Maths Intent & Implementation Statement

At Bandon Hill, we dare to dream. Our mission is to encourage daring, resilient, enquiring, ambitious and motivated pupils.

Our intentions in Mathematics are for children to:

- **Dare** children to challenge themselves to master new concepts and deepen their understanding in others.
- Encourage **resilience** when finding Mathematics problem solving difficult.
- Stimulate creativity and inquisitiveness through **enquiry** and exploration. Is there more than one solution? Is this always, sometimes or never true?
- Empower children to be **ambitious**, learning to challenge themselves to deepen their understanding of mathematics through reasoning and problem solving.
- **Motivate** children to work successfully independently as well as collaboratively

At Bandon Hill we aim to encourage a love of mathematics and believe that all children can achieve well when our maths lessons follow a teaching for mastery approach. We teach for a secure and deep understanding of mathematical concepts. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems rather than acceleration through new content.

We aim for all pupils to:

+ Become fluent in the fundamentals of mathematics (see Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

+ Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.

+ Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

+ Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.

As a school we are currently in the process of moving to the 'White Rose' Mastery Maths scheme which will be fully implemented by September 2024.

White Rose mastery approach is a research-driven teaching and learning method that meets the goals of the National Curriculum.

All children have a daily maths lesson carefully designed to teach all children the same learning through a concrete, pictorial and abstract series of steps to ensure understanding is secure.

Each lesson focuses on a manageable step of new learning based on the National Curriculum statements.

Typical Lesson design:

1.	Introduction (Including retrieval, making links with previous learning)
2.	Vocabulary for the Maths lesson
3.	Live modelling of the new learning with explicit use of potential misunderstandings
4.	All children practise the new learning together which includes fluency, reasoning and problem solving. Cognitive load is reduced by ensuring the examples presented are very similar to the independent work.
5.	In children's books / independent activities; ● Children typically complete around 5 fluency questions based on the content already practised. ● Children complete a 'Reasoning' question, which may unpick a misconception. ● Children go on to complete 'Problem solving' question/s.
6.	The teacher draws the class back together with a focus on the 'Problem solving' question that the children have completed in the lesson. This ensures that children who haven't solved this in their books can gain an understanding through working collaboratively as a class.
Note：The teacher may use a mini-plenary during independent learning to draw children's attention to the reasoning question.	

Maths Meetings

Maths meetings take place regularly throughout the week to pick up on areas based on 'assessment for learning'. Teachers revisit specific areas of learning from the previous week and from recently carried unit assessments in order to consolidate key learning.

From September 2024, KS1 will plan one 'Maths Meeting' per week, KS2 will plan three.

Mastering number (EYFS & KS1)

From September 2024 the NCETM 'Mastering Number' programme will be implemented. This will replace the existing scheme of work in the main for Reception. For Y1 & Y2, teachers will teach an additional 20 minutes Mastering Number lesson in addition to the Mathematics lesson.

The project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number. Attention will be given to key knowledge and understanding needed in Reception classes, and progression through KS1 to support success in the future.

'Mastering Number' is research-based. Ofsted's *'Coordinating Mathematical Success' (2023)* report recommends that;

'Other organisations (Maths Hubs) should offer the Mastering Number Programme to all schools as an example of good practice in early mathematics'