# **Fairisle Infant and Nursery School**



# **MATHEMATICS POLICY**

Date policy reviewed: February 2019

To be reviewed:

February 2021

Ratified by Governing Body: 6.3.19

Signature: Astophers

# **Fairisle Infant and Nursery School**

# **Mathematics Policy**

"All children have a right to an education" Article 28

"Education should develop each child's personality and talents to the full" Article 29

United Nation Convention on the Rights of the Child

Mathematics is a tool for everyday life. It is a network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems, which emphasise the development of mathematical language, understanding and skills.

#### Aims

It is our aim for children learning within the Early Years Foundation Stage and Key Stage 1 National Curriculum:

- To understand the importance of mathematics and its relevance to everyday life.
- To develop a positive attitude towards mathematics.
- To develop confidence in understanding and using mathematical vocabulary as a way of communicating information and ideas.
- To develop an ability to solve mental and written problems in a range of contexts, to reason, to think logically and to work systematically.
- To feel confident in using a range of methods and equipment to support their independent problem solving.
- To be surrounded by an environment that fosters and supports their growth as mathematicians.
- To use ICT to support their learning of mathematical concepts.
- To have a firm understanding of the basic concepts of mathematics.
- To apply their mathematical skills, knowledge and understanding across the curriculum.

Through careful planning and preparation, we aim to ensure that mathematics is presented in a range of ways to support all styles of learning. Throughout our school and nursery, children are given opportunities to explore mathematics through:

- Practical activities and mathematical games; inside and outside of the classroom
- Role play
- Problem solving challenges, games and investigations.
- Individual, paired, group and whole class discussions and tasks.
- A range of strategies e.g. mental, written, practical.
- ICT as a mathematical tool.

### Mathematics - policy into practice.

At Fairisle Infant and Nursery School we will:

- Teach mathematics in a way that is engaging and where children are challenged to think.
- Foster children's self esteem as mathematicians.
- Develop mathematical understanding through contextual, practical and play based learning as appropriate.
- Provide a variety of structured concrete experiences, related to the children's own experience.
- Build on children's prior knowledge to support their learning of new concepts.
- Model the use of appropriate mathematical language during direct teaching, discussions and plenaries across a range of curriculum areas.
- Demonstrate how mathematics can be used to solve real life problems, using a range of strategies.
- Ensure the teaching and learning matches children's individual needs
- Provide opportunities for the children to work independently, as a group or collaboratively as a class.
- Give feedback to children's responses both verbally and in writing.
- Provide opportunities for children to reflect on and evaluate their learning.
- Discuss with the children the next steps in their learning.
- Ensure that children present their working out in a clear way.
- Provide opportunities for children to correct their work and give next steps to further aid their learning

#### The Foundation Stage

At Fairisle Infant and Nursery School children in the Foundation Stage (Year N and Year R) are taught following the Early Years Foundation Stage Curriculum.

They are given frequent opportunities to develop and apply their understanding of early mathematical concepts and vocabulary through a wide range of play based contexts and number rhymes/songs, related to every day situations.

#### **Assessment and Recording**

#### In the Foundation Stage:

Progress is tracked using the Learning Journals in both Nursery and Reception classes, and through internal data collection based on the Foundation Stage Curriculum.

- Nursery/Year R photographs and sticky labels of observations which show mathematical curiosity and learning, as well as evidence of practical problem solving are kept in each individual child's "Learning Journal".
- Year R Learning that takes place in directed activities is kept in individual children's folders and in maths books.

#### In Key Stage 1:

Progress is tracked using the National Curriculum (2014) objectives and the Assessment guidance.

For children not yet achieving working towards the expected standard (WTS), the Pre Key Stage 1 standards (PKS) 1-4 then the P scales 1-4.

- Teachers use AFL daily. They evaluate success of lessons each day and review the level of understanding of the children and the learning achieved. Teachers then decide whether children need to move on, or consolidate current learning.
- Tracking takes place each term on Classroom Monitor. Issues related to progress are discussed in consultation with the Headteacher and next steps to support further progress are identified and addressed.
- Children in Key Stage one are 'set' according to ability to ensure that they receive the correct steps to ensure their good level of progress.
- In Year 2 teachers use the Standard Attainment Tests, to support their judgements with regards to pupil attainment.

#### **Parental Involvement**

At Fairisle Infant and Nursery School we recognise the importance of including parents in their children's learning.

#### **The Foundation Stage**

Progress in Mathematics is reported to parents mid year and the end of year.

#### **Key Stage One**

Progress in Maths is reported to parents mid year and end of year, using data gathered as part of ongoing tracking and SATs.

#### **Equal Opportunities**

At Fairisle Infant and Nursery School we recognise that all individuals are different. We recognise that we must take account of the ethnicity, background and needs of all children. We provide differentiated support to enable children to develop their individual skills in Mathematics. Specific materials, methods and opportunities are available to those learners who need them and progress in closely monitored.

#### **Monitoring and Evaluation**

The Mathematics Subject Leader monitors during the year in the following ways:

- Classroom observations of the teaching of Mathematics.
- Pupil Conferencing talking to children about their work in Maths/attitude to Maths.
- Work sampling of Learning Journals and Maths books.
- Monitoring of planning.
- Moderation of Maths samples with Year Team colleagues and as a teaching staff.
- Federation meetings with schools from the local federation covering a variety of Maths related topics
- Tracking progress of groups of children from each class, using Classroom Monitor.
- Analysing Tracking Data/end of year Data and reporting to Senior Leadership team, and Governors as part of Subject Leaders Report.
- Analysing end of year Data and reporting to Governors.

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