**Royston Nursery**

**Numeracy and Mathematics Policy**

**Rationale**

**Mathematics** is the study of numbers, shapes, and space using reason and usually a special system of symbols and rules for organising them.

**Numeracy** is a subset of mathematics and a life skill which permeates and supports all areas of learning, allowing young people access to the wider curriculum.

*‘Mathematics is important in our everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions’*

*Curriculum for Excellence*

**Vision**

As the children at Royston Nursery engage in play they will develop their understanding of Numeracy and Mathematics across the curriculum. The learning opportunities our children experience will equip them with the skills, knowledge and confidence to explore mathematical concepts with high levels of curiosity and motivation.

Overall, the children will consider themselves to be confident, young mathematicians demonstrating high levels of mathematical understanding in and beyond our playrooms.

**Aims**

Our nursery policy outlines that we will aim to:

* Deliver an inclusive Mathematics curriculum that enables all children to reach their full potential, becoming successful learners, effective contributors, responsible citizens and confident individuals.
* Plan experiences and opportunities that deliver breadth and depth across the Mathematical Curriculum.
* Provide a rich, stimulating learning environment that encourages and supports children in their exploration of mathematical concepts.
* Ensure practitioners have high levels of Numeracy and Mathematics understanding, using this to confidently plan, teach and assess individual children’s mathematical learning.
* To work in partnership with children and families to support family learning in Mathematics.
* Foster a culture of Mathematical Mindsets throughout the nursery.

**Method**

* **Curriculum for Excellence and the Benchmarks** -Applying the principles and guidance contained within Education Scotland’s *Curriculum for Excellence, Pre-Birth to Three* and the *Benchmarks* to inform our planning, teaching and assessing of our Mathematics curriculum.
* **Glasgow Counts**-Utilising the Glasgow Counts- A Framework of Mathematics to support children’s progress across the Mathematics curriculum.
* **Royston Nursery Numeracy Programme**- Delivering the Numeracy Programme, to link experiences, number songs/rhymes and stories to a breadth of specified Mathematical learning intentions.
* **CPA Approach**-Ensuring that learning and teaching across the Mathematics curriculum follows a Concrete, Pictorial and Abstract model with the emphasis on the early years being on the Concrete and Pictorial.
* **Counting**- Counting is embedded in the everyday activities of the nursery and structure of the day.
* **Individual Planning**- Plan personalised learning experiences that follow children’s individual interests and offer support, challenge and enjoyment across the Mathematics curriculum.
* **Child-led/Adult-led Learning**- Planning the structure of the day to ensure there is a careful balance of child led/child initiated learning experiences during free-play with shorter periods of relevant adult-initiated learning experiences
* **Playfulness**-A playful approach when engaging children in Mathematical experiences is adopted by practitioners. .
* **Learning Environment-** Maintaining a well-resourced learning environment that provides opportunities that invite children to engage in Mathematical learning.
* **Problem-Solving Dispositions** – Problem-solving dispositions such as perseverance, focus, making predictions, testing hypotheses and taking reasonable risks are encouraged through staff by providing time, resources and space to explore. When observed, these are recognised and celebrated.
* **Maths Talk**- Introducing the children to relevant Mathematical vocabulary when exploring Mathematic concepts.
* **Mathematical Mark Making**- Children are encouraged to record their Mathematical thinking through mark making and this is shared and discussed.
* **The Role of the Adult-** The adults are aware of the maths learning focus and adopt a range of strategies including: playing, questioning, challenging, discussing, modelling in order to make progress in the child’s Mathematical learning.
* **CPD**- The staff team keep abreast of training opportunities and professional learning in relation to the learning and teaching of Mathematics in the early years.