

# Policy for Mathematical Development

## Principles

The United Nations Convention on the Rights of the Child (Article 28) insists that: "young people should be encouraged to reach the highest level of education they are capable of."

## Statement Of Intent

In Ballycastle Integrated Nursery Unit we aim to provide all children with broad and varied experiences in which mathematical language, skills and concepts will be promoted, supported and nurtured.

The Nursery Staff will ensure that children will become confident and enthusiastic in the development of mathematical thinking, problem solving and the use of mathematical language. Adults will aim to seize upon the learning potential associated with each activity and naturally introduce and promote mathematical language and concepts.

At Ballycastle Integrated Nursery Unit we believe that mathematical learning is inherent in all activities therefore the following mathematical areas will be promoted through our play based curriculum.

## Procedures to promote early Number Concepts

- Through the course of their play, and during tidy up routines, children will sort and match for colour, shape, texture, size, pattern etc....
- The concept of 1-1 correspondence is promoted through play, snack, tidy routine for example 1 coat - 1 peg, 1 person - 1 cup etc
- Counting skills are promoted through the use of books, stories and rhymes as well as environmental print, menus, recipes etc. and all play opportunities
- Children have opportunities to count materials, items and objects during the course of their play e.g. 2 spoonfuls of sugar, 4 buckets of sand etc...
- Children will become familiar with number through discussion and experiences ie I am 3, I live at number 5 etc... in addition early recognition of number is experienced by the children during play e.g. numbers on telephone, computer, books, calculators, toy money etc...
- Through the use of skilful adult interaction and questioning, number concepts are promoted e.g. how many do we need? Are there enough for everyone? Etc....

## Procedures to promote early concepts associated with Shape and Space

- Adults will share in children's play and assist them in becoming familiar with face shapes, e.g. curved, straight, corner etc for example they may state..."this will not stack because it is curved"

- Children will be supported in identifying 2D and 3D shapes informally during play and through discussions e.g. the house has a triangle shaped roof!
- Through play, stories, questioning and discussions with adults, promote concepts associated with position and prepositions e.g. Will the train go under the bridge? Put the knife beside the plate etc....
- Children will have opportunities to sort for various shapes during play and whilst tidying resources.

### **Procedures to promote early concepts associated with Measurement**

- Adults within the Nursery will ask questions to encourage children to compare e.g. which bucket is the heaviest? Who is the tallest? Which pot is full/empty? Etc...
- Adults will use comparative language when interacting with children during play and through discussions.
- Children will sort, match and grade items during play and when tidying resources
- Adults will use questioning skills to promote spatial awareness
- Books, stories and rhymes are used to promote concepts associated with times of the day, seasonal times, festive times and occasions.
- Adults promote concepts associated with times of the day when discussing the passing of events and forthcoming events. E.g. It is nearly home time? Next is tidy up time then outdoor play....
- Activities and resources are planned for to allow children to re-enact times of the day for example bedroom in the house for bed-time, dolls in water for bath-time.
- Topics and themes incorporate festive and seasonal times resulting in planned learning experiences promoting concepts associated with the passage of time.

The nursery has access to software which is used when appropriate, in a structured and progressive manner in order to support early mathematical concepts. This includes access to Interactive Whiteboard, laptops and iPads.