Maths Approach

Mathematics is an important creative discipline that helps us to understand and change the World, we want to inspire everyone to achieve. We want all pupils at Berkeley Primary School to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

At Berkeley Primary, we foster positive 'can do' attitudes, believe all children can SHINE and achieve in mathematics, 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 before acceleration through new content.

Intent

We aim for all pupils to:

+ Become fluent in the fundamentals of mathematics (see Year by Year 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.

+ Mathematical ideas are discussed and reasoned and not passively 'received' by pupils

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

Implementation

Maths Lesson

Mathematics Lessons Teaching manageable step M/Tu/W/Th/F 09:30 – 10:15		Mental Maths M/Tu/W/Th/F 10:15 – 10:25	Maths on Track Meetings: Keep Up M/Tu/W/Th/Fr 13:10 - 13:30
Learning Together	Support and Challenge	Arithmetic, timestables.	Deliberate Practice/ Arithmetic/ Intervention

Typical Maths Lesson

Typical Lesson design:

1) Teach It: Live modelling of the new learning with explicit use of potential misunderstandings

2) Do It: Up to 5 examples – 5 'What it is' or '3+2 'What it is/What it's also' **Challenge 1: Procedural Fluency**

3) Prove It: 1 Misunderstandings (True/false, Spot the mistake) **Challenge 2: Conceptual Understanding**

4) Use It: Apply understanding to solve new problems **Challenge 3: Mathematical Thinking**

5) Ace it: Further application of problem solving and reasoning to provide challenge with higher order thinking.

Mental Maths lessons focus purely on mental mathematics and require quick response and strategies.

Maths on Track (Is at the teachers discretion and based on Assessment for learning.)

1) Previous learning recap/Pre learning
2) Previous learning recap/Pre learning
3) Deliberate practice
4) Deliberate practice
5) Teacher Judgement on the week's learning) Arithmetic

Impact

At each stage, pupils develop secure and deep understanding of mathematical concepts with sustainable foundations ready to be built on in the next stage of education

Our students are able to apply mathematical knowledge, concepts and procedures appropriately for their age. Pupils develop detailed knowledge and skills across the curriculum and, as a result, achieve well.

Click the icons below to find out more information about each year groups knowledge organisers and road maps

Year groups	Road Map	Knowledge organisers
EYFS	1 2 3	
Year 1	1-6	
Year 2		
Year 3		
Year 4		
Year 5		
Year 6		