

# MATHS INTENT



## What we aim to achieve in Maths

At St. Michael's we wish to provide an environment, experiences and opportunities where children are truly becoming mathematicians and not just "doing" maths. We want to equip all of our pupils with skills and knowledge in maths that mean they are able to use these successfully and confidently in the wider world. We seek to promote an enjoyment of maths and problem solving which fosters engagement and drive.

In Mathematics, we aim to encourage all our children to want to become confident mathematicians. We want them to feel that they are able to achieve whilst allowing them to challenge themselves in order to extend their own learning. We hope to provide a thinking environment where the children naturally question their own knowledge and are able to **explain** and **prove** their thinking to both themselves and others.

## Mastery at St. Michael's

Our approach is that every child is able to achieve and we aim to instil this belief in our children. Learning facts (**fluency**) is only a part of becoming a mathematician. Being able to question, **explain** and **prove** their own thinking demonstrates our desire to encourage our children to be free thinkers – willing to take risks and accept that mistakes will inevitably happen. Encouraging resilience and perseverance is a key factor of becoming a successful learner and we therefore aim to provide challenges which will help to develop these skills.

# BIG IDEAS

**FLUENCY** – I am a mathematician because I am **fluent** in basic maths facts.

**EXPLANATION** – I am a mathematician because I can **explain** my thinking using precise mathematical language

**PROOF** – I am a mathematician because I can **prove** my thinking when solving problems.



## *How we deliver Maths*

Maths is taught by knowledgeable staff with a secure understanding of the concepts being taught and the small steps required to master these. Confident teachers address common misconceptions and use them as a teaching tool, in addition to a range of equipment to support and extend children's learning.

Children progress from concrete and pictorial to an abstract understanding of maths. Time is given to allow them to think through problems for themselves; to provide their own answers and reasoning; and are encouraged to learn from their mistakes. Teachers promote the use of correct vocabulary and a range of question types; children learn to listen carefully and pose their own questions.

Excellent relationships are developed between teachers and pupils where children are confident to explain and prove their thinking to others, working together to learn together.