

## **Arbour House**

# **Mathematics Policy**

Policy Review Date: May 2017 Introduction Mathematics is a key life skill. It helps us to make sense of our world. Mathematics provides us with tools to:

- tackle real life problems;
- communicate information;
- develop skills which are essential in most other areas of the curriculum;
- enjoy what can be obtained from appreciating the power of mathematics.

#### Aims

The aim of this policy to ensure that each child has access to a broad, balanced and differentiated Mathematics Curriculum that:

- provide a positive attitude to mathematics by making it interesting purposeful and enjoyable;
- develop an awareness of the relevance of mathematics in everyday life and within life-centred education;
- develop, use and understand the language of mathematics at the child's own level;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts, and other curriculum areas;
- to develop a practical understanding of the ways in which information is gathered and presented;
- to explore features of shape and space, and develop measuring skills in a range of contexts;
- to enable children to select and use a range of mathematical tools effectively.
- to equip children with the mathematical language needed to understand problems and explain their methods and reasoning.
- to promote and provide opportunities for children to develop the core learning skills of confidence, determination, curiosity, aspiration, teamwork, independence, communication and focus.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The curriculum is designed to enable pupils to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

## **Approaches to Teaching**

Arbour House uses Numicom and subscribes to the pedagogy behind this structured approach that acknowledges children learn best when moving from using concrete maths apparatus, pictorial representations (jottings, pictures, drawings etc.) and then abstract (signs and symbols). This is offered to the children alongside a number rich environment and is presented to the pupils in different ways, and so uses a variety of teaching styles in mathematics, adapting to the needs of the children as necessary and appropriate. We develop the children's ability to represent problems using visualisation skills, jottings and pictorial representations. Mathematical dictionaries are used where appropriate.

#### **Assessment and Recording**

All staff are involved in the process by:

assessing work with the child;

- marking and annotating work;
- listening to reading;
- recording progress.

Next steps are identified with the child and staff working with them.

Mathematics is assessed in the following ways:

- P-Scales for English;
- National curriculum;
- MSI assessment;
- Photographs/film clip;
- Annotating children's work;
- Assessment files;

The Headteacher and Executive Headteacher will monitor termly plans and annual data. He/she will report to the Board regularly. Observing lessons, learning walks and work scrutiny are also part of the monitoring process.

#### Resources

Numicon resources are available for each Year Group. These are used in conjunction with everyday objects as part of the Life-Centred Education philosophy.

## Monitoring and Evaluation of this Policy

This policy will be reviewed within 6 months and will take account of developments in the Curriculum, as well as developments and improvements in interventions and support.