

Maths Curriculum Intent

23-24

Intent

In class, we promote questioning and curiosity about mathematics. The main aim is for pupils not only to become fluent in the fundamentals of maths and be able to reason and use problem-solving skills but also not to be scared about "talking maths". We will try to eradicate the misconception that "maths is difficult and that it is another language I can't speak." We intend to achieve this by taking aspects of the unit awards and combining it with concrete and "real maths".

This above "My Finance Skills: IN-SCHOOL", a course offered to pupils KS4/KS5. The My Personal Finance Skills programme has teamed up with the Duke of Edinburgh Award to provide pupils with a skills section for the Bronze Award. This will ensure that Maths is "REAL"; pupils can relate to it in everyday life and apply mathematical knowledge to problem-solve rather than teaching maths to pass an exam. The curriculum is designed to incorporate the National Curriculum for Maths aims.

Implementation

Each lesson content includes; Questioning, Mini whiteboards work, True or False , Short tasks.

Significant time in the curriculum is spent developing a deep knowledge of mathematical ideas to underpin future learning and solidify fluency and reasoning in mathematics.

Unit awards is an element of classroom practice to help learners develop a deep understanding of maths. Children can use concrete objects to help model problems when introducing new topics. The intent is to move them on to representing problems in pictorial form. Finally, the hope is that pupils can answer abstract questions, drawing on previous knowledge and skills to help answer.

We take these aspects of Unit awards teaching practice to help our pupils to engage more in maths and make maths more enjoyable.

Mini whiteboards - Instant and not so „concrete“ like pen in books. Learners will gain more confidence knowing that they can „rub things off“ if it is not.

correct. This will also allow more discussions in class through sharing methods of working.

Short Tasks - Can also be done on mini whiteboards with picture evidence. This will eliminate/reduce pupils' anxiety by seeing one or two questions at a time. Short tasks will also ensure the teacher is more aware that their pupils understand the topic through regular feedback,

True or False - This encourages mental reasoning without having to „work out an answer“. Learners will be challenged to justify their choice of True or False response. This will open the room for discussion should there be 2 conflicting answers. More importantly, this will encourage and start normalising the maths discourse. The more we talk about maths, the less pupils will find it an „alien“ language.

Reasoning - We will combine their ability to reason mathematically within a real-life context, putting maths topics into their everyday lives. The common question is, „Why would I need that? “ We discuss the skills required to solve problems and apply those to our day-to-day lives. E.g., Algebra requires collecting like terms and solving.

Teachers relate maths topics to everyday life. The aim is to explain why and when we need maths to

help with our day-to-day life so that learners have a deeper understanding of how maths being used in everyday life will enhance their future independence.

Teachers use precise Questioning and ask for explanations. This is to ensure that deeper understanding takes place as well as being able to relate to their day-to-day situations. · Teaching will be supported with carefully chosen resources that are tactile and practical to support Unit awards intention of a deeper understanding of the fundamentals of maths.

Teachers use maths schemes of work at various levels to note down learners' progress day by day or week by week. These documents will be marked using the traffic light system and thus will inform teachers which areas of maths each student is struggling with and achieving in.

These documents will also clearly indicate topics that need to be looked at in terms of teaching style, Questioning, resources, and the correct level of support. Furthermore, pupils will be assessed periodically using past papers/teacher-curated assessments to check progress. Learners are assessed termly, usually on a sample paper or, if pupils are ready, the formal qualification paper.

Impact

The impact of mathematics curriculum at Freshsteps is that learners have a deeper understanding of mathematics and can relate it to real world concepts. Through open questioning and encouragement to „talk maths“, we have fostered an environment where „no question is a silly question, and no answer is a silly answer“ because teachers care more about the journey to finding an answer. Learners are developing skills in being articulate and can reason well verbally, pictorially and in written form. With the financial maths curriculum along with the unit awards, learners' enjoyment of maths and the levels of engagement have increased.

Pupils have started to demonstrate a quicker recall of facts and mathematical procedures as well as having more confidence when attempting to tackle problems. Learners are beginning and continue to develop fluidity and flexibility to use different representations to help them to problem-solve.