will be differentiated as appropriate to enable all children to make effective progress. Differentiation may be planned for by the difficulty of the task, the support received during the task, the outcome of the task or by planning alternative activities.

When appropriate, the following should also be indicated on plans:

- TA support
- Gifted & Talented Children
- Special Educational Needs
- Differentiated learning objectives
- Use of ICT and other resources

Homework

This will be set in accordance with the Homework Policy.

Use of ICT

The effective use of ICT can enhance the teaching & learning of mathematics when used appropriately. When considering its use we take into account the following points:

- ICT should be used in lessons only if it supports good practice in teaching mathematics

- Any decisions about using ICT in a particular lesson or sequencing lessons must be directly related to the teaching and learning objectives for those lessons.
- ICT should be used if the teacher and/or the children can achieve something more effectively with it than with out it.

The role of TAs and other adults

Teaching Assistants need to know the teacher's objectives for the children's mathematics learning and the learning objectives that have been set for individuals or groups of children. Teaching Assistants may observe, join in children's play, support groups or individuals and provide valuable feedback to the teacher. Teaching Assistants are also advised to give children verbal feedback and encouragement as well as indicate the level of support given with each child in their books (see Marking Policy). Many mathematical interventions require TAs to teach specific objectives but the planning for this will be supplied.

ASSESSMENT

At Lethbridge Primary School we are continually assessing our pupils and recording their progress. We see assessment as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

Assessment will take place at three connected levels: short term, medium term and long term. These assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

Short Term Assessment will be an informal part of every lesson to check understanding and to give the teacher information, which will help to adjust day to day lesson plans.

Formative assessment will be made with reference to 'The 2014 National Curriculum' programme of study for each year group, and in relation to 'Development Matters in the Early Years Foundation Stage'.

Medium Term Assessment will take place at the end of each term based on assessments made by staff throughout the term or tests, as appropriate. Class teachers will identify children who are below their expected progress and set up appropriate intervention.

Long Term Assessments will take place towards the end of the school year to assess and review pupils' progress and attainment against the year group expectations within The National Curriculum programme of study. These will also be made through compulsory National Curriculum Mathematics test for pupils in year 2 and 6. Teachers will also draw upon their class and individual records and supplementary notes and knowledge about their class to produce a summative record i.e. end of year report. This report will then be given to parents and key points discussed with the child's next teacher.

Self Assessment - where possible, children should be involved in assessing their own work; this might include traffic lighting, thumbs up etc.

TARGETS

Each child is encouraged to be aware of the next steps that they are working at within mathematics. The differentiated WILFs will enable children to identify what they need to do in order to make progress.

MARKING

Work is marked regularly using the schools 'Marking Policy' and pupils are given clear guidance on how to improve either verbally or in written format. There should be evidence that the children are given time to work on their next steps.

EQUALITY

Maths is taught in line with the school's 'Equality Duties'.

SPECIAL EDUCATION NEEDS

Children who require additional support are identified on both the year groups' provision maps and the teachers' mathematics plans. Needs for these children are met through differentiated activities and adult support when appropriate. This can take place both during the mathematics lesson and through an additional intervention.

MONITORING AND EVALUATION

Monitoring of the standards of children's work and of quality of teaching in mathematics is the responsibility of the SLT, supported by the subject leaders and governors.

The mathematics subject leaders will attend regular network meetings, monitor pupils' books, talk to pupils and observe classroom practice through learning walks. In addition, the work of the subject leaders involves supporting colleagues in the teaching of mathematics and informing teachers about current developments in the subject.

GOVERNORS

Governors will monitor the implementation of the maths policy through its Standards Committee receiving regular reports on the curriculum from the school's senior leadership team. Link governor visits will also include maths lessons as part of their visits.

RESOURCES

There are a range of resources to support the teaching of mathematics across the school. All classrooms have a wide range of appropriate apparatus and additional equipment is stored in the mathematics resource area.

A range of software is available to support maths work e.g. Mathletics, MathsWhizz, Number Shark, Education City etc.

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Next Review June 2017