

# Mathematics at Ashton Gate Primary School

Mathematics is a creative, connected and experimental discipline which helps us to see the world in new ways. We want all pupils at Ashton Gate to experience the beauty and power of mathematics and to develop a sense of 'awe and wonder' at its relevance to the world around them. We believe all children can achieve in mathematics and promote positive mathematical attitudes alongside knowledge. We teach for a secure, deep and connected understanding of concepts and provide challenge through rich and sophisticated problems.

## Intent

We aim for all pupils to:

- Become fluent in the fundamentals of mathematics 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 contents with increasing sophistication, including in unfamiliar contexts and real-life scenarios
- Reason mathematically by following a line of enquiry, and develop and present a justification, argument or proof using mathematical language

## Implementation

A mastery lesson structure which allows for all learners to move together through content, flexibly accessing support or challenge as needed.

- Immediate support is available for slower graspers. This is provided in class using flexible grouping based on continuous assessment, supported by out-of-class intervention where necessary. All support is based on a CPA (concrete pictorial abstract) approach.
- All learners have the daily opportunity to access deep and challenging content, including reasoning tasks based on misconceptions and application of their learning to new contexts.
- Children with significant additional needs are provided with targeted teaching at the appropriate level. They also take part in whole-class learning where appropriate and are supported to access this alongside their peers.
- In Early Years, mathematics learning opportunities are woven into the indoor and outdoor provision. Children are supported by adults to guide their own learning through rich discussion and appropriate scaffold.



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## Assessment

- Whole Class Feedback is used across the school to address misconceptions and adapt planning in next steps and future lessons
- Key Stages 1 and 2 complete formal assessments 3 times per year (twice a year for Year 1). This supports teachers with attainment judgements and provides gap-analysis to inform teaching and interventions
- EYFS use focus activities to support attainment judgement and inform teaching and interventions

## Fluency in Key Stage 2

Discrete arithmetic sessions (maths meetings) are used to consolidate prior learning and encourage automaticity and fluency in number, including mental and written methods.

Times tables sessions are delivered twice a day, combining 2-minute tests with conceptual teaching of a fact of the day.

## Mastering Number

EYFS and Key Stage 1 follow the NCETM's Mastering Number Programme. These sessions are designed by specialists to develop fluency and number sense.

## Impact

Students at Ashton Gate are:

- Confident and capable mathematicians with fluency, reasoning and problem solving skills which build throughout the school.
- Enthusiastic and interested in mathematics. Prepared to take risks and try new things in order to succeed.
- Resilient and prepared to tackle their next key stage of mathematical learning