



## **Ralph Butterfield Primary School – How do we teach maths?**

**The National Curriculum viewpoint on the importance of mathematics:** *‘Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.’*

**The national curriculum for mathematics intends to ensure that all pupils:**

- 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.
- ***reason*** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- 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.

### **Maths Intent:**

At Ralph Butterfield Primary School our aim is to teach children how to make sense of the world around them by developing their ability to calculate, reason and solve problems. We aim to support children in achieving economic well-being by equipping them with a range of computational skills and the ability to solve problems in a variety of contexts by delivering a curriculum that:

- promotes enjoyment of learning through practical activity, exploration and discussion;
- caters for needs of every individual child;
- develops confidence and competence with numbers and the number system;
- develops the ability to solve problems through decision-making and reasoning in a range of contexts;
- helps children understand the importance of mathematics in everyday life and the links it has with other curriculum areas
- incorporates the use of a wide range of mathematical resources and where pupils are taught to show their workings in a concrete, pictorial and abstract form wherever suitable;
- develops fluency 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;
- provides numerous and varied opportunities to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations.
- promotes children taking an active role in their learning by explaining their choice of methods, developing an argument, justification or proof using mathematical language.
- encourages children to be curious about their learning by challenging answers (from both their peers and teachers) they do not fully understand.
- encourages resilience, adaptability and acceptance that finding some things challenging is often a necessary step in their learning journey.