

**my
pals!**

ARE HERE

PRIMARY MATHS

BROCHURE





My Pals are Here! Maths (4th Edition)

My Pals are Here! Maths (4th Edition) is a six-level primary Mathematics series that is widely adopted and highly popular amongst teachers and pupils worldwide. Being the main Maths package used in Singapore since 2001, it has contributed to Singapore's success in topping international studies such as Trends in International Maths and Science Study (TIMSS) and Programme for International Student Assessment (PISA). It is used in more than 50 countries, 10 of which are using country-specific adaptations of the series. Favoured for its engaging visuals, hands-on activities and digital interactives, My Pals are Here! Maths makes learning fun and has proven to be effective in developing and honing pupils' 21st century competencies.

Updated based on the latest mathematical thinking and best practices in the 2021 Singapore Mathematics Syllabus, **My Pals are Here! Maths (4th Edition)** continues to bring you the very best of what has been provided in the previous editions. The series is now made more suitable for a hybrid classroom with a comprehensive blend of print and digital resources which are designed to be easy to use. With the high-quality resources of the enhanced series, teachers can now better develop their pupils into resilient, critical and creative thinkers and future-ready problem solvers.

Product Architecture

Pupil's Book



The eBook can be annotated and includes interactive digital resources such as animated openers, learn videos, and virtual manipulatives.

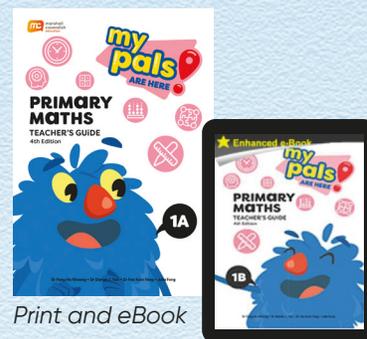
Workbook



The eBook can be annotated and marked by teachers through the eWorkbook module on



Teacher's Guide



The eBook can be annotated and includes printable teacher resources such as schemes of work, lesson plans, class presentations, and worked solutions.

In addition, teachers are also given access to a question bank.

Why Choose My Pals are Here! Maths (4th Edition)?

1 Based on the Latest Best Practices Adopted by the Highest-Achieving Maths Classrooms in the World

The latest 2021 Singapore Mathematics Syllabus aims to further improve the learning and teaching of mathematics by placing a greater emphasis on the development of the 21st century competencies such as critical and creative thinking, as well as metacognition. **My Pals are Here! Maths (4th Edition)** is designed to align with the goals of the new syllabus so that classrooms worldwide can have access to the latest practices adopted in Singapore.

One of the hallmarks of **My Pals are Here! Maths** is the intentional and progressive development of critical and creative thinking skills through mathematical problem solving.

In line with the latest syllabus, the problem-solving opportunities in **My Pals are Here! Maths (4th Edition)** have been increased and are now designed with a focus on real world contexts. Such relevant contexts make learning meaningful for pupils and motivate them to learn, while ensuring that their critical and thinking skills are honed.

SECTION OPENERS offer such real-world problem-solving opportunities to warm pupils up to learning. In addition to being relatable to pupils, these problems tap on the pupils' prior knowledge and can be solved in various ways, hence honing their critical and creative thinking skills.

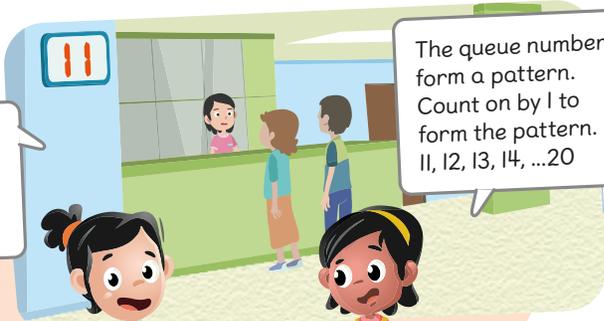


Sharing!

What number patterns do you see around you?
What number patterns can you create?

Examples

You need to get a queue number to see the doctor.



The queue numbers form a pattern. Count on by 1 to form the pattern. 11, 12, 13, 14, ...20

SHARING! encourages pupils to share their experiences in their everyday life and discuss how they can apply what they have learnt. Such opportunities develop pupils' reasoning and communication skills, which are vital 21st century competencies.



What do you notice about the house numbers?

What pattern do you see?

Sharing! (Pupil's Book, page 94)

20 minutes

- This activity allows pupils to discuss the **Big Ideas about Invariance and patterns**: A number pattern or a sequence of numbers can be formed by adding a constant value or subtracting a constant value. Patterns help us describe relationships and make generalisations and predictions for new situations.
- Have pupils work in pairs or groups to reason and communicate their thinking.
- Draw pupils' attention to the picture at the top of the page.
- Highlight that it is a scene of people queuing to see a doctor at a clinic.
- Ask**: What queue number is the doctor attending to now? (11)
- Ask**: If Jessie gets a queue number 16, how many patients are ahead of her? (4, excluding the patient with queue number 11)
- Next, draw pupils' attention to the picture at the bottom of the page.
- Highlight that it is a scene of houses at an estate.
- Ask**: What do you notice about the numbers? (All the house numbers 1, 2, 3, 4, 5, 6, form a number pattern; the houses numbers on the left, 1, 3, 5 form a number pattern and the house numbers on the right, 2, 4, 6, form another number pattern)

For Extension

Lisa's house number is 78.
Is her house on the left or right? (right)

Not all problems pupils will encounter in their everyday life and in the future will be routine and familiar. **My Pals are Here! Maths (4th Edition)** retains the popular **PUT ON YOUR THINKING CAP!** while enhancing it with more questions and a greater focus on real-life scenarios.

The questions are designed to encourage pupils to use problem-solving strategies or heuristics. The recommended heuristics are clearly outlined in the Teachers' Guide.

Put On Your Thinking Cap!

Pupil's Book p.29

- 1** A garden has fewer than 18 plants. There are 10 pink flowers.



- (a) What is the greatest possible number of blue flowers?
 (b) What is the smallest possible number of blue flowers?

- 2** Chris has more cards than Alan. Alan has fewer cards than Budi. Chris has fewer cards than Budi.

- (a) Who has the smallest number of cards?
 (b) Who has the greatest number of cards?

- 3** Here are six queue numbers.



The numbers form a number pattern. What are the two missing numbers?

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There than correct

Workbook End-of-Chapter Let's Reflect

Chapter 5 • Number

Teacher's Guide p.2

- Put On Your Thinking Cap!** (Pupil's Book, page 95) **30 minutes**
- Encourage pupils to explore, think critically and explain their thinking as they work in pairs or small groups to solve (1) to (3).
 - In (1), pupils have to determine what is the greatest value and the smallest value. Encourage pupils to draw a number tape to show numbers less than 18. Pupils may solve the question by making a list.
 - In (2), pupils have to reason the position of the numbers represented by A, B and C. Encourage pupils to draw a number tape to place and order the three numbers. Pupils may solve the question by drawing a picture or acting it out.
 - In (3), pupils are required to count on or back to find the answer to determine if the set of numbers forms a pattern. This helps them to find the unknown values that will form a pattern. Pupils may use other strategies to find the answer. Encourage pupils to write the numbers on a number tape.
 - Assign pupils Workbook 1A, End-of-Chapter Practice (Level 3), pages 119 – 120, to extend what they have learnt in the chapter.

Pupil's Book p.56

Solving word problems

Let's LEARN

- 1** Max has 15 robots. Jim has 11 robots. How many fewer robots does Jim have than Max?

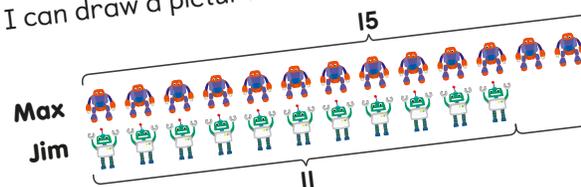
Step 1 Understand

How many robots does Max have?
 How many robots does Jim have?
 What do I have to find?



Step 2 Plan

I can draw a picture.



The problems found in **PUT ON YOUR THINKING CAP!** are especially important in developing critical and creative thinking skills. Solving these problems not only helps pupils learn a variety of problem-solving strategies or heuristics, it also encourages them to approach such problems systematically.

□ **Let's Reflect Together** (*Workbook, pages 121 – 122*)

20 minutes

- At the end of this chapter, pupils should be able to:
 - count on from 10 to 20;
 - read and write 11 to 20 in numerals and words;
 - use tens and ones to show numbers to 20;
 - compare the number of objects in two or more sets within 20;
 - compare and order numbers to 20;
 - find 1 more/less than a given number;
 - find 2 more/less than a given number;
 - find the missing number(s) in a number pattern within 20.
- Use the Let's Reflect Together to guide pupils to reflect on what they have learnt in the chapter.

The new syllabus places a greater emphasis on metacognition and **My Pals are Here! Maths (4th Edition)** delivers this aim through the guided reflection opportunities, found in **LET'S REFLECT TOGETHER**. Such reflection opportunities on the key concepts and skills encourage pupils to actively think about their learning and thinking, which is key to developing metacognition skills.

Workbook p.27

Let's **REFLECT TOGETHER**

Talk to your classmate about these sentences.

1 The method of counting I learnt is _____.

2

I can count on by _____ to get _____.

3 Compare 13 and 18.
Circle the correct word.

First, I compare the (ones / tens).

Are they equal? (Yes / No)

Next, I compare the (ones / tens).

3 is (greater / smaller) than 8.

So, 13 is (greater / smaller) than 18.

2 Enhances the Strong Fundamental Elements of My Pals are Here! Maths

Since 2001, the **My Pals are Here! Maths** series has developed many mathematics learners who have performed well at TIMSS and PISA. Its unique pedagogy develops critical and creative thinkers through making Maths visual and fun.

The intentional and progressive development of critical and creative skills has been a key characteristic of the **My Pals are Here! Maths** series in the previous editions, and it continues to be a prominent feature in this latest edition. The **4th Edition** provides more opportunities in problem-solving to develop these critical and creative thinking skills through specific sections such as the **SECTION OPENER, SHARING!** and **PUT ON YOUR THINKING CAP!**. At the same time, where these sections have appeared in the previous editions, there are now more of such thinking questions, as compared to before.

Pupil's Book p.41

Put On Your Thinking Cap!

1 Fill in the blanks.

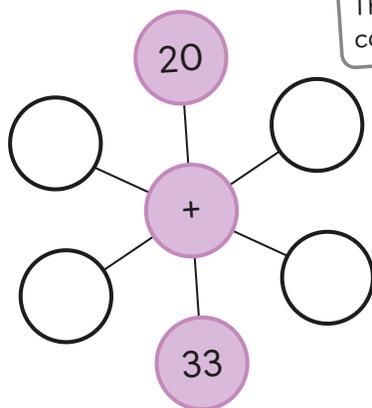
(a)

$$\begin{array}{r} 3 \quad \square \\ + \quad \square \quad 4 \\ \hline 8 \quad 9 \end{array}$$

(b)

$$\begin{array}{r} \square \quad 5 \\ + \quad 2 \quad \square \\ \hline 7 \quad 4 \end{array}$$

2 The numbers in each line add up to 53.
Fill in the ○.
Use numbers that are greater than 10.



There are many correct answers!



My Pals are Here! Maths (4th Edition) also continues its legacy of adopting the Concrete-Pictorial-Abstract (CPA) approach. Pupils start their discovery with concrete objects before moving on to visuals, and finally abstract representations. With the adoption of such a visual approach and with the unpacking of concepts carefully scaffolded, pupils can succeed in learning Maths regardless of their language proficiency.

Pupil's Book p.34

Adding three numbers in two steps

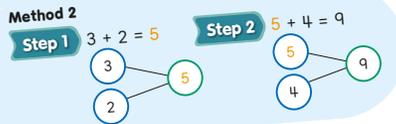
Let's LEARN

- Roll a die once. Fill in the blanks. Add the numbers.
 $7 + \square = ?$
 $8 + \square = ?$
 $9 + \square = ?$

- Elsa has 3 cakes. Sue has 2 cakes. Zara has 4 cakes.



$3 + 2 + 4 = ?$



$3 + 2 + 4 = 9$
 There are 9 cakes altogether.

Pupil's Book p.35

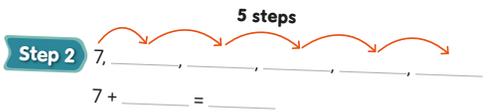
Let's PRACTISE

- There are 4 red pens. There are 3 blue pens. There are 5 orange pens.



$4 + 3 + 5 = ?$

Method 1



Method 2



$4 + 3 + 5 = \square$

There are _____ pens in all.

5 Carry out this activity! **Count On!**

- Place the 20 face down on the table.
- Player A turns over a 20. Use the 20 and the 100 grid to show the number. Count on from 10 to tell how many.

Players: 2

You need:

- 20
- 20
- 100 grid



- Player B checks the answer. If the answer is correct, Player A keeps the card. If not, Player A puts the card back.

My Pals are Here! Maths has always included fun and engaging activities to help pupils master Maths. The activities focus on peer-to-peer interaction among pupils to encourage them to achieve mastery in a fun and collaborative manner. **My Pals are Here! Maths (4th Edition)** continues to deliver this promise.

Pupil's Book p.6

3

Designed for 21st Century Educators and Learners, with a Comprehensive Suite of Print and Digital Resources

The post-Covid world has changed the way lessons can be carried out. Regular lessons are now not limited to being conducted within the physical classrooms in schools, they can also be done through home-based learning.



My Pals are Here! Maths (4th Edition) offers the printed Pupil's Books and Workbooks to benefit young learners with a tactile experience.

My Pals are Here! Maths (4th Edition) provides a comprehensive solution for both teachers and pupils in the various learning and teaching scenarios. The series comes complete with both the print and digital Pupil's Books, Workbooks and Teacher's Guides for use in the physical and online classrooms. The extensive suite of learning and teaching digital resources is easily accessible through the eBooks or the app with marker recognition function, where they are tagged at the point of use. **My Pals are Here! Maths (4th Edition)** has now become more exciting and easier to use with a blended suite of resources that can be accessed anywhere!



App Icon



Animated Opener

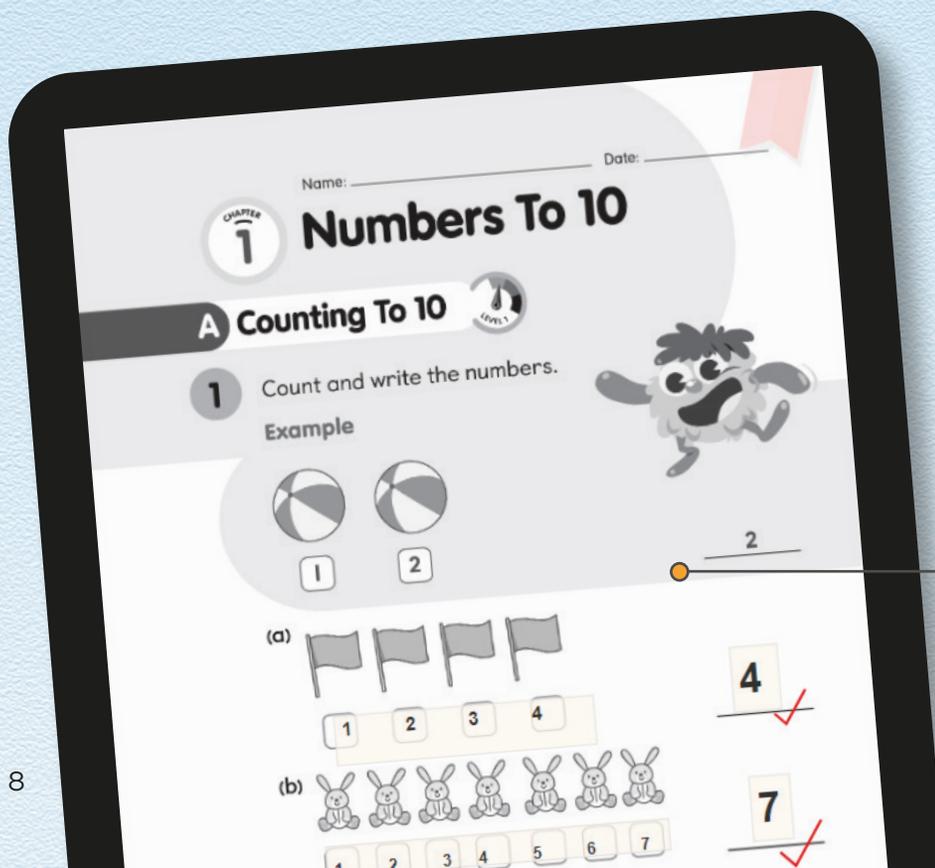


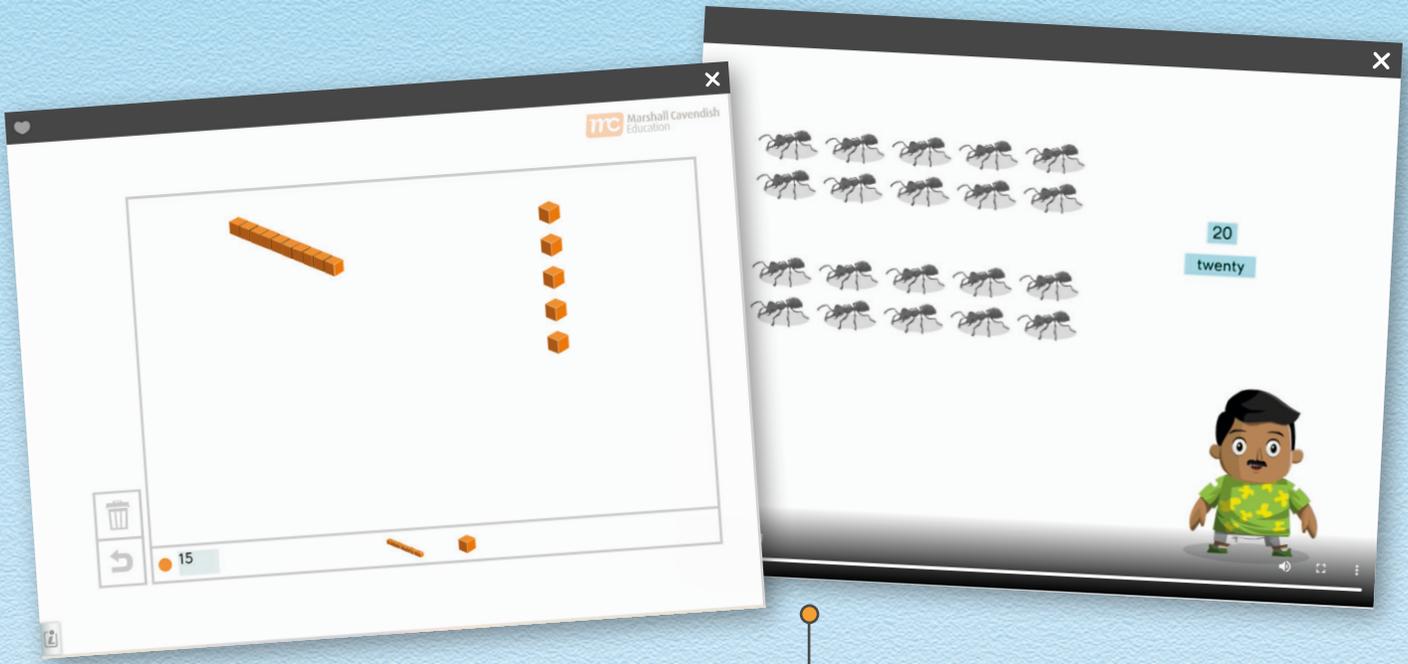
Pupil's Book p.1



My Pals are Here! Maths (4th Edition) also offers helpful digital resources at the point of use to make learning even more engaging. For example, key section openers are animated to make learning more interactive and dynamic in both physical and online classrooms. The animated openers can be accessed via the links found in the eBooks or through the app by scanning the pages of the printed books.

In addition to the Pupil's Book eBooks, eBooks of the Workbook are also available. All the eBooks can be annotated – pupils will be able to do their work on the eBooks and teachers will be able to review and mark pupils' work digitally.





Besides the animated openers, **My Pals are Here! Maths (4th Edition)** offers other digital resources such as learn videos and virtual manipulatives. As the physical manipulatives may not be readily available when we move from the physical classrooms to the online classrooms, the virtual manipulatives allow pupils to interact with the Maths contents. The use of virtual manipulatives provides pupils with a concrete experience for them to explore and understand abstract mathematical concepts. It is easy to access the digital resources via the various links found in the eBooks or through the app.

Not only has the pupils' user experience been improved, but teachers will also find an improved experience in using the new Teacher's Guide eBooks. The eBooks are tagged with various digital resources at the point of use for easy access. The digital classroom may be challenging to handle but having the required resources at the teachers' fingertips will lighten their load.

Teachers can mouse over the icons to reveal contents of the links. Clicking on the links takes the teacher directly to the contents of the resources.



SCHEME OF WORK

Chapter 5 • Numbers To 20

Suggested duration: 7 days, 14 periods (1 period is about 30 to 40 minutes.)

Teaching and Learning Sequence	No. of Periods	Learning Objectives	Resources	Materials	Vocabulary / Thinking Skills / Heuristics
Days 1 – 2 Section Opener A. Counting To 20	4	<ul style="list-style-type: none"> Explore and think critically about counting to 10 and completing an addition equation within 10. (Section Opener) Count on from 10 to 20. Read and write 11 to 20 in numerals and words. Use tens and ones to show numbers to 20. 	<ul style="list-style-type: none"> Pupil's Book 1A, pages 70 – 78 Workbook 1A, pages 95 – 104 Class Presentation Chapter 5 Days 1 – 2 	<ul style="list-style-type: none"> 1 copy of Section A Recapil per pupil 20 craft sticks per pair 2 rubber bands per pair 20 connecting cubes per pair 1 copy of Ten Frames (TR11) per pair 1 set of Number Cards (0 to 20) (TR12) per pair 1 set of Number Words Cards (zero to twenty) (TR13) per pair 	<p>Vocabulary:</p> <ul style="list-style-type: none"> eleven twelve thirteen fourteen fifteen sixteen seventeen eighteen nineteen twenty

Note: Editable lesson plans are available on MCEduHub.

To promote pupils' understanding of the abstract concepts, it is important that the teacher resources are seamlessly integrated with the pupils' materials.

Slide 6

My Pals are Here! Maths (4th Edition) now offers integrated slides that present contents that are similar to what the pupils see in the books. Pupils will be able to follow their teacher's slides while using their books, making distant learning easier and more synchronised with face-to-face learning.

Slide 5

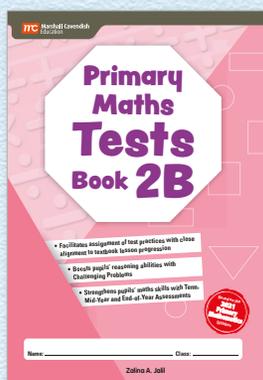
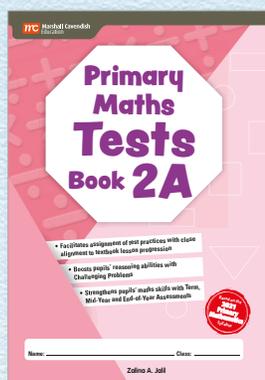
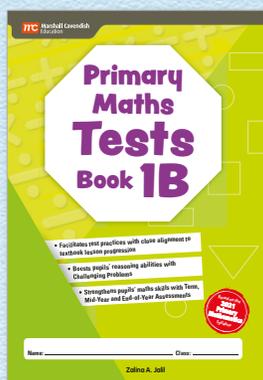
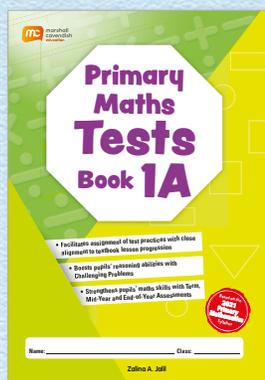
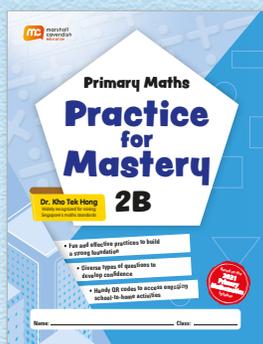
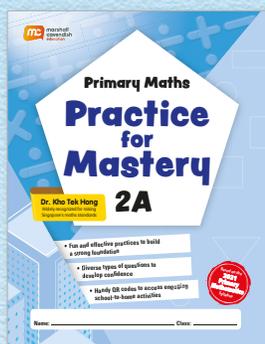
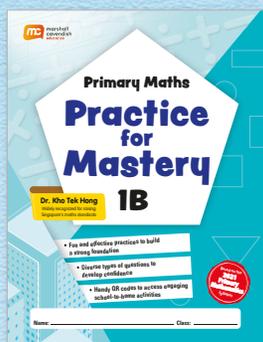
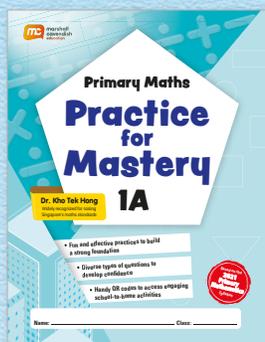
The slides also include the visuals of manipulatives that can be dragged-and-dropped to help teachers implement the Concrete-Pictorial-Abstract (CPA) approach with their pupils in an online classroom.

The question bank in **My Pals are Here! Maths (4th Edition)** is equipped with an auto-marking function. It contains 1000 questions at three different levels: basic, intermediate, and advanced, to cater for differentiated practices.

MPaH! Maths 3rd vs 4th Edition: What's New?

		
Alignment to Singapore Maths Syllabus	2013	2021
General Approach	Emphasis on 21 st century competencies such as reasoning, communication, critical and creative thinking	A greater emphasis on 21 st century competencies including reasoning, communication, critical and creative thinking and metacognition
Development of Concepts and Skills	Concrete-Pictorial-Abstract approach	Concrete-Pictorial-Abstract approach
Development of 21st Century Competencies (Processes, Metacognition and Attitudes)	Focuses on the use of learning experiences	Focuses on the use of: <ul style="list-style-type: none"> • more problem-solving in real-world contexts • more fun learning experiences • reflection on learning processes
Team of Experts	For lower primary levels: <ul style="list-style-type: none"> • Dr Fong Ho Kheong • Bernice Lau Pui Wah • Chelvi Ramakrishnan • Michelle Choo 	For lower primary levels: <ul style="list-style-type: none"> • Dr Fong Ho Kheong, Consultant and Principal Author of MPaH! Maths • Dr Darren Yeo, Assistant Professor with expertise in educational neuroscience and mathematics education • Dr Foo Kum Fong, Master Teacher in Mathematics • Julia Fong, International Mathematics Coach
High-Quality Blended Resources	<ul style="list-style-type: none"> • Pupil's Books • Workbooks • Teacher's Planning Guides • Teaching Aid Slides • Question Bank • eBooks with a variety of digital resources • Maths Learning Solution 	<ul style="list-style-type: none"> • Pupil's Books, enhanced digital resources • Workbooks, enhanced with levelled practices • Teacher's Guides, simplified with easy-to-use lesson plans • Class Presentations for seamless blended lessons • Question Bank with auto-marking function • eBooks with a variety of digital resources and the eWorkbook module to allow teachers to mark pupils' Workbooks

Complementary Materials



Primary Maths Practice for Mastery

Primary Maths Practice for Mastery is based on Dr Kho's life work on primary mathematics and contains specially designed mathematics problems to help pupils master the subject. The books come complete with scannable QR codes to access the online home support guides which are guides filled with engaging activities and strategies for home instructors to facilitate school-to-home connection.

This series comes with:

- Fun and effective practices to build a strong foundation
- Diverse types of questions to build confidence
- Handy QR codes to access engaging school-to-home activities

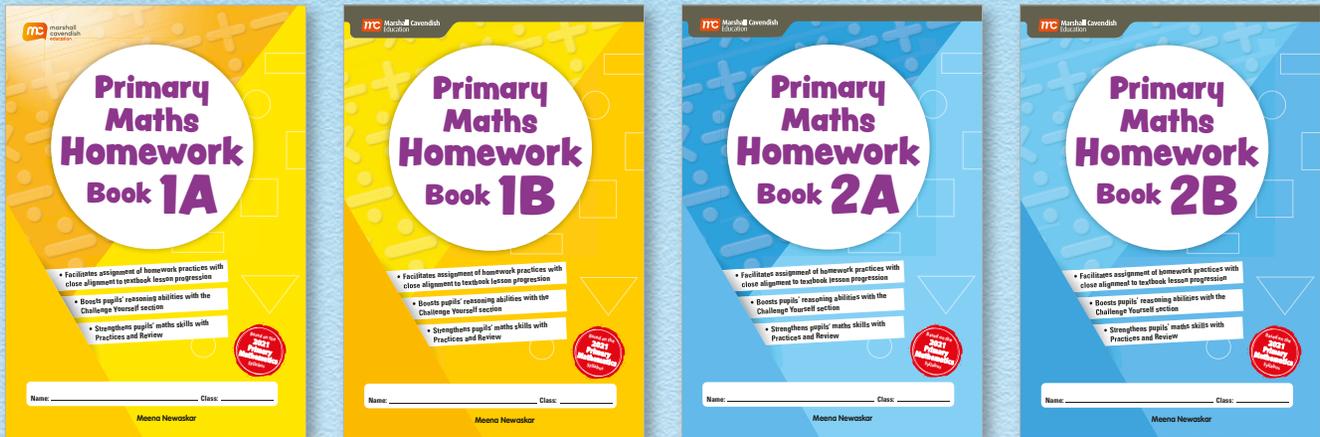
Primary Maths Tests

Primary Maths Tests Books provide examination-like questions that are designed to assess pupils' understanding of mathematical concepts learnt in class. The books are written based on the 2021 Primary Mathematics syllabus from the Ministry of Education, Singapore.

The tests aid pupils in their preparation for assessments in school. Through consistent practice, pupils can gain confidence and excel in Mathematics.

Features of the series include:

- Close alignment to textbook lesson progression, which facilitates assignment of test practices
- Challenge Problems, which boost pupils' reasoning abilities
- Term, Mid-Year and End-Of-Year Assessments which strengthen pupils' maths skills



Primary Maths Homework

Primary Maths Homework Books 1 & 2 contain ample practice questions that are designed to help pupils reinforce all maths concepts taught throughout the school terms, giving them opportunities to enhance their conceptual understanding and improve their reasoning skills. The books are written based on the 2021 Primary Mathematics syllabus from the Ministry of Education, Singapore.

The books are perfect for use at home or in school. Through consistent practice, pupils can build their confidence and mastery in Mathematics.

Features of the series include:

- Close alignment to textbook lesson progression, which facilitates assignment of homework practices
- Challenge Yourself section, which boost pupils' reasoning abilities
- Practices and Review, which strengthen pupils' maths skills

Marshall Cavendish Education (MCE) is a global education solutions provider dedicated to nurturing the joy of learning and preparing students for the future. We believe the best way to do so is by simplifying learning and listening to the needs of schools, teachers, students, and parents.

MCE makes world-class educational content more accessible through a seamless experience that integrates both print and digital resources. We provide holistic and end-to-end solutions customised to the school's requirements, with professional development to help educators implement the curriculum.

We've worked with ministries, policymakers, educators, and parents in over 90 countries, designing education solutions in 14 languages for Pre-K to 12. MCE is the only Asia-based publisher that is an endorsement partner of Cambridge Assessment International Education.

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