

MATHEMATICS

INTENT:

At Beech Grove Primary, children will become systematic, inquisitive and resilient mathematicians who are fluent and relish problem solving. We promote skills through maths which will be invaluable in later life:

Ability to work in a team structure

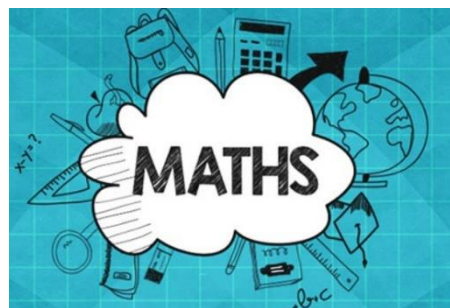
Ability to make decisions and solve problems

Ability to communicate verbally

Ability to plan, organise and prioritise work

Ability to obtain and process information

(Top 5 skills required by employers)



The curriculum at Beech Grove Primary ensures time is given to build fluency with calculation building confidence and the foundations to be able to think more deeply. It offers regular opportunities to problem solve and work collaboratively. When problem solving, children develop resilience and are given the vocabulary to have discussions about strategies and solutions. Carefully structured and sequenced lessons incorporate challenge for all children who are given equal opportunities to shine. By conducting both targeted and swift responsive interventions, it is our ambition for children to 'keep up not catch up.' We believe that confidence and flexibility in thinking are the key to unlocking maths and aim to eradicate the phrase 'some children can't do maths.' As a school, in our specific context, we believe we have a duty to teach financial education to provide the foundations for how to manage money well.

IMPLEMENTATION:

Children at Beech Grove Primary are taught maths in a systematic, structured manner, where children learn key facts and are given the opportunity to deepen their understanding. All children are given the belief that if they work hard, they can achieve and if they require extra support, we can help them keep up as opposed to catch up.

Our maths lessons are carefully sequenced, which enables children to build on their previous learning and apply this to new problems they may encounter. Each lesson is built on small steps of learning which cumulatively lead to successfully meeting an overall objective. This makes it easier for all children to access learning and understand the new concepts that are being taught. It also enables the class teacher to be able to pinpoint exactly where a child has a misunderstanding and an intervention can be delivered to address this.

Opportunities to teach maths across a wide range of subjects is planned into our curriculum; examples include: different graphs and charts in science or times tables warm-ups in PE.

We teach our children how important maths is in practical ways especially in Key Stage 2 where we study financial education and take part in enterprise projects.

Regular high-quality CPD is delivered to staff through the school's maths team which is made up of teachers from each year group who are passionate about teaching maths. The maths team, with support and inspiration from Archimedes Maths Hub, are committed to developing the big ideas of the 'mastery approach' to teaching maths (representation and Structure, mathematical thinking, fluency and variation) at Beech Grove Primary School.

Calculation Fluency

Each maths lesson begins with revision of previously learned key maths objectives to allow the children to embed these concepts into their memory. Teachers use this time to assess children's understanding of previous taught topics and can use this to help plan any future lessons or interventions. Alongside this, children will complete rapid recall tests, which develop fluency in calculation. We believe it is essential that children learn their times tables and we have invested in Times Tables Rockstars, so children can also practise at home. By being able to calculate more fluently, children can then reason and problem solve more easily.

Reasoning and Problem Solving

Children are encouraged to reason about the mathematical concepts they are taught in lessons. Through partnered talk, group discussions or written work, children are given the opportunity to share their mathematical thoughts. This fosters children's inquisitiveness about mathematics and aids their enjoyment of the subject as they become more confident.

Children who rapidly grasp a concept in a maths lesson are encouraged to 'dig deeper' and use the new knowledge they have gained to solve problems. This builds in resilience and allows them to think deeply about mathematics whilst further fostering enjoyment of maths.

We are passionate about promoting the enjoyment of maths for all. Each year, we explore problem solving through our Maths Enrichment Day. The children have to use their maths problem solving skills to crack codes and solve mysteries.