PARK GROVE SCHOOL

Mathematics Policy

AIMS

- To develop children's confidence and interest in mathematics.
- To develop children's fluency with numbers using a mastery approach (including number facts).
- To enable children to develop flexible and effective methods to solve problems including reasoning in a wide range of contexts and representations.
- To teach lessons which are underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
- To teach lessons with small steps to promote deep understanding.
- To make connections between areas of maths which will help children appreciate and enjoy the fascination of mathematics and the relationships within mathematics.

These approaches are to provide all children with full access to the curriculum, enabling them to achieve confidence and competence – 'mastery' – in mathematics.

OBJECTIVES

Pupils should:

a) experience a variety of teaching styles to include:
- whole class teaching (grouped by year group)
- mixed ability teaching
- group work
- paired work or maths talk partners
- individual work

b) learn through-
- problem solving and reasoning questions
- practical activities (concrete)
- different representations (pictorial)
- Written methods (abstract)
- consolidation and practice (independent tasks)
- discussion, building on links and patterns with prior learning
- maths games
- daily counting, times tables learning and arithmetic activities
- self and peer assessment

c) be provided with challenging work appropriate to their abilities

d) have access to a wide range of resources to include:
- practical resources to support mathematical activities (concrete resources)
- Pictorial resources displayed on the teaching slides
- published materials including NCETM (our main material) and Whiterose
- Chromebooks

GENERAL CONTEXT

<u>Planning</u>

All planning is based on the framework provided in the National Curriculum 2014 and the Early Years Outcomes document. All teachers (excluding Early Years mentioned above) follow the NCETM spines and long-term planning. The spines have broken down each objective into small steps and teachers create slides. Teachers use the representations from the NCETM planning presentations and modify these based on the needs and requirements of each individual class (apart from the Y3/4 mixed class who use Whiterose as a whole school transition). Teachers also supplement NCETM with Whiterose planning and resources use these together to deliver high-quality maths teaching and resources. Reasoning is taught within the curriculum. We have a strong focus on basic skills and recall facts, which are practised within maths lessons every day. Alongside the maths sessions, each year group has a specific focus for the first 10-15 minutes of the maths lesson. KS1 uses

the Mastering Number resource which aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. Year 3 and 4 focus on times tables using the NCETM times table teaching approach will teach the children 36 facts needed to master the 1-12 times tables. Year 5 and 6 focus on arithmetic skills. The children are given an arithmetic test (weekly in Year 6 and monthly in Year 5) which is used to identify specific needs of the children during the arithmetic sessions to ensure progression.

Assessment & Recording

Teacher assessment is an integral part of teaching mathematics and is used to inform planning. Pixl assessments are used three to four times a year (Year 2- Year 5) in accordance with the school and Ebor Academy assessment procedures. This data helps inform planning, gaps in knowledge and support children's progress. Year 1 children's assessments will be completed via teacher assessment and EYFS children are assessed through the early learning goals (GLD). Year 6 children complete a previous SATs paper as a baseline assessment in September and further SATs papers in Cycle 1 and 2. The Year 6 children will then complete their formal SATs in May.

Reporting

Parents are informed of children's progress in mathematics through

- informal discussions
- maths workbooks
- parents' evenings
- annual reports

Classes

The children in Y1, 2, 5 and 6 are placed in sngle-age group classes. In Year 3/4, the children are placed in mixed year classes (and one Y4 class).

Marking/Presentation

Whenever possible, work should be marked with children to facilitate useful discussion (live marking). Feedback promotes deeper thinking and enables children to reflect on errors and to make corrections.

From Year 1, number work will be in squared (large squares for KS1 and small squares for KS2).

Cross Curricular Links

Mathematics is taught through topic work and other curriculum areas such as science where appropriate.

MONITORING & EVALUATION

Throughout the year, the maths subject leader will monitor maths in all classes. Implementation of this policy will be monitored by the mathematics subject leader.

LINKED POLICIES

Marking Policy, Assessment policy, Assessment schedule

REVISED BY: B.Rogers

DATE: February 2025

NEXT REVIEW: February 2027