

What does Mathematics look like at Badsley Primary?

At Badsley Primary, we ensure our children have access to a high quality maths curriculum that is both challenging and enjoyable, provide children with a wide range of opportunities which will enable them to make connections in learning for today and tomorrow.

All pupils can achieve in mathematics! There is no such thing as a 'maths person', that is the belief that some pupils can do maths and others cannot. A typical Maths lesson will provide the opportunity for <u>all</u> children, regardless of their ability, to work through Fluency, Reasoning AND Problem Solving activities.

<u>Intent</u>

It is our intent for the mathematics curriculum to deliver lessons that are creative and engaging. We want children to make rich connections across mathematical ideas to develop fluency, reasoning and confidence in solving increasingly sophisticated problems.

At Badsley, our aim for each child is to develop a sound understanding of maths, equipping them with the skill of calculation, reasoning and problem solving that they need in life beyond school.

Implementation

Our maths curriculum uses a mastery approach to introduce and reinforce mathematical vocabulary and concepts to enrich and deepen understanding. Together, these elements help cement knowledge so pupils truly understand what they've learnt.

All pupils, when introduced to a key new concept, should have the opportunity to build competency in this topic by taking this approach. Pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

- **Concrete** children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.
- *Pictorial* children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems.
- **Abstract** With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence.

Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child.

<u>Impact</u>

At the end of their mathematical education, we expect our children to:

- Perform basic numeracy skills fluently to include the rapid recall of key facts and procedures.
- Understand the mathematics likely to be encountered in daily life.
- Approach problems systematically and choose appropriate techniques for their solution.
- Enjoy mathematical experiences and achievements and celebrate their own and others' achievements.
- Mathematical vocabulary is articulated across all concepts in maths.
- The flexibility to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics

A mathematical concept or skill has been *mastered* when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

Our Ultimate End Goal: What will our mathematicians be able to do when they leave Badsley Primary?

At Badsley Primary, we believe that mathematics is a subject for everyone. We want to ensure that each and every pupil at Badsley Primary has a solid understanding of the key principles linked to maths and can apply them independently. As educators, we strive to foster a love of mathematics and that children are confident enough to make mistakes and use those as drivers to enhance their own learning. We provide early years children with the building blocks of mathematics, creating a solid foundation for their mathematical journey ultimately leading to confident and adaptive mathematicians. Pupils at Badsley Primary will use embedded arithmetic knowledge to understand and solve increasingly difficult problem solving and reasoning questions.