

Maths curriculum Intent 24-25

Intent

At FreshSteps Independent School, we aim to cultivate **questioning and curiosity** about mathematics, breaking down the barriers that often cause students to feel intimidated by the subject. Our primary goal is to help pupils become **fluent in the fundamentals** of mathematics, develop strong **reasoning** and **problem-solving** skills, and feel comfortable engaging in "maths talk." We strive to remove the misconception that "maths is difficult" or a foreign language, ensuring students feel confident expressing their understanding.

Through innovative approaches such as the **My Personal Finance Skills programme**, which is integrated with the **Duke of Edinburgh Award** for the Bronze skills section, we emphasize the real-life application of maths. This ensures that students in KS4 and KS5 see maths as relevant to their lives, preparing them for real-world financial decisions. The curriculum aligns with the **National Curriculum** for Maths, focusing on practical problem-solving rather than teaching maths solely for exams.

Implementation

To ensure deep understanding and engagement with mathematical concepts, we incorporate various methods and activities:

- **Questioning:** Encouraging thoughtful questions to help deepen understanding.
- **Mini whiteboards:** Offering pupils a flexible and immediate way to trial solutions without fear of making mistakes, promoting confidence and discussion through shared problem-solving.
- **Short tasks:** Allowing students to focus on one or two problems at a time, reducing anxiety and providing immediate feedback on understanding.
- **True or False:** Developing mental reasoning by challenging students to justify their answers, encouraging discourse around mathematics.

We use **Unit Awards** to introduce new concepts, beginning with **concrete objects** to model problems before transitioning to **pictorial representations** and finally **abstract problem-solving**. This progression supports a deeper understanding and helps students relate mathematical principles to real-life scenarios. Teachers focus on linking maths to everyday situations, such as explaining how **algebra** is used for tasks like organizing or collecting like terms.

The curriculum is enriched with precise questioning and **real-world applications** to demonstrate the necessity of maths in daily life. For example, lessons include discussions on financial maths, teaching students about budgeting, saving, and other personal finance skills.

Teachers track pupils' progress using a **traffic light system** to identify areas of success and where more support is needed. Regular assessments, including **past papers** and **teacher-curated tests**, help monitor students' development. **Termly assessments** ensure that learners are progressing toward meeting curriculum goals and achieving qualifications.

Impact

The impact of the mathematics curriculum at FreshSteps is reflected in students' **deeper understanding** of mathematical concepts and their ability to relate maths to the real world. Through open questioning and fostering a culture where no question is "silly," students develop confidence in discussing and reasoning through maths problems verbally, pictorially, and in written form.

The introduction of **financial maths** and **unit awards** has increased students' enjoyment and engagement with the subject. As a result, they are showing quicker recall of mathematical facts and procedures, and they approach problem-solving with greater confidence. Furthermore, pupils are becoming more **fluid and flexible** in their use of different representations and techniques to tackle various challenges, preparing them for future independence and real-life decision-making.

By creating an environment where the journey to finding an answer is valued more than the answer itself, FreshSteps encourages a love of learning and a resilient approach to mathematics.