Maths Curriculum Intent – Kilmington Primary School

The National Curriculum

The national curriculum for maths 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 have conceptual understanding and the ability to recall 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 non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Curriculum Intent

Mathematics is a creative and highly interconnected discipline that provides the solutions to many everyday problems. It is essential to everyday life; critical in science, engineering and technology; and necessary for financial literacy and many forms of employment. We intend to provide a high-quality mathematics curriculum that builds year-on-year, forming solid building blocks for future learning. Through learning mathematics children will develop an ability to reason, justify, argue and prove hypotheses through increasingly complex concepts and ideas.

Curriculum Design

At Kilmington Primary school, we believe all children should be confident mathematicians. By delivering lesson in which all children can access learning at their own level through using small steps, manipulative and varied representation, no children are left behind. Kilmington school operates with mixed age classes throughout the school and uses the "White Rose" scheme of work as a foundation. This scheme has been chosen as it includes a mixed age planning format whereby a mixed age class can work on the same mathematical strand, but at different levels across the two year groups and abilities in the class. It is supplemented using a wide range of other resources including, but not limited to, the NCETM materials. Children develop the skills of confidently reasoning about their learning, using clear explanations supported by the use of stem sentences, specifically taught vocabulary and a range of problems set within real contexts to bring meaning to them.

Nurturing lifelong learning behaviours through Mathematics

Motivation/ Resilience • Keeping going • Perseverance • Resilience • Not giving up I'm Wilbur Woodpecker	Fm Olive Owl Engagement/ Reflectiveness • Planning • Reflecting • Thinking things through	Collaboration/ Reciprocity <i>Listening</i> <i>Sharing</i> <i>Collaborating</i> <i>Working as a team.</i>	Thinking/ Resourcefulness • Curiosity • Finding out • Why? Where? • When? Who? I'm Samuel Squirrel
Trialling different ways to find a solution to a complex problem. Tackling a number of examples in order to bacome "fluent"	Explaining how to find all the solutions to a problem. Drawing on prior learning to help tackle a word problem.	Sharing possible solutions to a problem and using mathematical vocabulary to explain your reasoning to a partner.	Choosing appropriate manipulatives and/or methods of calculation. Identifying questions to investigate, e.g. How
Evaluation	skills in different subjects like science or computing.		10?
The curriculum is reviewed on a yearly basis to ensure that it is responsive to the needs of our current pupils.			