

MATHEMATICS

IMPLEMENTATION

Our Maths curriculum at Clifton Hill provides breadth and balance, is relevant and engaging and is differentiated to match the needs and abilities of all our students to ensure that everyone is able to excel. Maths also supports the Values at Clifton Hill and staff and parents are aware of this via the school's website.

As a school, we have implemented a programme called **Maths Mastery** (<https://www.arkcurriculumplus.org.uk>) as a means to developing a solid understanding of mathematical concepts which can be applied in a variety of contexts through reasoning and problem solving challenges.

Students receive Maths Lessons throughout the week in differentiated groups according to their ability (from pre reception to year 3). We have created our medium-term plans in line with Maths Mastery, but have altered the order and time dedicated to each topic to suit and benefit the needs of our students so that connections between units of learning are easier to recognise. Lesson design links to prior learning to ensure all can access the new learning and identifies carefully sequenced steps in progression to build secure understanding.

From Lower school to Upper school, students follow the scheme of **Maths Mastery** which supports students in learning the fundamentals behind the meanings of numbers and exploring other key mathematical areas. Our maths curriculum is also supported through the implementation of resources from Maths Mastery. Examples, representations and models are carefully selected to expose the structure of mathematical concepts and emphasise connections, enabling students to develop a deep knowledge of mathematics. Procedural fluency and conceptual understanding are developed in tandem because each supports the development of the other.

Where students require additional support, 'scaffolds' are used to support students further to ensure that they have secured the small step before moving on. These 'scaffolds' may be in the form of returning to concrete resources or pictorial representations. For students who understand a concept quicker, challenges are used to deepen and challenge learners further within the curriculum area.

In the classroom students are taught through whole-class interactive teaching, enabling all to master the concepts necessary for the next part of the curriculum sequence, paired and group work and 1:1 interventions. In a typical lesson, the teacher leads back and forth interaction, including questioning, short tasks, explanation, demonstration, and discussion, enabling students to think, reason and apply their knowledge to solve problems. Use of precise mathematical language enables all students to communicate their reasoning and thinking effectively and supports continuity throughout the year groups. If a student fails to securely grasp a concept or procedure, this is identified by staff working within the lesson, and gaps in understanding are addressed systematically. Significant time is spent developing deep understanding of the key ideas that are needed to underpin future learning. Within each lesson it is recognised that practice is a vital part

of learning, but the practice must be designed to both reinforce students' procedural fluency and develop student's conceptual understanding.

Staff have access to regular training from the Maths lead and via online courses <https://www.arkcurriculumplus.org.uk/our-programmes/primary/mathematics-mastery>

Maths Mastery is implemented via the 5 Big Ideas framework

Teaching for Mastery

