Primrose Hill Primary School

Mathematics Policy: *A baseline for outstanding practice*

September 2015

Review date: September 2016

KEY PRINCIPLES

Teaching at Primrose Hill is 'Learning Centred', meaning that each element of whole school and classroom practice is designed with an understanding of how children learn best at its heart.

At Primrose Hill we believe children learn best when:

- learning activities are well planned, ensuring progress in the short, medium and long term
- teaching and learning activities enthuse, engage and motivate children to learn, and foster their curiosity and enthusiasm for learning
- assessment informs teaching so that there is provision for support, repetition and extension of learning for each child, at each level of attainment
- the learning environment is ordered, the atmosphere is purposeful and children feel safe
- there are strong links between home and school, and the importance of parental involvement in their children's learning is recognised, valued and developed

These Key Principles are developed in our Teaching and Learning Policy. Their specific application to Mathematics teaching and learning is described here.

Key Principle

Children learn best when learning activities are well planned, ensuring progress in the short, medium and long term.

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

- progress in the children's learning, specifically related to Mathematics skills and knowledge (in their books, displays, photographs and videos on the website, in conversation, in their learning behaviour).

TEACHERS WILL ENSURE THAT:

- Mathematics learning is a combination of skills and knowledge. Each unit of Mathematics being planned includes opportunities for children to review, consolidate and extend upon their knowledge in that area, and to apply their mathematical skills through a range of reasoning and problem solving contexts.

IMPLICATIONS FOR THE WHOLE SCHOOL WILL BE:

- There is a yearly overview of objectives for each year group to ensure that progression is maintained over the whole year and that learning objectives are systematically revisited.
- there is a Mental Calculations Progression Map in place to ensure a consistent approach to the teaching of mental calculation strategies across all four operations
- there is a Written Calculations Progression Map in place to ensure continuity and progression throughout the school, focussing on a structured and systematic approach to teaching written calculation methods for number.
- a monitoring cycle is in place to support the progress of individuals and groups of learners: planning scrutiny, books looks, learning walks and regular checks of outcomes on the website.

Key Principle

Children learn best when teaching and learning activities enthuse, engage and motivate them to learn, and when they foster their curiosity and enthusiasm for learning.

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

- ☐ Mathematics resources used to support children's understanding of concepts
  (mathematical vocabulary, number squares, counting sticks, games etc.)
- ☐ concrete materials to assist with more abstract concepts
- ☐ Mathematical games to build on children's skills and knowledge
- ☐ a range of methods of calculating (*mental, pencil and paper and using a calculator)*
- ☐ learning experiences organised with reasoning and problem solving as a focus

TEACHERS WILL MAKE SURE THAT:

- ☐ appropriate resources are selected to support children's learning
- ☐ there is a balance between practical activities, problem solving and fluency
- ☐ resources are provided on a differentiated basis to adequately support the variety of abilities and need.

Key Principle

Children learn best when assessment informs teaching so that there is provision for support, repetition and extension of learning for each child, at each level of attainment.

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

- ☐ children who are motivated to learn through differentiated learning-activities that build on their prior attainment and issue challenge that is pitched at a level that is achievable when they work hard and try their very best

TEACHERS WILL MAKE SURE THAT:

- they keep agreed assessment records for six tracker children within the class to keep track of coverage as well as progress
- they submit data termly to enable Pupil Data Tracking based on the above
- teachers provide opportunities for children to explain their understanding through problem solving and reasoning activities, questioning and marking.

Key Principle

Children learn best when the learning environment is ordered, the atmosphere is purposeful and they feel safe.

THERE WILL BE EVIDENCE IN THE LEARNING ENVIRONMENT OF:

☐ children taking risks in their learning, learning from their mistakes and persevering when tasks are challenging
☐ children's learning outcomes displayed around the classroom and the school for others to appreciate and admire
☐ organisation of resources to optimise learning (children have access to number lines, number square, cubes, base-10 materials, counting sticks, and counters etc.)
☐ prompts to assist children are displayed on the wall

TEACHERS WILL MAKE SURE THAT:

☐ children will be encouraged in their learning and their efforts will be praised both in the classroom and in assemblies
☐ number lines and number squares and other visual resources are on display in every classroom
☐ an area in the classroom is dedicated to displaying children's learning in mathematics

IMPLICATIONS FOR THE WHOLE SCHOOL:

☐ safe guarding procedures are in place and are adhered to

Key Principle

Children learn best when there are strong links between home and school, and the importance of parental involvement in their children's learning is recognised, valued and developed.

TEACHER'S WILL MAKE SURE THAT:

- ☐ parents are invited to attend Mathematics workshops based on calculation methods used at school
- ☐ parents are provided with a Written Calculations Booklet to better assist their children at home
- ☐ parents are welcomed in to share in their children's Mathematics learning, through open mornings and afternoons.
- ☐ Mathematics is an integral part of home learning to provide opportunities for children to practice and consolidate their skills and knowledge and to develop and extend their techniques and strategies.

IMPLICATIONS FOR THE WHOLE SCHOOL:

- ☐ ensure parents are informed about school events and relevant topics through regular newsletters, letters, text messaging, notice boards and the school website

DISSEMINATION OF THE POLICY

The policy will be given to all members of staff and copies will be available for parents.

PROCEDURES FOR MONITORING AND EVALUATION

The head teacher, members of the senior management team and members of the curriculum leadership team, will monitor the policy.

Laura Smith – September 2015