



Maths at Robert Le Kyng Primary School

At Robert Le Kyng, we firmly believe that all children can achieve in mathematics. We promote positive 'can do' attitudes and teach for 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. Mathematics is an important creative discipline that helps us to understand and change the World. We want all pupils at Robert Le Kyng to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

Intent

We aim for all pupils to:

- + Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- + Become efficient calculators through a range of strategies (just know it/in your head/jottings/written)
- + 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.
- + Enjoy and be enthusiastic about mathematics.

Implementation

The teaching of mathematics at Robert le Kyng can be broadly separated into two distinct areas:

Mathematics Lessons

Typical Lesson Design

- 1) **Recall** (basic skills focus)
- 2) **Recap** previous learning
- 3) **Teach** new learning-hook, systematic, sequential, carefully crafted questions, explicit use of potential misunderstandings
- 4) **Practise** together
- 5) **Fluency** (what it is) – quality of questions, not quantity
- 6) **Variation** (what it is also) - relevant and secures understanding
- 7) **Reasoning** (conceptual understanding, misconceptions-what it's not)



8) Problem solving (application)

Arithmetic

At Robert Le Kyng we believe it is fundamentally important that our children can fluently and efficiently calculate using mental and written methods. Pupils receive regular, discrete sessions to learn and practise key arithmetic skills. As part of our arithmetic sessions we dedicate regular time to practising the quick recall and application of times tables facts.

Arithmetic is taught 3 times a week in 20-30 minute sessions. Each week the children will learn a particular arithmetic skill taken from our arithmetic long-term progression document. A typical week would consist of:

Session 1

-Times tables fluency. Regular learning and practise of times tables through a variety of methods. Year 1 learn and practise number bonds.

Session 2

-Teacher-led. A particular arithmetic skill is taught and practised. A large emphasis is placed on 'what do you notice?' and number sense. Children are encouraged and explicitly taught how to choose efficient and accurate calculation strategies.

Session 3

-Independent practise.

Children from years 2-6 will also complete Times Tables RockStars worksheets three times a week.

