

# Mathematics Policy

## Black Firs School

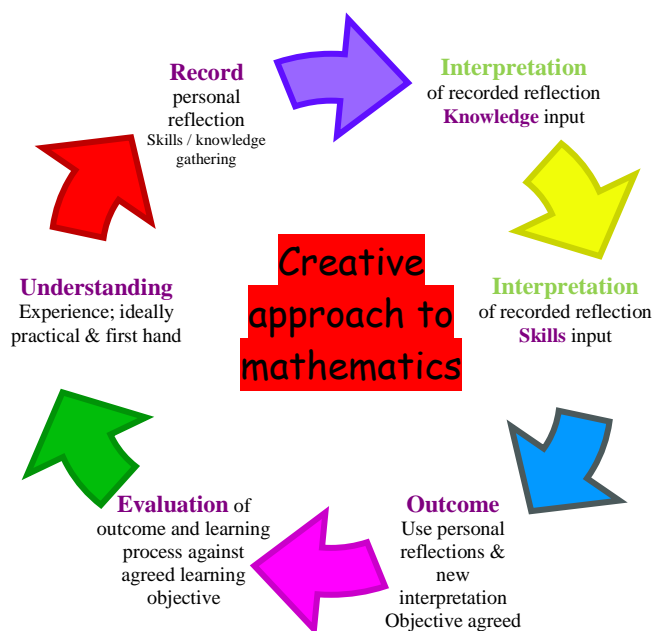
### INTRODUCTION

Mathematics provides children with unique and powerful skills to appreciate and transform the world. Logical thinking, problem-solving and the ability to think in abstract ways are important in everyday life. It is a creative subject contributed to by many different cultures which can stimulate wonder and discovery. This document is a statement of the aims, principles and strategies for teaching and learning mathematics at Black Firs School.

### AIMS

Our aims in teaching mathematics are that all children will:-

- develop basic mathematical concepts.
- appreciate patterns and relationships.
- enable children to appreciate the nature of numbers and space.
- develop mathematics as an essential tool for communication.
- observe, explore, pose questions and devise ways of answering them.
- develop mathematical skills and knowledge accompanied by quick recall of basic facts.
- acquire knowledge of computational skills.
- encourage powers of judgement, imagination and the critical interpretation of findings.
- develop favourable attitudes to Mathematics, an interest in the subject and aesthetic awareness.
- develop an ability to apply mathematical concepts and skills creatively in other subject areas and in everyday life.
- develop an ability to think clearly and logically in Mathematics.
- enable children to work independently and co-operatively.
- help children develop a systematic approach to their work.
- give children confidence in their mathematical abilities.



### Strategies for Mathematical Thinking

The mathematics curriculum is based on the National Curriculum for Mathematics and supported by a range of textbooks, ICT programmes and other resources. Mathematics is taught every day either explicitly or through other curriculum areas as part of topic-based learning. On average, approximately 45 minutes per day is spent on mathematics at Key Stage 1, and a minimum of 1 hour per day at Key Stage 2. Included in this are activities for focussing on A.T. 1 to ensure N.C. coverage.

Teachers aim to make mathematics lively and engaging. Carefully planned lessons and study work assignments challenge the children to think. Mathematics is a combination of concepts, facts, properties, rules patterns and processes and the whole school environment including the outdoors is used to support teaching. Children work independently and in groups and are encouraged to discuss, use resources and ask for support as needed.

Ratified by the Governing Body.

## **Entitlement**

In the National Curriculum, Mathematics is set down under 3 attainment targets:

### **Ma2 Number:**

- **Using and applying:** *problem solving; communication; reasoning.*
- **Numbers and the number system:** *counting; number patterns and sequences; the number system; integers; fractions, percentages and ratios; decimals.*
- **Calculations:** *number operations and the relationship between them; mental methods; written methods; calculator methods; solving numerical problems, processing, representing and interpreting data..*

### **Ma3 Shape, space and measures:**

- **Using and applying shape: space and measure:** *problem solving; communicating; reasoning*  
**Understanding patterns and properties of shape**
- **Understanding properties of position and shape**
- **Understanding measure.**

### **Ma4 handling Data**

- **Using and applying handling data:** *problem solving; communicating; reasoning.*
- **Processing, representing and interpreting data**

## **Special Needs**

The schools S.E.N. should be followed. Where necessary, the curriculum should be modified and resources provided which help meet the needs of all children.

## **Equal opportunities**

Please refer to school aims.

## **Feedback to pupils**

This is referred to in the school marking policy document.

## **Assessment**

Throughout the year formative assessment is used to guide the progress of individual children. It involves identifying each child's progress, determining what they have learned and what therefore should be the next stage of learning. Summative assessment at the end of each term is recorded using Classroom Monitor to map the progress a child has made and is used when writing annual reports. Individual pupil targets are set each half term.

## **Record Keeping**

Whole school assessment using Classroom Monitor

Comments & targets in Studywork Books & own Teacher's records

Please refer to the school policy document on Record Keeping.

## **Reporting**

Parents receive a verbal report at the end of each term and a summative report at the end of the school year.

## **Role of Coordinator**

- ✓ To support staff in the teaching of Mathematics.
- ✓ To monitor progression and continuity both key stages.
- ✓ To support Key Stage 1 Assessment and to lead Key Stage 2 Assessment.
- ✓ To attend courses and cluster group meetings.
- ✓ To order resources and manage the storage and distribution of those resources.
- ✓ To initiate discussion on mathematics and seek to maintain a high profile for the subject.
- ✓ To respond to link initiatives from outside agencies e.g. High Schools.
- ✓ To encourage cooperation between KS1 and KS2 in mathematics projects.

## **Equipment and resource**

A bank of resources is kept centrally.

## **Health and safety**

We endeavour to keep staff up to date with the latest guidelines (from ASE and CLEAPSS) and encourage staff to read the safety guidelines annually.