

Vision 2018-2019

Mathematics at Sandgate Primary School:

At the centre of our approach to the teaching of mathematics at Sandgate Primary School is the unwavering belief that **all children have the potential to succeed**. We believe that **all children** need a **deep** understanding of the mathematics they are learning so that: future mathematical learning is built on solid foundations.

'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 non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.'*

At Sandgate Primary School, we believe that all pupils should be able to:

- use mathematical concepts, facts and procedures appropriately, flexibly and fluently;
- recall key number facts with speed and accuracy and use them to calculate and work out unknown facts;
- have sufficient depth of knowledge and understanding to reason and explain mathematical concepts and procedures and use them to solve a variety of problems.
- solve problems of greater complexity (i.e. where the approach is not immediately obvious), demonstrating creativity and imagination;
- independently explore and investigate mathematical contexts and structures, communicate results clearly and systematically explain and generalise the mathematics.

Teaching at Sandgate is underpinned by careful curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.

The '5 principles of mastery' model exemplifies our aims in relation to the teaching and learning of mathematics.

