



## **PRE-PREPARATORY DEPARTMENT**

# **Curriculum Policy for Mathematics in the Early Years Foundation Stage**

*School Mission Statement:*

***“Learning and growing in  
the light of the gospel”***

### **WITHIN THE POLICY:**

- Aims and Objectives
- Strategies for Learning / Development Matters
- Yearly Scheme of Work: Cygnets & Swans

## **AIMS AND OBJECTIVES – These will link with the developmental matters in the practice guidance for the Early Years Foundation Stage.**

To promote enthusiasm, enjoyment and confidence in the many mathematical experiences the children are involved in on a daily basis.

To provide a wide range of activities and different resources that our children are firstly able to explore and experiment in a practical way which then gives them the confidence and opportunity to record numbers.

To plan activities which challenge our children and take into consideration the different ages, abilities and levels of understanding that some children may have.

Provide time and extra support for those children who grasp concepts at a slower pace or who find the language of maths difficult.

To follow the guidelines set out in the Practice Guidance for the Early Years Foundation Stage.

## **STRATEGIES FOR LEARNING**

### **Operating Policy**

Children are provided with opportunities that include counting, sorting, matching, seeking patterns, making connections, recognising relationships and working with numbers.

They will also have experience with working with shapes, space and measures and an understanding of simple money values, which includes role play and why and when we use money.

Mathematical development is introduced into other areas of the curriculum through stories, songs, rhymes, games and into imaginative play situations. Mathematics is also included into their daily routines and their school environment.

There are opportunities for children to initiate their own activities that involve mathematical equipment and concepts.

There are also teacher directed activities that encourage the acquisition of numeracy concepts and intended learning opportunities.

Throughout their time in the Pre-Preparatory Department the emphasis is on supporting the individual progression and monitoring through observation and assessment.

The Pre-Preparatory Department uses the new Abacus Foundation Stage Scheme which is used throughout the school. In addition to this, teachers may use other resources as appropriate.

Resources for Mathematics can be found in the individual classrooms resource audit under mathematical equipment, computer software, small manipulative toys, audio equipment, big books and non-fiction.

## **Number**

- Say and use the number names, in order, in familiar contexts, such as number rhymes, songs, stories, counting games and activities (first to 5; then 10; then 20 and beyond).
- Recite the number names in order, continuing the count forwards and backwards from a given number.
- Begin to recognise the number names.
- Count reliably up to 10 everyday objects (first to 5; then 10; then beyond), giving just one number name to each object. Recognise small numbers without counting.
- Recognise 'none' and 'zero' in stories, rhymes and when counting.
- Count reliably in other contexts, for practical purposes in class, in physical activities outside and in PE lessons.
- Estimate a number in the range that can be counted reliably, then check by counting; estimate the number of a set.
- Counting to 20 and beyond.
- Counting to 100, recognising large numbers, beginning to count in 10s.
- Recognise numerals 1 to 9, then 0 and 10, then beyond 20.
- Begin to record numbers, progressing to simple tallying.
- Use language such as 'more' or 'less', 'greater' or 'smaller', to compare two numbers and say a number that lies between two given numbers.
- Order a given set of numbers, for example the set of numbers 1 to 6 given in random order.
- Order a given set of selected numbers, for example the set of numbers 2, 5, 1, 8, 4.
- Begin to understand and use ordinal numbers in different contexts.
- Make simple estimates and predictions, for example the number of cubes that will fit in a box, or strides across a room.
- Use developing mathematical ideas and methods to solve practical problems involving counting and comparing in a real or role-play context.
- Begin to use the vocabulary involved in adding and subtracting.
- Begin to recognise the symbols of addition and subtraction, eg "+", "-" and "=".
- Find 'one more' or 'one less' than a number from 1 to 10.
- Begin to relate addition to combining two groups of objects, counting all the objects.
- Begin to relate addition to 'counting on'.
- Begin to relate the addition of doubles to 'counting on'.
- Find a total by 'counting on' when one group of objects is hidden.
- Separate a given number of objects into two groups.
- Select two groups of objects to make a given total.
- Begin to relate subtraction to 'taking away' and counting how many are left.
- Remove a smaller number from a larger and find how many are left by 'counting back' from the large number.
- Begin to find out how many have been removed from a larger group of objects by 'counting up' from a number.
- Work out by counting how many more are needed to make a larger number.
- Solve problems, including doubling, halving and sharing.

## **Shape, Space and Measure**

- Use language such as 'more' or 'less', 'longer' or 'shorter', 'heavier' or 'lighter' to compare two quantities; then more than two, by making direct comparisons of lengths, or masses, and by filling and emptying containers.
- Begin to estimate length and height, measuring a length/height using a non-standard unit.
- Measure time using sand timers.
- Begin to understand the vocabulary of time; comparison of night and day; today, tomorrow and yesterday; distinguish weekdays from weekends; know the days of the week in order; recognise the hours on an analogue clock; reading the time to the hour.
- Use of measurement equipment, i.e. rulers, measure tapes, bottles, containers of different sizes, weighing buckets and scales.
- Measurement using non-standard units, i.e. bodies, hands, feet etc.
- Use language such as 'circle' or 'bigger' to describe the shape and size of solids and flat shapes.
- Begin to name solids such as cube, cone, sphere, pyramid; flat shapes such as circle, triangle, square and rectangle.
- Use a variety of shapes to make models, pictures and patterns, and describe them.
- Put sets of objects in order of size.
- Explore characteristics of everyday shapes.
- Talk about, recognise, create and describe patterns, for example, simple repeating or symmetrical patterns in the environment.
- Use everyday words to describe size, position, direction, time, distance and movement: for example follow and give instruction about positions and movements in PE and other activities.

## **Abacus**

- The Abacus Foundation Stage for Cygnets is a target for full-time children. Part-time children may not be able to cover all areas of the Mathematics curriculum.
- The Scheme is based on practical, teacher-led activities and uses differentiated ideas for small groups or paired activities as well as giving opportunities for learning through structured play or child initiated activities.
- Throughout the day there can be opportunities to record numbers during play and class activities.
- The Abacus Foundation Stage for Swans uses similar teaching strategies as the Cygnets.

## **Assessment**

Staff analyse and review each child's development and learning and make informed decisions about their progress and plan next steps to meet the children's development and learning

needs. To do this we write post-it notes and observation sheets; take photos, to record any significant achievements within the seven areas of learning and these are then stored or added into each child's Learning Journey. A Learning Journey is kept for each child. This may contain photographs, observations, things that the children have made or drawn and information from parents. It informs or guides everyday planning. Children and parents may access these in the classroom as and when they wish. We use our records, post-it notes and Learning Journeys to track the children. 3 E's (Emerging, Expected, Exceeding) at the end of Reception. Children in Cygnets are assessed and Progress Summaries completed.

(Reviewed ND August 2017)