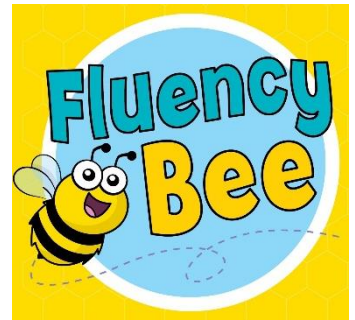


Key Stage 1 Mathematics Fluency

White Rose Education Fluency Bee Programme



What is Fluency Bee?

Fluency Bee is a structured teaching programme designed to give children confidence with numbers through varied and frequent practice. It builds number sense and develops a range of core skills in maths.

The key to mathematical fluency

The best way to develop maths fluency is frequent practice. Fluency Bee consists of a daily 15-minute lesson separate from the main maths lesson. Fully animated PowerPoint slides bring core skills to life, emphasising key learning points and highlighting important connections.

Fun and engaging

Fluency Bee provides a hands-on and practical approach to number sense. There are lots of games and activities embedded in the teaching slides. Frequent, fun and varied practice helps core skills become embedded.

Concrete – pictorial – abstract (CPA)

The programme uses a CPA approach throughout to develop a secure understanding of mathematical concepts. Concrete manipulatives and pictorial representations are used to support children to make links, build visual images and make sense of abstract calculations.

Mathematical talk and reasoning

Frequent opportunities for mathematical talk are provided. Familiar characters encourage children to explore common misconceptions and explain their reasoning.

- Fluency Bee is used flexibly depending on the needs of the children, either with the whole class or small groups of targeted children to build confidence with number.
- There are frequent opportunities for hands-on activities, using concrete manipulatives alongside the teaching slides.
- Stem sentences feature throughout to support children in using the correct mathematical language.
- Each small step has an optional follow-on task for extra fluency practice, to build confidence and to assess understanding.

Year 1 overview



Stage 1						Stage 2		
Block 1 Perceptual subitising	Block 2 Conceptual subitising	Block 3 Composition to 5	Block 4 Comparison to 5	Block 5 1 more (within 5)	Block 6 1 less (within 5)	Block 1 Composition of 6 and 7	Block 2 Composition of 8 and 9	
Stage 2		Stage 3						
Block 3 Composition of 10	Block 4 Comparison to 10	Block 1 Introduction to addition and subtraction	Block 2 1 more (within 10)	Block 3 1 less (within 10)	Block 4 Add and subtract with 0	Block 5 Odd and even numbers	Block 6 Doubles to 10	
Stage 3			Stage 4			Stage 5		
Block 7 Add 2	Block 8 Subtract 2	Block 9 Final facts	Block 1 Ten and a bit 11-15	Block 2 Ten and a bit 16-20	Block 3 Comparison to 20	Block 1 Count in 10s	Block 2 Count in 5s	Block 3 Count in 2s

The programme is divided into 5 stages. Each stage consists of blocks which are divided into small steps. Wider blocks have more steps.

The programme is not tied to set term dates or weeks. It is ready to pick up and start at any point throughout the year to meet the needs of your children.

If you feel that your children need to spend longer than one lesson on a step, that is fine, just continue onto the next step when they are ready.

Stage 1 and **Stage 2** explore composition of numbers to 5 and 10. This builds the foundations for the key facts within 10 which are explored in **Stage 3**.

Stage 4 and **Stage 5** build the foundations for the four operations in Year 2.

Stage 4 focuses on developing children's understanding of the teen numbers which will support them to calculate with numbers to 20 and bridge through 10.

Stage 5 looks at counting in equal groups to support children's later work on multiplication and division.

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Stage 1 explores the composition of numbers to 20 and the related addition and subtraction fact families.

Stage 2 looks at number facts to 20, securing and building on the number facts to 10 explored in Year 1. Links between related facts such as $5 + 2 = 7$ and $15 + 2 = 17$ are made explicit.

Stage 3 focuses on adding and subtracting through 10.

Stage 4 builds an understanding of the structure of numbers to 100 which will support them to consolidate and apply related facts when calculating with larger numbers in year 3.

Stage 5 looks at multiplication and the related division facts for the 2, 10 and 5 times-tables.

Year 2 overview



Stage 1							Stage 2		
Block 1 6 and 7	Block 2 8 and 9	Block 3 10	Block 4 Comparison to 10	Block 5 Addition and subtraction	Block 6 Ten and a bit	Block 7 Comparison to 20	Block 1 1 more (within 20)	Block 2 1 less (within 20)	Block 3 Make connections
Stage 2					Stage 3				
Block 4 Odd and even	Block 5 Doubles to 20	Block 6 Near doubles	Block 7 Add 2	Block 8 Subtract 2	Block 1 Add through 10	Block 2 Subtract through 10	Block 3 Bonds to 20		
Stage 4		Stage 5							
Block 1 How many?	Block 2 Comparison to 100	Block 1 Introduction to multiplication and division	Block 2 The 2 times-table	Block 3 The 10 times-table	Block 4 The 5 times-table				