



### **Maths Intent:**

At Bunny C of E Primary School, we teach the content of the National Curriculum in Key Stages One and Two. The national curriculum for mathematics intends to ensure that all pupils

1. become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
2. reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
3. can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

At Bunny C of E Primary school, we aim to:

- Ensure our children have access to a high quality maths curriculum that is both challenging and enjoyable.
- Provide our children with a variety of mathematical opportunities, which will enable them to make the connections in learning needed to enjoy greater depth in learning.
- Ensure children are confident mathematicians who are not afraid to take risks.

- Fully develop independent learners with inquisitive minds, who have secure mathematical foundations and an interest in self-improvement.

The teaching of **fluency** - We intend for all pupils to become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

The teaching of **problem solving**. - We intend for all pupils to solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of more simple steps and persevering in seeking solutions.

The teaching of **reasoning**. - We intend for all pupils to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

A **vocabulary** rich environment. - We intend to create a vocabulary rich environment, where talk for maths is a key learning tool for all pupils. Pre teaching key vocabulary is a driver for pupil understanding and develops the confidence of pupils to explain mathematically.

### **Maths Implementation:**

Bunny C of E Primary School's Long Term Planning for Maths outlines key knowledge and skills taught and is taken directly from the National Curriculum. Teachers use the White Rose framework to create a series of maths lessons which develop mathematical skills through using the concrete, visual and abstract approach.

#### Planning

1. Long term: National Curriculum and Development Matters
2. Medium term: White Rose Yearly Overview, up-dated annually in response to data and in house monitoring of teaching & learning.
3. Short term: - Daily lessons include a clear Question for learning 'Can I' and clear success criteria. – Lessons are taught daily and short term planning is supported by the use of the White Rose Maths, NCETM and Nrich resources. Daily maths lessons are supplemented with 'Fluent in 5' arithmetic sessions.

Our implementation is developed through secure understanding of the curriculum and subject area, delivered through high quality teaching providing appropriately challenging work for all individuals. To support us we have a range of mathematical resources in classrooms including Numicon, Base10 and counters. We also use a range of planning resources including those provided by the White Rose Hubs, NCETM and NRICH. We continuously strive to better ourselves and frequently share ideas and things that have been particularly effective. We also take part in training opportunities and regional networking events. Through our teaching we continuously monitor pupils' progress against expected

attainment for their age, making formative assessment notes where appropriate and using these to inform our discussions in termly Pupil Progress Meetings and to update summative assessments. The main purpose of all assessment is to always ensure that we are providing excellent provision for every child. Children who are identified as making less than expected progress receive same day interventions during Step Up Learning time and pre-teaching where necessary.

### **Maths Impact:**

Our Maths Curriculum is high quality, well thought out and is planned to demonstrate progression. If children are independently achieving the lesson and curriculum objectives, they are deemed to be at expected standard. In addition, we measure the impact of our curriculum through the following methods:

- PUPIL VOICE Through discussion and feedback, children talk enthusiastically about their maths lessons and speak about how they love learning about maths. They can articulate the context in which maths is being taught and relate this to real life purposes.
- EVIDENCE IN KNOWLEDGE Pupils know how and why maths is used in the outside world and in the workplace. They know about different ways that maths can be used to support their future potential.
- EVIDENCE IN SKILLS Pupils use acquired vocabulary in maths lessons. They have the skills to use methods independently and show resilience when tackling problems.
- BREADTH AND DEPTH Teachers plan a range of opportunities to use maths inside and outside school