Mathematics Mission Statement

Mathematics at the Woodland Federation

At both of our schools, our mission is to create a superb learning community that challenges children to acquire a thirst for knowledge. Our aim it that all children make progress and attain mathematically in line with the National Curriculum and the NCETM Mastery Approach based around five 'big ideas': mathematical thinking, fluency, variation, coherence and representation and structure.

- **Mathematical Thinking**: If taught ideas are to be understood deeply, they must not merely be passively received but must be worked **on** by the student: thought about, reasoned with and discussed with others.
- **Fluency**: Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics.
- **Variation:** Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships.
- **Representation and Structure:** Representations used in lessons expose the mathematical structure being taught, the aim being that students can **do** the maths without the physical or pictorial representation.
- **Coherence:** Lessons are broken down into small, connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of concept and the ability to apply the concept to a range of contexts.

NCETM, 2017

At the Woodland Federation, we also pay close attention to the mathematical vocabulary required by a child to explain their thinking as well as how the explanatory sentences are structured. This is in line with the Oracy project that we use across our curriculum.