



Maths

Vision (intent)

Maths is a subject that is valued and understood to be a part of children's everyday life. It is interwoven through all other subjects taught in school. We aim for all children to leave our school being confidently numerate and able to apply all areas of Maths with deep understanding.

We aim for children to view Maths not in terms of individual concepts but as areas that interlink and can be used to solve problems and explain and reason. Through carefully planned lessons and resources, we aim to ensure high quality teaching and experiences which will equip children to utilise their skills across a variety of situations.

Curriculum (implementation)



Curriculum structure

The curriculum is structured to provide children with the opportunity to learn and retain fluency skills across all areas of Maths. They receive high quality teaching which provides opportunities for all children to apply fluency skills to solve problems and reason. Mathematical vocabulary is explicitly taught with a clear progression across the school. Regular adult modelling and activities involving children working in mixed ability groups, ensures varied and frequent opportunities for exposure to rich mathematical vocabulary.

Abacus Maths is used as a planning framework and provides focused objectives and progression across the year groups. Lessons are adapted to suit each individual cohort with targeted questioning and differentiation built in to ensure a specific outcome. Understanding of mathematical concepts and procedures is achieved in small steps and underpinned by secure fluency skills.

Across KS1 and KS2, concepts are taught gradually ensuring deep and secure understanding. This is achieved through the use of concrete and pictorial representation of a concept before moving onto abstract and formal representation.

A map of each half-term's learning is annotated across a class Maths Wall and written straight onto the backing. This learning map provides a constant resource for children to refer to and ensures links are made explicit.

Mastery opportunities are provided for all children through a wide variety of resources e.g. NRich, Maths Hub, Maths No Problem, White Rose and I See Reasoning. Learning is deepened by regular and targeted questioning with children required to answer in full sentences using correct mathematical vocabulary.

Lesson delivery (Pedagogy)

We have an expectation that all children can succeed in maths, which we achieve by keeping the class together as much as possible. Where appropriate, split inputs will be delivered with specific focuses and outcomes for target groups. Children are taught through a mastery approach- giving children a secure and sustainable understanding of mathematical concepts by developing consistent models and images throughout.

We ensure children are fluent in mathematical procedures and number facts by rehearsing these in systematic ways. Children are engaged and motivated by our Times Table Rock Stars program which simultaneously provides opportunities for fluency and quick recall whilst being fun and inclusive.

Children who master a concept easily are expected to deepen their understanding, for example by applying it to solve problems embedded in mathematical investigations or more complex contexts. Children who do not master an objective with the rest of the class are supported to enable them to gain more experience and achieve mastery, for example through same-day intervention, plus longer-term support if necessary. Children make links between different areas of Maths and utilise these across the varying concepts.

Curriculum enhancement

The Maths Curriculum is further enhanced by providing regular opportunities for outside competitions and events such as: Piggott Maths Challenge and the KEYS Academy Trust Maths Challenge. The Maths Problem Solving Workshops also provide a challenging day for pupils to apply their Maths skills to solve problems. BlueCoats School delivered a weekly Maths club to our KS2 pupils which was greatly enjoyed and also developed the confidence of some less-secure pupils. Times Table Rockstars is an excellent supplement to our curriculum and also enhances it through the Battle of the Bands competitions against different classes and local schools.

Outcomes (Impact - How do we measure and evaluate)

Staff assess pupils' progress in Maths on a daily basis through discussion, observation and questioning. Pupils needing further support are given a same-day intervention or a short-term focused group intervention is planned.

Cluster and in-house moderation of Maths books gives staff an opportunity to share good practice with other schools and refine methods of marking, planning and assessing.

Teaching staff use a focused tracking system, Target Tracker, to assess individual pupils' progress against the year group objectives. This is used to inform future planning and, if needed, interventions.

Partnerships

Piggott School

Waingels Secondary

KEYS Academy

BlueCoat School

MathsHub

Abacus

Times Tables Rock Stars