Grindleton C.E. Primary School

In the same way, let your light shine before others that they may see your good deeds and glorify your father in heaven.'

Matthew 5 v16

Maths Policy

March 2020

Aims and Curriculum Intent

At Grindleton C.E. Primary School, mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables children to understand relationships and patterns in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

Our aims in the teaching of mathematics are:

1. To promote enjoyment of learning through practical activity, exploration and discussion.
2. To promote confidence and competence with numbers and the number system.
3. To develop the ability to solve problems through decision-making and reasoning in a range of contexts and to be able to explain the choices made using the correct mathematical vocabulary;
4. To allow pupils opportunity to work both independently, and cooperatively.
5. To promote activities which develop in pupils a fascination with mathematics, irrespective of its utilitarian value.
6. To use mathematics to describe, illustrate, interpret, predict and explain, recognising that one of the main reasons for mathematics is that it is an essential element of communication.
7. To allow equal access to the mathematics curriculum to all pupils regardless of gender or home background.

Teaching and Learning

The school uses a variety of teaching and learning styles in mathematics in order to develop children's knowledge, skills and understanding. We have a strong focus on developing problem solving and reasoning skills through our teaching and start each lesson with a problem.
During daily lessons we give the children opportunities to work collaboratively as a whole class and in groups, or to work individually as needs arise. We give the children the opportunity to work with concrete, practical, oral, mental and investigative materials and encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources, such as number lines, number squares, digit cards and small apparatus to support their calculations and reasoning. We also use a wide variety of mathematical equipment such as laptops/ipads, calculators, clocks, compasses, trundle wheels etc. ICT is used in mathematics lessons for teachers to model ideas and methods interactively. Wherever possible we encourage the children to apply their learning to everyday situations.
We deliver the National Curriculum by drawing on a variety of resources and schemes; 'Lancashire Mathematics Planning Support', 'Abacus Evolve', 'White Rose' materials, 'Times Table Rock Stars', 'Purple Mash' and the extensive experience of staff.

Mathematics Curriculum Planning

Mathematics is a core subject in the National Curriculum. Planning is undertaken at three levels:

- A yearly overview is used for the long-term plan based on the Lancashire planning documents. This covers the programs of study for KS1 and KS2. We also use White Rose small steps documents to ensure appropriate objectives are covered during the year.
- Medium term planning is carried out termly. Teachers use the Lancashire Mathematics Planning Support to shape their medium-term planning which ensures an appropriate balance and distribution of work across each term. We also use the White Rose Small Steps documents to ensure clear progression in skills.
- Short term planning is carried out weekly by class teachers. The Lancashire documents are used alongside Evolve Abacus plans and White Rose materials and are adapted according to the needs of children and groups. These plans include learning objectives for the problem-solving starter, mental oral activity, the main activity, resources to be used, any differentiation, key vocabulary and key questions.

We are always mindful that no published scheme can ensure complete coverage of the National Curriculum for mathematics. To compensate for this teachers draw upon their long-term experience of teaching the subject.

Examples of short-term planning is collected and monitored by the maths coordinator and senior management team. Teachers are encouraged to annotate and self-assess their planning; areas of difficulty are noted and targets set.

Special Educational Needs and inclusion

At our school, we teach mathematics to all children, whatever their ability and individual needs. Mathematics forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our mathematics teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities and those with special gifts and talents and we take all reasonable steps to achieve this.
When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Assessment against the National Curriculum allows us to consider each child's attainment and progress in relation to age related expectations. This ensures that our teaching is matched to the child's needs.

Recording

For recording of the pupils' work, exercise books, paper, whiteboards or ICT are chosen to provide a match to the children's needs, abilities and the activities undertaken. Their work should always be set down neatly.

Mental maths is an integral part of the teaching of mathematics but at times it may not lend itself to the physical recording of the answer in an exercise book.

Marking

The quality of marking is crucial and should refer to the lesson's learning objective, common errors or individual targets. A simple 'x' is of little assistance to a child unless accompanied by an indication of where the error occurred, together with an explanation of what went wrong. Errors and corrections must be marked as such (i.e. circle and tick for amendment).

The children themselves can mark exercises which involve routine practise with support and guidance from the teacher, especially children in KS2. Self and peer-assessment is good practise.

Assessment

Teachers will assess children's work in mathematics from three aspects (long-term, medium-term and short-term). We use short-term assessments to help us adjust our daily plans. These short-term assessments are closely matched to the teaching objectives and take the form of individual teacher's assessment of the children's work and progress - both written and oral work form part of any assessment.
Medium-term assessments measure progress made over a term. This will be in the form of a formal test. We use the Lancashire Assessment materials which involve an arithmetic paper and a reasoning paper.
We make long-term assessments towards the end of the school year and we use these to assess progress against school and national year group expectations. In Year 2 and Year 6 the national SATs tests are used to measure attainment and progress. These results can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year, so that she can plan for the new school year.
Children are encouraged to make judgements about how they can improve their own and each other's work through self and peer-assessment.

Reporting

A yearly report is sent to parents towards the end of the summer term, giving information of their child's progress in mathematics during the previous year. Where necessary the results of S.A.T.S are recorded on the report (i.e. for Y2 and Y6 children), the parents of KS2 children in Y3, Y4 and Y5 will receive a teacher assessment of their child's level in numeracy.

Monitoring and Evaluation

The mathematics coordinator is released regularly form his/her classroom in order to work alongside other teachers. Planning examples are collected each term. This time is used to monitor and evaluate the quality and standards of mathematics throughout the school and enables the coordinator to support teachers in their own classrooms. The subject leader keeps informed about current developments in mathematics, thus providing a strategic lead and direction for the subject.

Opportunities for teachers to review the scheme, policy and planning materials are given on a regular basis during staff meetings.

Homework

It is our policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief, but are valuable in promoting children's learning in mathematics. We aim to send home a maths activity once a week.

Issued: May 1994
Revised: January 2004/5/7
Further Revision: November 2011
Further Revision March 2020

Signed: …….. Chair or Governors