

# Curriculum overview

## *Mathematics*



### Our approach

At La Fontaine Academy, we take a mastery approach to the teaching of mathematics. The fundamental principle is that all children can be successful at mathematics when given high quality instruction and meaningful support. Children progress through the learning at broadly the same pace, with opportunities for faster graspers to increase their understanding through exploring each area of the curriculum in depth. We want to ensure that all children have a solid understanding of the subject: the ability to solve a calculation is not enough; children must be able to demonstrate and articulate their understanding of the mathematical concept.

‘A mathematical concept or skill has been mastered when, through exploration, clarification, practice and application over time, a person can represent it in multiple ways, has the mathematical language to be able to communicate related ideas, and can think mathematically with the concept so that they can independently apply it to a totally new problem in an unfamiliar situation.’

Drury, H. (2014), *Mastering Mathematics: Teaching to Transform Achievement*, p.9. Oxford University Press.

We do this by:

- breaking down each part of the curriculum into small steps to support understanding of key concepts
- planning each lesson so that it builds on the previous one to ensure continuous progression
- using a range of concrete materials and visual representations – in all year groups – to scaffold learning
- including problem solving and reasoning skills into all lessons.

### Our reason for taking this approach

We accept the definition of ‘mastery’ as stated by Drury. We know that many of the children in our school are able to complete a calculation correctly, but we also know that this is because they are familiar with the relevant algorithm (or tricks); some of the children have difficulty articulating what they have done and why that algorithm works.

We want to ensure that our children truly understand the fundamentals of mathematics; by doing so, we believe that we are providing our children with the knowledge and skills necessary to study more complex mathematics at secondary school and beyond. We also believe that by giving the children this fundamental grasp of mathematics, we are providing them with valuable life skills.