



Milton Primary School
Numeracy and Mathematics Position Statement
February 2022



Rationale and aims

“Mathematics equips us with many skills required for life, learning and work. Understanding the part mathematics plays in almost all aspects of life is crucial. This reinforces the need for mathematics to play an integral part in lifelong learning and the richness it brings.” (*Education Scotland*)

In Milton Primary School we recognise that good numeracy skills are necessary for successful learning and are essential for life after school. Curriculum for Excellence provides a framework in Numeracy and Mathematics which allows for the development of these vital skills across all curricular areas. This gives learners the opportunity to learn the numerical and mathematical skills required by each of us to live effective and successful lives.

“Being numerate helps us to function responsibly in everyday life and contribute effectively to society. It increases our opportunities within the world of work and establishes foundations which can be built upon through lifelong learning. Numeracy is not only a subset of mathematics; it is also a life skill which permeates and supports all areas of learning, allowing young people access to the wider curriculum.” (*Education Scotland*)

All learners have the opportunity to develop skills for learning, life and work with a focus on Numeracy. At Milton Primary School, it is our aim to ensure that all there are shared, high expectations for all learners and that we provide a variety of opportunities to engage and motivate learners to reach their full potential in Numeracy and Mathematics.

Curriculum

Numeracy

Curriculum for Excellence has structured the Numeracy aspect of the curriculum using eight organisers:

- Estimation and rounding
- Number and number processes
- Fractions, decimal fractions and percentages
- Money
- Time
- Measurement
- Data and analysis
- Ideas of chance and uncertainty

In Numeracy, there will be an emphasis on developing a good range of strategies for mental calculations to enhance learners' progress and achievement in mathematics. These strategies include counting on and back, partitioning, bridging and adjusting, complements to 10, 100 1000 etc and doubling and halving.

Mathematics

The Mathematics experiences and outcomes are structured within three main organisers, each of which contains a number of sections:

Number, money and measure

- Estimation and rounding
- Number and number processes
- Multiples, factors and primes
- Powers and roots
- Fractions, decimal fractions and percentages
- Money, Time and Measurement
- Mathematics – its impact on the world, past, present and future
- Patterns and relationships
- Expressions and equations

Shape, position and movement

- Properties of 2D shapes and 3D objects
- Angle, symmetry and transformation

Information handling

- Data and analysis
- Ideas of chance and uncertainty

Learning and Teaching Approaches

In Milton Primary School, we use a variety of approaches to allow our learners to experience breadth, depth and challenge within all aspects of Numeracy and Mathematics. Tasks and approaches are planned to challenge and engage all learners at an appropriate pace for individual learners. The approaches that we use include:

- Creating a learning environment where learners feel valued, supported and confident.
- Use learning intentions, success criteria and effective questioning to ensure learners are able to reflect on their progress and plan next steps appropriately.
- Making use of a variety of learning environments including developing our knowledge and skills both in and outdoors.
- Using a flexible approach to groupings; groups may change regularly to best meet learners needs and to allow challenge and/or support to be given for different aspects of Numeracy and Mathematics.
- Developing a sound understanding of numeracy and mathematics using active and interactive resources where appropriate.
- Using different strategies to develop confidence and accuracy in the mental agility of all pupils.
- Giving learners the opportunity to discuss their thought process and how they reach their solutions.
- Engaging learners by making frequent links across the curriculum so that concepts and skills are being further developed by being applied in different relevant contexts.
- Developing higher order thinking skills through problem solving skills.
- Using a range of appropriate resources to support learning and teaching throughout numeracy and mathematics.
- Using a range of tracking and monitoring strategies to ensure the progress of all learners is being recorded and to ensure they are being suitably challenged within Numeracy and Mathematics.
- One of our Principal Teachers is currently training in 'Maths Recovery' with Maths Recovery UK. Maths Recovery aims to 'emphasise ongoing assessment, careful observation, gauging student's current knowledge and strategies, and building on them to increase the student's knowledge, ability and self-confidence in mathematics.' This training will be used to support learners throughout the school who may require consolidation of numerical concepts.

Pupils

All learners will:

- Experience learning and teaching approaches that stimulate, challenge and meet individual needs.
- Be given opportunities to develop confidence in applying numeracy skills through real-life experiences for example through being part of a school committee, helping to organise the Christmas Fayre and through our focus weeks on Financial Education.
- Develop strategies to understand and solve problems in a variety of contexts.
- Develop their confidence and accuracy in their mental agility through a range of strategies including games and interactive resources.
- Engage in investigative, collaborative and independent approaches to learning.
- Be given the opportunity to select and use appropriate resources and technologies.
- Be given quality feedback on their Numeracy and Mathematics tasks to ensure they can continue to meet the next steps in their learning.
- Share their success in Numeracy and Mathematics during our Wonderwall assemblies.

Parents and Carers

Information will be provided to parents and carers about their child's progress and their next steps in learning through parent and teacher workshops, showcases of learning and parent consultation evenings. Parents and carers will be able to track the progress of their children through target setting as well as termly snapshot jotters which will reflect the Numeracy work completed in class.

Review Date – February 2023