

Statement of Intent

Purpose

At Wortham Primary School, we want to teach our children to be fluent in the fundamentals of mathematics, but also teach them the ways in which maths is used every day in the 'real' world. We teach our children to be problem solvers. Children have regular opportunities to grapple with, and solve challenges in a variety of contexts. Alongside problem solving, our curriculum allows children to develop their reasoning skills and to become confident in making conjectures and justifications. At Wortham, we encourage our children to be curious, ask questions and spot connections and patterns within their maths. Our overall aim is for our children to be confident, curious and excited mathematicians who have the skills and strategies to apply maths in the world around them.

Principles

- We cover learning objectives in a carefully sequenced way and ensure objectives are revisited and revised frequently to help deepen understanding
- A wide variety of learning activities are planned for, including learning outdoors, using manipulatives, working collaboratively, solving problems and talking through ideas
- Problems are represented in different ways to help develop children's fluency
- Children move between concrete, pictorial and abstract representations
- Long and medium term plans ensure there is progression throughout the school
- Strong links are developed between mathematics, science and computing and this supports children in valuing the importance and relevance of maths in the real world
- Key mathematical vocabulary is modelled and used
- Teachers model strategies of problem solving and reasoning
- Careful questioning is used to extend and develop children's understanding and reasoning

Expectations

- Children enjoy mathematics
- Children use manipulatives
- Children show their workings out and the steps they have taken to reach a solution
- Children work logically and present their work neatly
- Children make mistakes and learn from these. A risk-taking culture is developed in all classrooms
- Children practice fluency, reasoning and problem solving
- Children can make conjectures, justify, provide proof and generalise
- Children make links between their mathematics learning and other curriculum areas
- Children are confident mathematicians who are well equipped with the knowledge and skills needed to take their next steps into further education and the wider world