Sharnbrook Primary

Mathematics Curriculum Policy



March 2018

- 1. Rationale
- 2. Aims
- 3. Intended Outcomes
- 4. Current Resources and Practices
- 5. Assessment, Recording and Reporting
- 6. Pupils with Special Needs
- 7. Role of the Co-ordinator

Date agreed at Governing sub-committee: March 2018
Chair of Committee: C West
Chair of Governors: L Carr-Archer
Head teacher: S Kaznowski
Date for review: March 2021

1. Rationale

We believe that by following a systematic and progressive programme of mathematical activities, children will gain the mathematical knowledge, skills, concepts and attitudes, which are necessary for life in today's world. We undertake to develop each child's full potential, through a structured, daily maths lesson.

Through the programmes of study (detailed in the EYFS and the National Curriculum, and supplemented by schemes of work) children will become increasingly more able to use mathematics with understanding, in order to investigate, communicate, and solve problems. We acknowledge that the teaching of mathematics can contribute to learning across other curriculum subjects, and develops thinking skills.

2. <u>Aims</u>

We aim to:

- Build on each child's early experiences at home and in pre-school settings.
- Equip pupils with the knowledge and skills and the ability and confidence to use and apply these to meet the needs of everyday life.
- Offer pupils intellectual challenge.
- Provide opportunities for pupils to work through structured whole class, group and individual teaching strategies.
- Encourage children to become confident and proficient with numbers, shapes, space and measures.
- Give children the ability to solve problems in a variety of contexts.
- Ensure that all children, irrespective of gender, race and culture have access to a wide range of stimulating problems and activities.
- Provide opportunities for children to use technology to support their mathematical work.
- Provide effective maths teaching to secure high standards.

3. Intended Outcomes

Our teaching programme is based on identified learning objectives, to ensure high expectations, consistent approaches and good progression throughout the school.

Pupils will be taught to:

- Use and develop mathematical language and be able to communicate mathematically
- Develop their understanding and ability to use the four operations of number.
- To use and apply mathematics in solving real life problems and acquiring further knowledge, skills and understanding.
- Develop logical thinking and explain their reasoning.
- Count, compare and order numbers and describe relationships between them.
- Calculate accurately and efficiently both mentally and written, drawing on a range of calculation strategies.
- Describe and represent shapes in terms of their properties, location and movement.
- Estimate and measure quantities including length, area, volume, capacity, angle, temperature, time and weight including reading scales with increasing accuracy.
- Process, present and interpret data to pose and answer questions.

4. Current Resources and Practices.

All pupils are entitled to a broad mathematics curriculum in which their individual learning needs are identified and met through a range of practical and written activities. There is a daily, dedicated maths lesson with tasks and activities which provides practice, consolidation and extension. Support will be targeted at those children who have difficulties. Children with a flair for maths are given appropriately differentiated, challenging tasks which require them to apply their mathematical knowledge to different tasks.

Mathematical development in school will begin in the pre-school, as shown in the Early Years Foundation Stage curriculum. This programme takes account of the stepping stones and Early Learning Goals, and provides a bridge to the National Curriculum in year 1.

In key stages 1 and 2 continuity is achieved by following the progression of key objectives as detailed in the National Curriculum.

Each classroom has been equipped with resources necessary to support the daily teaching of maths. Larger resources, particularly to support the teaching of shape, space and measures are stored in the resources room. Appropriate photocopiable material is stored within each classroom. All children have access to Numeracy software, both in the classroom and in the IT suite. Visual aids such IWB's, inter-active on line activities, iPads and calculators will provide stimulation points for mathematics.

We will keep ourselves fully informed of new developments relevant to our school's needs, and adjust our guidelines as necessary.

Parents will be kept informed of the maths curriculum and encouraged to support maths through homework activities, invitations to watch maths lessons and parent information evenings.

Governors are involved in policy, monitoring and evaluation.

5. Assessment, Recording and Reporting

All pupils take part in continuous assessment, which is integral to the teaching process. It is important not to limit assessment to those things which are more easily measured (e g pencil and paper methods of computation.) Questions and discussions are often more helpful to the teacher in gauging pupils' understanding and they should be given frequent opportunities to explain their thinking.

Short-term assessment will be used to check that children have understood the learning objective in a particular lesson, and also check that children are remembering number facts and can use mental calculation strategies. Medium-term assessments are used to review and record the progress children are making over time, in relation to the key objectives. Information from this assessment will be used to plan the next steps in learning. The purpose of long-term assessment is to assess the pupils' work against national standards and gives information about individual attainment and progress, to aid reports to parents, set new targets and the child's next teacher. Differentiated assessment for pupils with Special Educational Needs is given consideration where appropriate. Parents will be kept informed of their child's progress, at consultation evenings and in an end of year report.

6. Pupils with Special Needs

To meet the mathematical needs of each child, differentiation in the daily maths lesson is achieved in a variety of ways:

- the task is simplified or made more complex,
- the length of time given to complete the task is varied,
- provision is made for additional resources
- work is presented in a different format
- additional adult support is provided
- extension and enrichment activities are provided as appropriate

7. Role of the subject leader

The Maths leader will oversee:

- The provision of maths resources
- Curriculum continuity and progression.
- Tracking of pupil progress across the school
- The dissemination of information, including new resources and developments in maths teaching.

The leader will be available to discuss with individual teachers or year groups any problems that arise within the teaching of maths.

The subject leader will observe lessons and scrutinise work in order to gain an overview of maths standards throughout the school and engage pupils in learning conversations to gather their views on maths.