

## Intent

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. At Oriel Academy, our Mathematics Mastery curriculum has been developed to ensure every child can achieve excellence in mathematics. All children can experience a sense of awe and wonder as they solve a problem for the first time, discover different solutions and make links between different key areas of mathematics. It provides all pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to Science and other subjects.

## Implementation

### EYFS - Maths Mastery (Numbers and Space, Shape and Measure)

In EYFS, children follow the Maths Mastery programme. Maths lessons are fun, practical and stimulate children's curiosity to think and explore the new concepts that they are being presented with. Maths Mastery lessons involve pair, group and whole class work, which enables children to explain their learning and understanding in a variety of different ways. Children work on set tasks with their teacher to support and challenge their thinking. Tasks are assessed by the teacher and next steps are provided to move children's conceptual and mathematical thinking on. As well as formal Maths Mastery lessons, Reception children will partake in regular Maths Meetings, where they rehearse and reinforce maths fluency across various topic areas (including days of the week, number, shape etc). Maths is also accessible by pupils around the environment via continuous provision in the setting; to enable pupils to build maths skills contextually, inside and outside areas have been organised with activities which encourage children to learn maths skills through play. Additionally, children have access to maths resources during their independent play to help them reinforce their learning further and access maths practically.

### KS1 and 2 - Maths Mastery

Maths Mastery programme uses concrete, pictorial and abstract teaching methods and approaches. Maths lessons are fun, practical and stimulate children's curiosity to think and explain what they are being presented with. Lessons require children to work and talk together in pairs, groups and in whole class contexts to explain their learning and understanding. Independent work provides opportunities for problem solving. In addition to the Maths Mastery coverage suggested for Year 6, students also receive additional support including, but not restricted to, PiXL therapies. This is done in order to ensure that pupils have every opportunity to achieve to their best potential and leave the school fully equipped and prepared for KS3.

## Impact

By using the Maths Mastery Programme of Study consistently throughout the school, the following impact has been observed and evidenced through triangulations consisting of book looks, lesson observations and pupil voice:

- Opportunities to close gaps for children to make at least expected progress
- Evidence of high quality provision in Maths books
- Improved teaching pedagogy and subject knowledge for staff delivering the programme
- Increased levels of confidence, resilience and enjoyment of maths lessons
- Content coverage in line with the National Curriculum and ensures seamless progression
- Opportunities to challenge all pupils at their ability, including More Able Disadvantaged and SEND pupils.