Curriculum statement for the teaching and learning of Maths

The national curriculum for mathematics aims to ensure that all pupils:

- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- Can solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

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 and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

INTENT	Here at Penshurst, we aim to provide a Maths curriculum that caters for all learners and their individual needs and abilities. We ensure that Maths is applied in different contexts, giving the children the understanding of how mathematical knowledge links to the wider world, thus enabling our learners for a successful life beyond Primary

	School. We ensure that assessment is used accurately for every objective taught so pupils can build on their knowledge and are challenged through a variety of fluency, variation, reasoning and mastery questions. Mastery & Greater Depth In all phases of our primary school - from Early Years Foundation Stage to Upper Key Stage Two - we challenge our children to explore Maths in a deeper context, understanding numbers in a variety of forms, and to use mathematical vocabulary to explain their findings. Knowledge is scaffolded by questions transitioning from concrete to pictorial to abstract so the children have a secure foundation of mathematical concepts which can then lend themselves to helping develop their reasoning and problem solving skills. We encourage our pupils to take responsibility for their learning in lessons and to build resilience, acknowledging that struggles can be overcome and are all part of the learning process.

Underpinned By	The Expectation To Progress	Modelling	A Vocabulary & Manipulative Rich Environment	Maths In Context
	Through pre-assessment, all children are expected to identify their specific starting points in lessons and make progress from these points.	Teachers model good practice, along with high expectations, in lessons in order for children to gain the skills needed to	We intend for our classrooms to be vocabulary rich environments, using every opportunity to incorporate	In all areas of the curriculum, mathematical concepts will be identified and discussed, promoting the use of maths across

		succeed in mathematics.	maths vocabulary into lessons. Embedding maths vocabulary drives the understanding of mathematics and develops pupils' ability to explain mathematically.	all subjects, embedding maths in a variety of contexts for pupils.
	The Teaching of Fluency & Variations	The Teaching of Reasoning	Problem Solving	Greater Depth
	We intend for pupils to become fluent in all areas of mathematics by building on knowledge gained through questioning in basic forms before moving on to more varied forms of questioning. This allows children to apply mathematical methods fluently and rapidly before adapting this knowledge to questions displayed in more complex forms.	We intend for pupils to reason mathematically and logically by following lines of enquiry, proving relationships and debunking generalisations using justification or proof along with mathematical language.	We intend for all pupils to persevere in solving problems by applying their mathematical knowledge to a variety of questions, presented in different forms, using skills to identify information given and to break down problems into separate calculations using specific operations.	We challenge our pupils to secure long-term, deeper understanding of mathematical concepts which can be applied in a variety of contexts

Implementation			