



is a company dedicated to helping children understand mathematics by supporting schools and parents with training and materials for use in the classroom and at home.

Maths No Problem at Hove Junior School

Maths Mastery

Teaching maths for mastery is a transformational approach to maths teaching, which stems from high performing Asian nations such as Singapore. When taught to master maths, children develop their mathematical fluency without resorting to rote learning and are able to solve non-routine maths problems without having to memorise procedures.

Parent Video- The Mastery Approach

<https://mathsnoproblem.com/en/mastery/what-is-maths-mastery/>

Hove Junior School

At Hove Junior School, we encourage children to enjoy maths so that they feel secure enough to have a go at problem solving and, most importantly, we help them to see how this learning is applied to real life situations so they will be able to use the things they've learned when they are older.

Maths No Problem

At Hove Junior School, we are using a Singapore approach to teaching Maths with **Maths No Problem** resources to support learning throughout the school.

Parent Video- Number bonds

Dr Yeap Ban Har explains how we teach number bonds.

<https://mathsnoproblem.com/en/mastery/number-bonds/>

Bar Modelling

Bar modelling is an essential maths mastery strategy. A Singapore-style of maths model, bar modelling allows pupils to draw and visualize mathematical concepts to solve problems.

<https://mathsnoproblem.com/en/mastery/bar-modelling/>

CPA Approach

Concrete, Pictorial, Abstract (CPA) is a highly effective approach to teaching that develops a deep and sustainable understanding of maths in pupils. Often referred to as the concrete,

representational, abstract framework, CPA was developed by American psychologist Jerome Bruner. It is an essential technique within the Singapore method of teaching maths for mastery.

<https://mathsnoproblem.com/en/mastery/concrete-pictorial-abstract/>

Fractions

Many children (and adults for that matter) find fractions difficult to understand. This is often because fraction notation (writing a fraction as a number, e.g. $\frac{1}{2}$) is very confusing. Children therefore struggle to relate the symbol to the 'thing' and end up guessing. In Singapore, the understanding of fractions is rooted in the Concrete, Pictorial, Abstract (CPA) model, where children use paper squares and strips to learn the link between the concrete and the abstract.

At the heart of understanding fractions is the ability to understand that we're giving an equal part a name. It is simply a naming activity! Taken from the Maths — No Problem! Primary Maths Series Textbooks, here are 4 easy steps that will develop and ensure children's understanding of fractions.

<https://mathsnoproblem.com/en/mastery/fractions/>

Dr Yeap Ban Har is the Director of Curriculum and Professional Development at Pathlight School, an autism-oriented K-10 school in Singapore. An experienced educator, Ban Har spent ten years at the National Institute of Education, Singapore, where he was involved in several funded research programmes in mathematics education, and where he taught a range of teacher education courses, including Problem-Solving Heuristics in Primary Mathematics and Curriculum Studies in Primary and Secondary Maths. He works regularly in collaboration with the Curriculum Planning and Development Division of the Ministry of Education in Singapore, and he was part of a team, which reviewed the Singapore Maths curriculum for the revised 2013 syllabus.

He continues to teach courses at tertiary institutions such as the National Institute of Education (Singapore), Wheelock College (Boston) and Rajabhat Maha Sarakham University (Thailand). He also sits on the advisory board of the SEED Institute and several schools in Singapore and Asia.