# Numeracy and Mathematics Policy

## Rationale

From their earliest days, children try to make sense of the world. They investigate their environment in a variety of ways: by observing shapes, colours, patterns and sequences of events in their surroundings; by asking questions; by matching, sorting and counting, comparing and learning to name and categorise; by touching and handling and exploring; by recording in pictures and models; by experimenting and investigating, designing and making and guessing; by role playing and problem solving.

We at Stepps Primary Nursery Class recognise the importance of developing children's knowledge and understanding of the world and endorse the guidelines set out in A Curriculum for Excellence.

### Aims

Children should learn to:

- Ask questions, experiment, design and make and solve problems.
- Recognise patterns, shapes and colours in the world around them.
- Sort and categorise things into groups.
- Be aware of daily time sequences and words to describe/measure time e.g. snack time, morning, first, next, clock
- Understand and use mathematical processes such as matching, sorting, grouping, counting and measuring.
- Apply these processes in solving mathematical problems.
- Identify and use numbers up to ten during play experiences and counting games.
- Recognise familiar shapes using play activities.
- Use mathematical language appropriate to the learning situations.

Curriculum for Excellence - Principles

**Confident Individuals** 

• We are successful in different activities.

- We think carefully about decisions.
- We try to be independent.
- We are ambitious.
- We can relate to others.
- We have self respect.

#### Effective Contributors

- We can work as partners and in teams.
- We keep trying even if something is difficult.
- We can communicate in different ways.
- We can use our initiative, take the lead and make things happen.
- We can create new things and develop.
- We can solve problems.
- We can use critical thinking.

#### **Responsible Citizens**

- We think about technological issues.
- We understand different beliefs.
- We know about Scotland's place in the world.
- We know about the world.
- We understand different cultures.
- We respect other people.
- We make informed choices and decisions.
- We can think about complex issues.

#### Successful Learners

- We are creative and independent.
- We can work alone or in a group.
- We try hard to do our best.
- We are enthusiastic about learning.
- We use what we know in different situations.
- We listen to new ideas.
- We use technology to help us to learn.
- We use maths and literacy skills.

- We are creative and independent.
- We can work alone or in a group.
- We evaluate our work carefully.

## **Objectives**

We will:

- Provide the opportunity for children to experiment with colour, shape, number, matching, sorting and categorising through games during free choice activities.
- Enable children to explore and use everyday technology e.g. computers, scissors, bikes, wind up toys, remote control cars, cameras, physical equipment, baking etc.
- Provide children with times to explore their senses: sight, sound, touch, taste, smell, through a variety of activities such as cooking, baking, music and providing textures of materials to work with.
- Develop the children's interest in the natural world through planting bulbs and seeds and using our outdoor environment to find mini-beasts.
- Encourage the children to care for living things e.g. plants and animals by being involved in watering the nursery plants and feeding the nursery fish.
- Promote the importance of hygiene, healthy eating and exercise through hand washing, outdoor play and healthy snack and food preparation.
- Value children's knowledge, interest and curiosity and work as a team to extend these.
- Actively challenge children in maths and science according to their individual needs and skills.
- Develop children's confidence and self esteem through praise and encouragement from staff.
- As staff, be enthusiastic role models, listening to children and taking their interests on board.

Time Allocation and Flexibility

Knowledge and Understanding activities take place throughout free flow play, snack time and outdoor play. They are therefore available for about 2 hours 15 minutes out of a 2 hour and 30 minute session.

#### Resources

At the beginning of a budget cycle the need for resources throughout the nursery will be considered by the nursery team. Purchases will reflect Development plan priorities. Staff will monitor the condition of the equipment and broken or faulty items will be replaced.

### Equal Opportunities

All children shall be given equal access to equipment. Where an activity is challenging, more direct supervision and support will be provided. Where a child has a special need that precludes them from ordinary use of particular equipment, support and /or adaptations will be provided to enable them to participate, whenever practical.

## Health and Safety

The outdoor area should be checked for safety when it is set up as should the equipment. Staff working in the physical or outdoor areas will provide supervision appropriate to the risk created by using particular equipment.

#### Implementation

- Staff Roles: Both members of staff are responsible for planning and supervising sand, water, maths table, construction, outdoor activities, small manipulative toys, jigsaws, computers, jigsaws, baking etc.
- 2. Cross curricular links: There are links to all other curriculum areas.

## Assessment and Recording Strategies

Children will be assessed in each of the learning outcomes. This will be done informally through talking to the children and observing them at play and formally through focused observations, where next steps will be identified.

Photographic evidence will provide a record of children's achievements and support staff observations.

Individual pupil profiles will be updated regularly and made available to parents. The DHT will monitor and evaluate records of observation and assessment.

### Reporting

Children's progress is reported informally to parents/guardians on a regular basis and formally twice a year at Parent Interviews. Individual pupil profiles are available for parents/guardians to view at Parent Interviews.

A simple written report is provided to parents of ante-pre school children at the end of the school year and for pre-school children a transition record is written and passed onto parents/guardians and Primary 1 teachers.

#### Review

The nursery team and the DHT are responsible for the review of this policy.

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