**St John’s Primary Hamilton**

**Numeracy Policy**

**Introduction**

*“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.”*

[*(Curriculum for Excellence, Principles and Practice: Numeracy across learning)*](http://www.ltscotland.org.uk/learningteachingandassessment/learningacrossthecurriculum/responsibilityofall/numeracy/principlesandpractice/index.asp)

**Our Vision**

In our school community we will work together as a team to develop our children as successful learners, confident individuals, effective contributors and responsible citizens by providing a safe, friendly and inclusive environment for motivating and challenging learning experiences.

In order to achieve this vision, we aim to provide high quality learning and teaching in Numeracy embedding the UNCRC to develop our children as competent and confident lifelong learners.

**Rationale**

In St John’s Primary we strive to ensure that every child should become a competent and confident user of numeracy. Effectively equipping all learners with the skills needed to use numeracy life skills to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions throughout life.

**Aims**

1. Ensure all children and young people have access to meaningful learning experiences which enable them to demonstrate progress in their skills in numeracy.
2. Enable children and young people to demonstrate confidence at their level in analysing information, solving problems, making informed choices using their skills in numeracy.
3. Support children and young people to provide evidence of their progress as they investigate problems individually and collaboratively.
4. Provide children and young people with appropriate feedback on how to improve their numeracy skills, and set personal targets at all stages of their learning.
5. Offer a collective and ongoing commitment to improvement through continuous professional development which enhances staff confidence in promoting and reinforcing the development of numeracy skills within a wide variety of learning experiences for all learners.
6. Encourage active involvement of parents and carers in the learning of children and young people.
7. Support the Government’s vision for Scotland’s society and economy to be stronger with more adults able to use numbers effectively in order to handle information, communicate with others, express ideas and opinions, make decisions and solve problems, as family members, workers, citizens and lifelong learners.

**What is Numeracy?**

Numeracy is a skill for learning, life and work. Being numerate involves developing an ability and confidence in using numbers that allows us to function responsibly and contribute effectively to society. Good numeracy skills are necessary for successful learning and are essential for life after school.

**Numeracy Organisers and Skills**

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| Estimation and Rounding | Develop understanding of size and amount. Investigate different ways of estimating answers to calculations. Develop knowledge of rounding to help estimate answers. Building a repertoire of skills to call upon when making decisions. |
| Number and Number Processes | Develop an understanding of numbers as quantities, sequences and order. Addition, subtraction, multiplication and division of whole numbers and of parts of numbers. Knowledge and understanding of the number line including the significance of zero and negative numbers. |
| Fractions, Decimal Fractions and Percentages | Express understanding of the link between sharing, division and fractions. Develop knowledge of number by solving problems involving fractions, decimal fractions and percentages. Understanding the link between these and expressing equivalents. |
| Money | Recognise and use a range of coins and notes, understand how money is used, use financial terms and understand the main features of budgeting including the use of credit, debit and store cards, increasing financial awareness. |
| Time | Develop an awareness of how time is measured, tell the time and make calculations involving durations, use calendars, access and use a range of timetables, measuring and calculating speed, distance and time and develop understanding of time management. |
| Measurement | Understand the need for a standard measurement for sizes and amounts. Use information about standard units of measurement to estimate length, weight and volume. Convert between different units of measurement to calculate the most appropriate unit. Estimate and measure to solve problems of a practical nature. Understand different systems of measurement to estimate or determine the size of a quantity. |
| Data and Analysis | Collect objects and information and sort by category/type in a logical, organised manner. Present and communicate data in a variety of ways. Interpret an increasing range of data by forming questions and drawing conclusions. Sort the useful from the misleading information. |
| Ideas of Chance and Uncertainty | Using appropriate vocabulary to describe the likelihood of events happening. Conduct simple experiments involving chance. Making predictions based on informed choices and explaining consequences and probability. |

**Our Numeracy Co-ordinator** is Mr J O’Donnelly, DHT. In this role Mr O’Donnelly is available to offer advice and support to staff on teaching approaches, resources and assessment strategies. Mr O’Donnelly is responsible for leading new developments across all stages in numeracy and mathematics.

**Planning**

Teachers plan for 3 teaching terms each session and use the new numeracy planners based on the Curriculum for Excellence Experiences and Outcomes, focusing on subject knowledge and skills development and embracing the seven principles of curriculum design: challenge and enjoyment, breadth, progression, depth, personalisation and choice, coherence, relevance. Teachers meet termly with SMT to discuss plans and evaluate pupil progress and set targets.

**Learning and Teaching Strategies**

As numeracy is progressively developed across children’s learning, there are carefully planned opportunities to experience breadth, depth and challenge through a variety of approaches, including:

* active learning;
* developing mental agility;
* Assessment is for Learning: the sharing of learning intentions and success criteria, effective questioning and feedback that informs the next steps in learning;
* investigative, collaborative and independent approaches to learning;
* linking tasks across the curriculum (including well planned interdisciplinary learning) using relevant and exciting contexts to engage and motivate children, so that numeracy skills are extended, applied and developed in new contexts;
* problem-solving approaches;
* encouraging children to explain their thinking;
* effective use of technology to support learning.

At all stages differentiation is provided through success criteria, choice of resources and organisation structures such as cooperative learning, flexible ability groups depending on the task; and additional input, support and challenge. This helps to ensure Personalisation of learning. We also provide Personalisation and Choice of learning in P1-7 by meeting regularly with children to hold learning conversations and set targets for the next learning steps to increase attainment. 2 copies of the learning targets are sent home termly with one copy being kept at home and one copy signed and returned to school.

Clear links are promoted between numeracy and other subject areas to draw different strands of learning together and provide Coherence. The embedding of UNCRC throughout all curricular areas supports the increase in attainment and is demonstrated in the careful tracking and monitoring of progress.

Every opportunity is taken to link learning in numeracy to real contexts. This helps pupils to see the Relevance of numeracy to their daily lives.

Assessment is for Learning approaches including effective questioning, sharing of outcomes, self, teacher and peer assessment to identify success and plan next steps.

End of level assessments are used to support teacher judgement for **numeracy** and **mathematics**. Pace and progress are tracked and monitored by SMT during forward plan dialogues.

**Monitoring and Evaluation**

SMT will monitor the progress in numeracy and the delivery of the curriculum by:

• having planning discussion meetings every term to discuss planned learning, coverage of the curriculum and observe and discuss progress of pupils by discussing evaluations of pupil attainment.

• monitoring numeracy jotters/workbooks/Learning Logs /homework jotters, and discussing learning and teaching with selected focus groups of pupils

• formal observations of numeracy lessons

• informal visits to each class during a numeracy lesson

• carrying out regular audits to review school’s progress against national standards.

**Equal Opportunities**

St John’s Primary School aims to provide equal opportunities for all pupils irrespective of ability, gender and cultural background. We strive to enable each child to maximise his/her potential.

Numeracy policy February 2019

Review date June 2020.