



**Roe Lee Park
Primary School & Nursery**

Free to Flourish

***Maths
Policy***

Our Mission Statement is:

'Children, parents, governors and all staff to work together to ensure that everyone fulfils their potential and enjoys a rewarding experience'.

Statement of Intent

The intent of mathematics at Roe Lee Park School is to design a curriculum, which is accessible to all and will maximise the development of every child's ability and academic achievement. We deliver lessons that are creative, engaging and challenging and will lead to mastery in mathematical thinking. We want children to make rich connections across mathematical ideas, to develop fluency, mathematical reasoning, pattern spotting and competence in solving increasingly sophisticated problems. As our pupils progress, we want them to:

- broaden their understanding of the world
- use and understand mathematical language
- have the ability to reason mathematically
- have an appreciation of the beauty and power of mathematics
- develop a sense of enjoyment, excitement and curiosity about the subject.

Opportunities will be given to allow children to:

- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language to explain their thinking.
- 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.

Legal Framework

This policy has regard to the following statutory and non-statutory guidance:

DFE Mathematics programmes of study: key stages 1 and 2 National curriculum in England.

DFE Early years foundation stage statutory framework (EYFS).

Roles and responsibilities

Role of the Subject Leader

Ensure teachers understand the requirements of the National Curriculum and help them to plan lessons.

Lead by example by setting high standards in their own teaching.

Prepare, organise and lead CPD and joint professional development.

Work with the SEND Leader.

Observe colleagues from time to time with a view to identifying the support they need.

Discuss regularly with the Head teacher and the mathematics governor the progress of implementing National Curriculum for Mathematics in school

Deploy support staff to address mathematics related needs within the school.

Monitor and evaluate mathematics provision in the school by conducting regular work scrutiny, learning walks and assessment data analysis.

Role of Class Teachers

To follow the 2014 Programmes of study objectives by planning and delivering lesson which will enable children to access a broad and balanced maths curriculum.

To use a combination of summative and formative assessment to ensure that all pupils are achieving to their maximum potential.

To use summative and formative assessments to report on the progress of pupils in their class.

To intervene where appropriate and deploy support staff or intervention programmes to 'bridge the gap' where necessary.

Role of Support Staff

To be responsible for delivering specific intervention programmes

Role of Governors

Shazia Hassan is the present governor with responsibility for maths

Teaching and Learning

Our curriculum is designed with the objective that the pupils will gain a deep understanding of mathematical concepts to move towards achieving mastery in mathematics; developing a love of the subject and an ability to connect areas of learning and solve problems.

To achieve this, we aim to ensure that all pupils should become fluent in the fundamentals of mathematics through varied and frequent practice, so that pupils develop conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.

Quality First teaching is pivotal in the learning of the children. The class teacher is responsible for moving the children's learning on.

Mathematics is taught in set or mixed ability groups that focus on the life skills of collaboration, growth mindset, resilience and problem solving as much as discrete mathematical knowledge.

Pupils who grasp concepts rapidly are challenged through rich and sophisticated problems as well as developing their understanding and social skills by supporting others.

Those pupils who are not sufficiently fluent with earlier material are given additional support and provided with opportunities to consolidate their understanding.

Progression towards efficient written calculations should be developed and applied consistently in each year group following the strategies outlined in the school's Calculation Policy.

Problem solving should be an integral part of maths lessons. Each skill: identifying what is known and what needs to be found, best strategies of calculation to be used, solving the problem and evaluating should be taught consistently throughout school so that over time the children will improve at each aspect.

Each year group has a daily maths lesson which includes a 'Boardwork' session lasting 10-15 minutes where key strategies and facts are consolidated to encourage fluency in the basic skills and opportunities for pattern spotting are provided.

The Curriculum

EYFS

We follow EYFS curriculum guidance for mathematics. However, we are committed to ensuring the confident development of number sense and put emphasis on mastery of key early concepts. Pupils initially explore numbers to 10 and the development of models and images for numbers as a solid foundation for further progress. To support this learning White Rose Maths is used to guide planning. EYFS are participate in the Mastery of Number programme which is designed to embed fluency with number.

KS1/KS2

A coherent programme of high-quality curriculum materials is used to support classroom teaching. Concrete and pictorial representations of mathematics are chosen carefully to help build procedural and conceptual knowledge together. Exercises are structured with great care to build deep conceptual knowledge alongside developing procedural fluency.

The focus is on the development of deep structural knowledge and the ability to make connections. Making connections in mathematics deepens knowledge of concepts and procedures, ensures what is learnt is sustained over time, and cuts down on the time required to assimilate and master later concepts and techniques. The White Rose planning materials facilitates appropriate coverage. Teachers are skilled in developing these ideas and using a wide range of high-quality resources to ensure every learning intention is taught to maximising learning. This is supplemented with the NCETM Professional Development materials and The Mastery of Number programme for KS1.

Planning

Each year group follows a detailed medium term plan which is built around the White Rose Yearly Planner. It clearly maps out each unit of study, the objectives to be covered and the amount of time allocated (however this can be more flexible depending on the children's needs).

Individual teachers are responsible for weekly planning to ensure that the objectives are thoroughly covered and matched to their classes needs.

Intervention

Quality First teaching by the class teacher comes first in moving children's learning on. Immediate action within the classroom may need to be taken to keep the children's learning moving forwards.

Same Day Intervention, when needed, is used to ensure any misconceptions are picked up and children are ready for the next day's teaching.

Catch up groups may be used to aid children in the embedding of number fluency.

Where children are significantly behind their peers, alternative materials are provided to ensure children are working and progressing at the right level for them.

It is the class teacher's responsibility to liaise with the members of staff delivering any of these programmes for their children.

Assessment and Recording

Assessment for learning should occur throughout the entire maths lesson enabling teachers/teaching assistants to adapt their teaching or input to meet the children's needs. This feedback should be incisive and regular.

Pupils work should be marked in line with the marking policy and should highlight where children may have gone wrong and model corrections. Where possible children should be

given the opportunity to correct mistakes. The use of verbal feedback should be given where appropriate.

Future lesson design should depend on class success evaluated through marking and observations made during the lesson.

NFER summative tests are used at the end of each term and results are input into the school tracking system. Data is then analysed at class, year group and whole school level to inform judgements regarding pupil progress and attainment. This feeds into termly Pupil Progress meetings where appropriate strategies can be considered to enable children to continue to progress.

The White Rose assessments are used in order to provide further understanding of where the level of learning is for each child based on what they have been currently taught. Results from these tests are used by the class teachers and Maths Leaders to determine areas of strengths and weaknesses.

Cross Curricular Links

Skills acquired within mathematics lessons can be seen in other subjects e.g. measuring in D.T, data handling in science

Homework

KS1/KS2

Weekly homework is set from Years 2-6 to consolidate rapid mental recall, learning from that week or to introduce new concepts.

Children from Years 2 -6 have access to the online Times Table Rock Stars app and are given allocated time in school to use the iPads with this program.

Equal opportunities

All pupils will have equal access to the entire maths curriculum.

Gender, learning ability, physical ability, ethnicity, linguistic ability and/or cultural circumstances will not impede pupils from accessing all maths lessons.

Where it is inappropriate for a pupil to participate in a lesson because of reasons related to any of the factors outlined above, the lessons will be adapted to meet the pupil's needs and alternative arrangements involving extra support will be provided where necessary.

All efforts will be made to ensure that cultural and gender differences will be positively reflected in all lessons and teaching materials used.

Roe Lee Park Primary School aims to provide more academically able pupils with the opportunity to deepen their understanding through challenge tasks involving more advanced reasoning and problem solving activities.

Policy was reviewed 7.3.2022 by L. Knowles (Maths Subject Leader)

Date of next review: March 2023