The Maths Curriculum Statement

Our Intent

At Whinney Banks we want our children to be excellent mathematicians & they are (top 20% nationally for progress 2023).

Here is why.

We follow our **own bespoke curriculum**: ensuring that every child has the opportunity to succeed & where these steps of success are harder for children, they have the chance to catch up & keep up.

Our maths curriculum includes all the elements of the revised National Curriculum for mathematics & is taught by establishing **fluency with number & calculation** (we are really strong at this) before moving on to reason & solve problems. We want our children to be pattern spotters & hypothesis testers & to respond with positivity & resilience when maths becomes more challenging. Our expectations of what children are able to do by the end of their primary schooling are, & have always been, very high. There are no limits for the children of Whinney Banks. We want our children to be **equipped for the next stage in their educational journey & beyond to adulthood.**

At Whinney Banks, we believe that mathematics is an essential skill for adulthood, a key part in making sense of an ever more complex world & a powerful tool for analysing & communicating information & ideas. Maths is essential to everyday life, critical to science, technology & engineering, & necessary for financial literacy & most forms of employment.

As such we aim, through our curriculum, to provide children with enjoyable, stimulating experiences; to give children opportunities to take part in mathematics investigations; to develop their confidence in themselves as mathematicians; to develop their natural curiosity & ability to question; to encourage them to have high expectations of themselves; to enable children to use a range of mathematical tools such as mental calculations, pencil & paper methods & ICT & to give them opportunities to apply their mathematics knowledge, skills & understanding in a range of meaningful contexts.

We aim for all pupils to:

- **become fluent** in the fundamentals of mathematics, including through varied & frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding & the ability to recall & apply knowledge rapidly & accurately
- **reason mathematically** by following a line of enquiry, conjecturing relationships & generalisations, & developing an argument, justification or proof using mathematical language
- **be able to solve problems** by applying their mathematics to a variety of routine & non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps & persevering in seeking solutions.

We know that early learning in **maths involves lots of play & the use & manipulation of real-life objects through which children develop mental models & images** of how number & shape & space work. Our calculation policy demonstrates a clear progression from these early experiences through to expanded & eventually shorter, more efficient methods of calculation.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning & competence in solving increasingly sophisticated problems. Part of this interconnectivity comes through our 'Daily Works' which interleave previous topics as well as showing connections to the next. Children also apply their mathematical knowledge to science & other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace, **we do not stream**. However, decisions about when to progress should always be based on the security of pupils' understanding & their readiness to progress to the next stage. Our staff are skilled & are always 'there' to mark 'in the moment.' We want our children to get instant feedback & to know whether consolidation or extension is required. Pupils who grasp concepts rapidly should be challenged through being offered rich & sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding (through intervention or additional practice), before moving on.