

Charlestown maths III statement. We are mathematicians!

Intention:

Mathematics at Charlestown is taught in a way to reflect our whole school intent: to inspire, enrich and enlighten.

Maths is a vital part of our day. We believe that maths teaches us how to make sense of the world around us. We aim to promote a love of maths through **practical activity, real life application, cross-curricular learning and enrichment.**

We aim for children to become **fluent in the fundamentals of maths**, develop conceptual understanding and have the ability to **recall and apply** knowledge rapidly. We want children to develop the **component maths knowledge** in a clear sequenced way in order to be able to confidently meet the **composite** (top level) outcomes of our maths curriculum.

Our curriculum offer ensures pupils develop their declarative, **procedural and conditional** knowledge. We develop declarative knowledge by teaching the mathematical facts, concepts and rules, the procedural knowledge by ensuring pupils know how to perform the steps in a process and the conditional knowledge by providing children with the ability to know when to use a procedure, skill or strategy.

Our mastery approach requires children to be taught following a sequence of **concrete, pictorial and abstract** methods, which **build upon** their developing understanding as they progress through the school. This provides them with a **fluent skill set** that can be applied to a wide range of questions, problems and scenarios to accomplish solutions and/or explanations to express their methods and thinking.

We are **ambitious for all of our pupils** and teach for a secure and deep understanding of mathematical concepts through **small manageable steps**. We want children to become real **masters of the content**, being creative and applying it in new ways.

Implementation:

To ensure full and effective **curriculum coverage** we use White Rose maths. The small steps develop **component knowledge** slowly. Key learning is regularly reviewed and recapped to ensure **fluency** using Big Maths clics and fluency lesson starters.

Children are guided towards an understanding of new learning through the use of carefully selected and effective **manipulatives to deliver practical demonstration**. This in turn leads to children gaining confidence and independence when selecting resources to support their own learning.

Learning progresses with clear **worked examples, models and images** to form pictorial representations and visualisations to further secure their understanding. Children are given the opportunity to put their mastered skills and knowledge into practice to achieve outcomes and answers that demonstrate a deep and secure level of understanding.

Throughout this journey children are assessed lesson by lesson as well as using end of unit tests. Children are summarily assessed each term using teacher judgments along with standardised tests. **Misconceptions, misunderstandings and mistakes** are encouraged and even celebrated in the knowledge that they are necessary stepping-stones on the path to success.

Resilience is emphasised within maths to enable all children to try their best to **reason and problem solve** with increased confidence. We use a range of discussion activities to improve confidence and develop reasoning skills.

Maths learning walls are utilised as part of each lesson. Key concepts, meanings and vocabulary are captured where they are easily accessible to aid independent learning.

Maths in EYFS aims to nurture all children as **confident mathematicians for the future**. Teaching focuses on developing firm foundations in engaging and practical ways.



Impact

Lifelong learning takes place within the subject of mathematics: children acquire useful knowledge and information while developing invaluable personal strengths and qualities such as **perseverance and resilience** needed to succeed in life.

Well planned sequences of learning support children to develop and refine their maths skills. Children reason and problem solve with confidence in an environment that encourages mistakes.

Ongoing assessments through pit stops, live marking and teacher talk in every lesson ensure progress is being made. Day to day assessments are recorded on Otrack. Summative assessments are completed each term.

Parents are informed of their children's progress in maths at parents' evenings and in written reports. Targets are shared with children and parents to work on at home.