



Overview of Mathematics at Saint Nathaniel's Academy



Power Maths

Every lesson starts with a 'Discover' question where the learning from the previous day is presented in a real life problem. The teacher will model their reasoning and mathematical thinking through this section of the lesson and guide the children's thinking towards the new learning. The children then take part in a 'Think Together' task where they are encouraged to: discuss the new learning; model their thinking using representations and manipulatives; begin to spot patterns and test the theory; identify the rule of the new teaching point. The challenge session allows the children to apply their learning in the main exposition before moving on to independent practice. This is varied practice which allows the opportunity to apply learning in different contexts. There is a focus throughout the lesson on children becoming fluent through reasoning their way through the problems using the correct mathematical language in their explanations. The session ends with a reflect question which enables the teacher to assess if the class are ready to move on.

Mastering Number

Daily 15 minute sessions develop pupils' understanding of number to build firm foundations, fluency and flexibility with number facts. In EYFS and KS1 the focus is on additive reasoning, and KS2 is on multiplicative reasoning. Having these firm foundations in counting, cardinality, composition and comparison in number frees up working memory in the Power Maths session to focus on structures and develop the deep conceptual knowledge that enables the children to know more and remember more.

Retrieval

Key number facts and procedures are practiced daily in the SODA session to keep learning fresh and support the development of deeper conceptual knowledge in the main maths lesson. Facts and procedures are tested weekly to ensure they are being retained.

Assessment

Children are tested each half term on the content they have been taught. Children requiring further support at each assessment point are identified for intervention to ensure they are keeping up not catching up.

Promoting Enjoyment of Mathematics

All children have access to the Active Learn platform where they can practice the concepts they are learning in games. They are rewarded with coins to spend in the virtual world.

Battle of the Bands

'Friendly' competition in the learning of key facts is promoted through Numbots in KS1 and Times Table Rock Stars in KS2.

