****

**Newburn Manor Nursery School**

**Maths Policy**

**April 2017**

**Review April 2018**

RATIONALE:

Mathematics skills are essential in preparing children for opportunities, responsibilities and experiences in adult life. These skills equip pupils with logical reasoning, problem solving, numeracy and abstract thinking which lie at the very core of everyday life.

We believe that problem solving; reasoning and numeracy skills are developed by becoming confident and competent in learning and using key skills through exposure to a rich environment, practical activity, exploration and discussion.

We commit ourselves to developing mathematical skills and understanding through challenging but achievable tasks which are founded in a sound knowledge of the individual needs of children and which exploit a range of teaching methods, resources and materials including ICT.

The area of number and shape, space and measures are followed through our curriculum and continuous provision.

PURPOSE 1:

To promote development of problem solving, reasoning and numeracy through focussed mathematical tasks and other activities which draw on mathematical learning.

GUIDELINES:

Practitioners should:-

* Plan for a range of activities and mathematical opportunities with clear learning objectives.
* Provide a variety of enjoyable and meaningful, focussed activities, using a range of resources and materials.
* Provide opportunities for children to engage in activities planned by adults and also those which they plan or initiate themselves.
* Consolidate learning by revisiting learning objectives many times.
* Ensure provision of rich, carefully planned environment which provides opportunities for children to practise their mathematical skills and knowledge in their play and in everyday contexts such as role play.

PURPOSE 2:

To plan practical activities which are underpinned by children’s developing communication skills.

GUIDELINES:

Practitioners should:

* Plan practical activities which encourage children to engage in mathematical discussion, organising and initiating ideas and explain their thinking or what they have done.
* Make good use of opportunities to talk mathematically as children play or take part in normal daily activities.
* Use open ended questions to support and extend thinking.
* Model correct mathematical terminology and introduce new vocabulary, when relevant.
* Provide opportunities for children to work together.
* Encourage children to record their findings or what they have done, as appropriate.

 PURPOSE 3:

Provide activities which are imaginative and enjoyable.

GUIDELINES:

Practitioners should:

* Plan experiences which are relevant, purposeful and imaginative using a range of contexts, such as role play.
* Plan activities which are challenging but achievable, ensuring the content matches children’s interests and needs.
* Ensure children fully participate in the learning process.
* Use a wide range of teaching strategies.
* Ensure children have opportunities to initiate mathematical play themselves as well as adult led activities.
* To join in with and intervene in child initiated play, when appropriate.
* Provide a safe and supportive learning environment.
* Provide a rich environment, inside and out, with a wide range of interesting materials, not necessarily just those confined to mathematical activities.

PURPOSE 4:

To ensure opportunities for observation, assessment and planning for the next stage of children’s learning.

GUIDELINES:

Practitioners should

* Make systematic observations and assessments of each child.
* Use information gathered to inform planning, identify learning priorities and plan relevant and motivating learning experiences.
* Ensure a cyclical approach to assessment and planning is adopted.
* Foster confidence by building on what the child knows, understands and can do.

PURPOSE 5:

To meet the needs of all children including those with Special Educational Needs and those who are more able.

GUIDELINES:

Practitioners should

* Set realistic and challenging expectations to meet the diverse needs of each child.
* Use learning and teaching strategies which vary and are adapted to suit the needs of the child.
* Identify and assess children with Special Educational Needs in accordance with guidelines set out in the Code of Practice.
* Set short term targets for learning.
* Ensure regular, systematic observation and assessment is carried out.
* Model mathematical language and play.
* Provide alternative activities, using specialist aids and equipment, where appropriate.

PURPOSE6:

To provide relevant training to improve practitioners knowledge, skills and understanding.

GUIDELINES:

Practitioners should

* Be able to implement curriculum requirements informed by sound knowledge of how children develop.
* Have a sound knowledge of the skills, knowledge and understanding that children need to acquire to achieve the Early Learning Goals by the end of the Foundation Stage.
* Evaluate their practice, recognising the importance of identifying and meeting their training needs.