

Inclusion and Maths — No Problem!

The **Maths** — **No Problem!** Programme has been carefully and sympathetically designed to support inclusive learning at Reception and Primary level.





Inclusive Approach

The **Maths** — **No Problem!** Programme uses the international research of leading psychologists and mathematicians to enable an environment in which learners from all attainment levels can thrive. The whole class works through the Programme at the same pace with ample time to master each topic before moving on. Mathematical ideas and concepts are revisited at higher levels as the curriculum builds.

Our comprehensive suite of pedagogical resources includes both learner and teacher resources. Underpinned by the internationally-renowned inclusive Singapore Maths model, the approach synthesises 30 years of international research with painstaking craftsmanship. It provides every single child with the ability to learn – and love – maths through proper guidance, regardless of prior attainment.

Underpinning Inclusive Theories

The Maths — No Problem! approach is underpinned by the following inclusive theories:

- Concrete Pictorial Abstract theory: learners gain a deep understanding of new concepts by initially using concrete items such as counters, then progress to pictorial representations, before finally using abstract symbols such as the equals sign.
- Spiral Learning theory: key concepts are presented repeatedly throughout the curriculum, with deepening layers of complexity, or in different applications. This approach allows all learners to strengthen their own knowledge and self-confidence, regardless of their initial fluency in maths.



"Your materials already go farther toward making rigorous (and interesting!) maths content accessible to students with learning differences than any programme I have ever seen."

Liz Walsh, The Howard School, Atlanta, Georgia



Inclusive Design Detail

Every element of Maths — No Problem! resources is present because it supports learning.

Our consideration to inclusive design includes:

• A unique typeface developed in collaboration with primary school children to reflect the way they create letter-forms. The design includes learner-friendly features such as large open counters and slight variations in typeface thickness that reflect where the 'pen' joins the paper, creating a connection between children's own writing and the text in the book.

Castledown Family

<u>Straights</u>	Fun	Cursive
Regular Bold Heavy	Regular Bold Heavy	Regular Dotted

- A specific balance between content (images, activities and questions) and whitespace to guarantee legibility.
- A clear visual contrast and differentiation without distractors so the page can be read intuitively.
- Precise spacing between the letters to promote understanding and clarity to support dyslexia.
- Designed so that children who are colour vision deficient can differentiate coloured objects. To support learners affected by deuteranopia, mathematical activities such as bar-modelling never include red and green bars next to each other.

Preferred Colours	Protanopia	Deuteranopia



Accuracy and Familiarity for Inclusivity

- Images are always presented in a visually correct way, supporting learners' understanding of 3D shapes as they progress. This can be diagnostic information for teachers.
- Attention is paid to the proper representations and arrangement of items. All the problems are real, arising from real-life scenarios that teach children about what they see and experience around them.
- Featured characters who grow up with the children as they move through year groups. This means they have a familiar companion who will accompany them and guide them on their journey.





Teacher Resources to Support Inclusion

Our teacher resource suite follows a precise roadmap with highly-defined Schemes of Work. These guide teachers to ensure inclusive learning takes place in the entire classroom. Schemes of Work outline the exact progression of topics — from Year 1 to Year 6 — with a weekly summary, and indicate the level of depth needed to confidently teach maths for mastery. Our comprehensive teacher provision includes:

- Summative Assessment Papers linked to the **Maths No Problem!** textbooks and the curriculum to measure learners' depth of understanding.
- Ready-to-use online lesson plans. These feature a differentiation toggle which provides instant ready-to-use adaptations while teaching.
- Teacher guidance to support inclusive education.
- Professional training videos with captioning broken down into bite-size, accessible clips.
- Assessment tools including our intuitive online assessment tool, Insights, to instantly identify strengths as well as gaps in understanding.



Although the whole class goes through the same content at the same pace, there is still plenty of opportunity for differentiation. Those pupils who grasp concepts quickly are challenged with rich and sophisticated problems within the topic. Those children who are still working towards the key ideas are provided additional support to consolidate their understanding before moving on.



Read More on Inclusion

Further information can be found on the **Maths** — **No Problem!** website where we publish case studies, blogs and podcasts on this topic.

Overcoming obstacles for maths learners with dyslexia mathsnoproblem.com/dyslexia

5 things you don't know about Maths — No Problem! Textbooks mathsnoproblem.com/textbooks

A maths mastery success story with St. Bridget's Primary School Part I mathsnoproblem.com/success

An inclusive approach to maths teaching mathsnoproblem.com/inclusive

What makes a book beautiful? Behind the scenes of Editorial Production schoolofschool.com/beautiful-books

