

# PRIMARY MATHS SERIES

# SCHEME OF WORK – YEAR 1



This scheme of work is taken from the Maths — No Problem! Primary Maths Series, which is fully aligned with the 2014 English national curriculum for maths. It outlines the content and topic order of the series and indicates the level of depth needed to teach maths for mastery. It can also help you and your school to plan and monitor progress.

## A TRIED AND TESTED STRUCTURE

Unlike many free schemes of work, the Maths — No Problem! syllabus is based on the model developed in Singapore, which has been tested and refined over the last 30 years.

- Founded on the learning theories of Piaget, Dienes, Bruner, Skemp and Vygotsky.
- Adapted from the New Syllabus Primary Mathematics Series and approved by the Ministry of Education in Singapore.
- Co-authored by Dr Yeap Ban Har, a world-recognised expert in Singapore maths teaching.
- Fully aligned with the 2014 English national curriculum for maths.

## HOW TO USE OUR SCHEME OF WORK

Our scheme of work demonstrates the spiral approach used in our programme, which builds pupils' depth of understanding and mathematical fluency without the need for rote learning. Learning is presented in small-step, logical sequences organised into individual lessons with a title indicating the focus of learning for that lesson. The sequence of lessons is carefully organised with clear lines of progression.

This scheme of work provides:

- An overview of the national curriculum topics covered during the school year by term.
- A full lesson breakdown for each national curriculum topic and the learning objective for each lesson.

The topics are colour coded to reflect the national curriculum content domain strands. This also allows you to see when the different topics are introduced and revisited.

Please note that the time allocated to each topic is only provided as a guide and is not meant to be prescriptive. The concepts are broken down into a number of lessons, which offer small-step progression for the most struggling of learners. As such, teachers can use their professional judgement to combine two consecutive lessons into one session as appropriate for their learners. Though teachers can merge lessons within a chapter, we do not recommend skipping or combining chapters.

## WHAT OTHER SUPPORT IS AVAILABLE

The scheme of work provides a researched structure, which is ideal for teachers who are confident teaching maths for mastery and have received Maths — No Problem! professional development.

Schools that don't always have the time to create their own lesson content should consider using our Primary Maths Series textbooks and workbooks. The series provides carefully varied exercises, which are designed to deepen pupils' understanding, and is complemented by an online Teacher Guide, which provides a step-by-step guide to each lesson, including assessment and differentiation support.

For a free trial of our Primary Maths Series go to [www.mathsnoproblem.co.uk/free](http://www.mathsnoproblem.co.uk/free)

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# PRIMARY MATHS SERIES – YEAR 1 AT A GLANCE

	AUTUMN TERM	SPRING TERM	SUMMER TERM
<b>Week 1</b>	<b>Number and Place Value: Numbers to 10</b> LESSON BREAKDOWN	<b>Calculations: Addition and Subtraction within 20</b> LESSON BREAKDOWN	<b>Calculations: Multiplication</b> LESSON BREAKDOWN
<b>Week 2</b>			
<b>Week 3</b>	<b>Calculations: Addition and Subtraction</b> LESSON BREAKDOWN	<b>Geometry – Properties of Shape: Shapes and Patterns</b> LESSON BREAKDOWN	<b>Calculations: Division</b> LESSON BREAKDOWN
<b>Week 4</b>		<b>Measurement: Length and Height</b> LESSON BREAKDOWN	<b>Fractions: Fractions</b> LESSON BREAKDOWN
<b>Week 5</b>		<b>Revision and Mid-year (A) Tests</b>	<b>Number and Place Value: Numbers to 100</b> LESSON BREAKDOWN
<b>Week 6</b>		<b>Review and Remediation</b>	<b>Measurement: Time</b> LESSON BREAKDOWN
<b>Week 7</b>	<b>Geometry – Position and Direction: Positions</b> LESSON BREAKDOWN	<b>Number and Place Value: Numbers to 40</b> LESSON BREAKDOWN	<b>Measurement: Money</b> LESSON BREAKDOWN
<b>Week 8</b>			<b>Measurement: Volume and Capacity</b> LESSON BREAKDOWN
<b>Week 9</b>			<b>Measurement: Mass</b> LESSON BREAKDOWN
<b>Week 10</b>	<b>Number and Place Value: Numbers to 20</b> LESSON BREAKDOWN	<b>Calculations: Addition and Subtraction</b> LESSON BREAKDOWN	<b>Geometry – Position and Direction: Space</b> LESSON BREAKDOWN
<b>Week 11</b>			<b>Revision and End-of-year (B) Tests</b>
<b>Week 12</b>	<b>Calculations: Addition and Subtraction within 20</b> LESSON BREAKDOWN	<b>Calculations: Multiplication</b> LESSON BREAKDOWN	<b>Review and Remediation</b>

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## AUTUMN TERM – TEXTBOOK 1A

### Number and Place Value: Numbers to 10

Maths — No Problem!  
Book Reference

Lesson Name

Lesson Objective

Chapter 1 – Numbers to 10	Lesson Name	Lesson Objective
	Lesson 1 – Counting to 10	To be able to count numbers to 10 accurately – forward and backward.
	Lesson 2 – Counting Objects to 10	To be able to count similar objects up to 10 with accuracy and fluency.
	Lesson 3 – Writing to 10	To be able to write all numbers to 10 with numerals and in words; to count only objects of the same name in a group.
	Lesson 4 – Counting to Zero	To be able to understand what zero represents and use it when counting.
	Lesson 5 – Comparing Number of Objects	To be able to compare different sets of objects and say which one has fewer, more or is equal.
	Lesson 6 – Ordering Numbers	To be able to order numbers to 10 and know which number is greater or is lesser in value.
	Lesson 7 – Comparing Numbers	To compare numbers using the terms ‘1 more’ and ‘1 less’.
	Chapter consolidation	To practise various concepts that were covered in the chapter, from writing the numbers in words to consolidating the correct value of digits.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## AUTUMN TERM – TEXTBOOK 1A

### Calculations: Addition and Subtraction

Maths — No Problem!  
Book Reference

Lesson Name

Lesson Objective

#### Chapter 2 – Number Bonds

Lesson 1 – Making Number Bonds

To understand that a number is made up of other numbers; to find as many ways possible to construct a number.

Lesson 2 – Making Number Stories

To use number bonds for storytelling.

Chapter consolidation

To practise various concepts that were covered in the chapter.

2 consolidation days

To be used if lessons take longer than expected or a topic needs to be revisited.

#### Chapter 3 – Addition Within 10

Lesson 1 – Add by Using Number Bonds

To be able to add two different numbers within 10. Pupils will become familiar with the different vocabulary associated with addition.

Lesson 2 – Add by Counting On

To add by counting on.

Lesson 3 – Completing Number Sentences

To complete number sentences and gain an understanding of inverse operations.

Lesson 4 – Making Addition Stories

To be able to make addition stories using correct vocabulary.

Lesson 5 – Solving Picture Problems

To be able to solve addition problems through pictures.

Chapter consolidation

Maths journal and reflection of learning throughout the chapter.

3 consolidation days

To be used if lessons take longer than expected or a topic needs to be revisited.

#### Chapter 4 – Subtraction within 10

Lesson 1 – Subtract by Crossing Out

To understand that subtraction can be done by crossing out or taking away.

Lesson 2 – Subtracting by Using Number Bonds

To be able to subtract using number bonds.

Lesson 3 – Subtract by Counting Back

To be able to solve a subtraction equation by counting back, using a number line as support.

Lesson 4 – Making Subtraction Stories

To be able to make subtraction sentences.

Lesson 5 – Solving Picture Problems

To be able to solve picture problems involving subtraction.

Lesson 6 – Addition and Subtraction

To solve problems in the context of addition and subtraction and to find the corresponding number families.

Chapter consolidation

To consolidate the learning of subtraction equations and fact families.

4 consolidation days

To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## AUTUMN TERM – TEXTBOOK 1A

### Geometry – Position and Direction: Positions

Maths — No Problem!  
Book Reference

Lesson Name

Lesson Objective

Chapter 5 – Positions	Lesson Name	Lesson Objective
	Lesson 1 – Naming Positions	To learn the appropriate positional language (ordinal numbers) for up to 10 positions.
	Lesson 2 – Naming Positions in Queues	To be able to name the positions in a queue.
	Lesson 3 – Naming Left and Right Positions	To be able to name positions, including left and right.
	Chapter consolidation	To consolidate the learning of positional language.
	3 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## AUTUMN TERM – TEXTBOOK 1A

### Number and Place Value: Numbers to 20

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 6</b> – Numbers to 20	Lesson 1 – Counting to 20	To count numbers up to 20. The key strategy is to begin by making 10.
	Lesson 2 – Writing to 20	To recognise, read and write numbers up to 20 in words and numerals.
	Lesson 3 – Comparing Numbers	To use the terms 'greater than' or 'less than' to compare numbers within 20.
	Lesson 4 – Ordering Numbers	To be able to arrange numbers up to 20 in ascending and descending order.
	Lesson 5 – Number Patterns	To look for patterns with numbers up to 20, focusing on one more and one less than a number.
	Chapter consolidation	To practise various concepts that were covered in the chapter.
4 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.	

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## AUTUMN TERM – TEXTBOOK 1A

### Calculations: Addition and Subtraction within 20

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 7</b> – Addition and Subtraction within 20  <b>Lessons 1–5</b>	Lesson 1 – Add by Counting On	To learn to add by counting on from the largest number.
	Lesson 2 – Add by Making 10	To add to numbers by first making 10 and then adding on the remainder.
	Lesson 3 – Add by Adding Ones	To add by separating the ones and ten. This enables pupils to add the sum of the ones to the ten.
	Lesson 4 – Subtract by Counting Back	To learn how to subtract by counting back from the largest number.
	Lesson 5 – Subtract by Subtracting Ones	To learn how to subtract by subtracting from only the ones column.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1A

### Calculations: Addition and Subtraction within 20

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 7 – Addition and Subtraction within 20  Lessons 6–7	2 revision days	To revisit lessons 1–5.
	Lesson 6 – Subtract from 10	To subtract a certain amount of ones from 10 rather than from the ones, as there are not enough ones.
	Lesson 7 – Addition and Subtraction Facts	To go through number facts derived from addition and subtraction sentences.
	Chapter consolidation	To practise various concepts covered in the chapter.



# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1A

### Geometry – Properties of Shapes: Shapes and Patterns

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 8</b> <b>– Shapes and Patterns</b>	Lesson 1 – Recognising Solids	To recognise four basic 3-D solid shapes: spheres, cubes, cuboids and pyramids.
	Lesson 2 – Recognising Shapes	To recognise 2-D shapes in the everyday environment.
	Lesson 3 – Grouping Shapes	To be able to group shapes using different criteria.
	Lesson 4 – Making Patterns	To make patterns using common 2-D shapes.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 days consolidation	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1A

### Measurement: Length and Height

Maths — No Problem!  
Book Reference

**Lesson Name**

**Lesson Objective**

**Chapter 9**  
– Length and Height

Lesson 1 – Comparing Height and Length

To compare height and length by using key terminology.

Lesson 2 – Measuring Length Using Things

To be able to measure objects using other items, such as pencils or books.

Lesson 3 – Measuring Height and Length Using Body Parts

To be able to measure items using other things - parts of the body in particular.

Lesson 4 – Measuring Height and Length Using a Ruler

To introduce the concept of using rulers for measuring.

Chapter consolidation

To practise various concepts covered in the chapter.

2 consolidation days

To be used if lessons take longer than expected or a topic needs to be revisited.

**Week 5**

**REVISION AND MID-YEAR (A) TESTS**

**Weeks 6 and 7**

**REVIEW AND REMEDIATION**

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1B

### Number and Place Value: Numbers to 40

#### Maths — No Problem! Book Reference

##### Lesson Name

##### Lesson Objective

Chapter 10 – Numbers to 40	Lesson Name	Lesson Objective
	Lesson 1 – Counting to 40	To use the making 10 strategy to count numbers above 10; to represent numbers on a number line.
	Lesson 2 – Writing Numbers to 40	To use the ten-frame method of organisation and place-value cards to assist pupils in writing numbers to 40; to encourage multiple ways of counting, including counting by 2, 5 and 10.
	Lesson 3 – Counting in Tens and Ones	To understand that digits represent tens and ones; to represent numbers using Base 10 materials and numbers.
	Lesson 4 – Comparing Numbers	To use place value to compare two or three numbers and determine which number is bigger/smaller; to arrange three numbers in order of size.
	Lesson 5 – Finding How Much More	To compare numbers using number bonds, 100-squares and number lines to determine how much more/less.
	Lesson 6 – Making Number Patterns	To observe and use number patterns; to see number lines in conjunction with number squares in order to create visual proportionality.
	Chapter consolidation	To practise various concepts covered in the chapter.
	3 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1B

### Calculations: Addition and Subtraction Word Problems

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 11</b> – Addition and Subtraction Word Problems	Lesson 1 – Solving Word Problems	To decide whether addition or subtraction is the most appropriate operation; to use and apply number bonds and visual representations to solve word problems.
	Lesson 2 – Solving Word Problems	To use and apply concepts of how many more and how many fewer/less; to apply number bonds and the guess-and-check method to solve word problems.
	Lesson 3 – Solving Word Problems	To develop number sentences based on word problems; to improve the use of number bonds and one-to-one bar model representations to suit the question.
	Lesson 4 – Solving Word Problems	To use pictorial representations to help solve word problems; to choose the correct operation to solve a word problem.
	Lesson 5 – Solving Word Problems	To use visual representations and patterns to solve word problems; to develop precision in model drawing to recognise similarities and differences.
	Lesson 6 – Solving Word Problems	To apply addition and subtraction to multi-step word problems; to use number bonds to make 10 when adding.
	Chapter consolidation	To practise various concepts covered in the chapter.
3 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.	

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SPRING TERM – TEXTBOOK 1B

### Calculations: Multiplication

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 12</b> – Multiplication	Lesson 1 – Making Equal Groups	To identify equal groupings as the first step in multiplying; to reinforce the idea that the arrangement of objects does not impact on the number of objects.
	Lesson 2 – Adding Equal Groups	To understand we can count groups of the same quantity more efficiently; to find multiple ways of counting groups of the same quantity.
	Lesson 3 – Making Equal Rows	To organise objects into equal rows in order to begin counting equal numbers efficiently.
	Lesson 4 – Making Doubles	To understand that doubling is creating an identical number to the one you started with; to understand that doubling is the same as saying two groups of the same amount.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Calculations: Multiplication

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 12</b> – Multiplication	2 revision days	To revisit lessons 1–4.
	Lesson 5 – Solving Word Problems	To solve word problems using equal groupings as the basis for multiplication.
	Chapter consolidation	To practise various concepts that were covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Calculations: Division

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 13</b> – Division	Lesson 1 – Grouping Equally	To understand how to divide even numbers into equal groups using concrete materials; to determine how many groups will be created from sharing equally.
	Lesson 2 – Sharing Equally	To understand how to divide even numbers equally into groups; to determine how many objects will be included in each group in order to share equally.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Fractions: Fractions

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 14</b> – Fractions	Lesson 1 – Making Halves	To split an object (shape) into two equal parts; to identify shapes that have been split into two equal parts.
	Lesson 2 – Making Quarters	To split an object (shape) into four equal parts; to identify shapes that have been split into four equal parts.
	Lesson 3 – Sharing and Grouping	To share and group objects into halves and quarters; to determine half of a number and a quarter of a number.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.



# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Number and Place Value: Numbers to 100

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 15</b> – Numbers to 100	Lesson 1 – Counting to 100	To count in sequences of 10 followed by counting ones; to increase confidence with number lines and Base 10 materials in order to count numbers to 100.
	Lesson 2 – Finding Tens and Ones	To understand the value of the tens and ones digits in a number; to use multiple methods of representing and constructing a number.
	Lesson 3 – Comparing Numbers	To review and extend skills and strategies related to number comparison; to place numbers in order from smallest to greatest and vice versa.
	Lesson 4 – Making Number Patterns	To see patterns of numbers when increasing or decreasing by 1, 2 or 5; to use a number line, a 100-chart and Base 10 materials to represent numbers.
	Chapter consolidation	To practise various concepts covered in the chapter.
2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.	

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Measurement: Time

#### Maths — No Problem! Book Reference

#### Lesson Name

#### Lesson Objective

	Lesson Name	Lesson Objective
<b>Chapter 16</b> – Time	Lesson 1 – Telling Time to the Hour	To develop familiarity with the analogue clock, including the minute and hour hands; to tell time to the hour on an analogue clock.
	Lesson 2 – Telling Time to the Half Hour	To improve familiarity with the analogue clock; to tell time to the half hour using the term 'half past.'
	Lesson 3 – Using Next, Before and After	To sequence events in order of time; to use the terms 'next', 'before' and 'after' to describe the order of events.
	Lesson 4 – Estimating Duration of Time	To estimate an amount of time using seconds, minutes and hours.
	Lesson 5 – Comparing Time	To use the terms 'quicker', 'slower', 'earlier' and 'later' when comparing time.
	Lesson 6 – Using a Calendar	To learn the days of the week and the months of the year and to be able to put them in the correct order.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Measurement: Money

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 17 – Money	Lesson 1 – Recognising Coins	To recognise coins and determine their value using size, colour, markings and shape.
	Lesson 2 – Recognising Notes	To recognise notes and determine their value using colour and markings.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Measurement: Volume and Capacity

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 18</b> – Volume and Capacity	Lesson 1 – Comparing Volume and Capacity	To compare volume and capacity using the terms 'more than' and 'less than', 'full' and 'empty'.
	Lesson 2 – Finding Volume and Capacity	To find the volume and capacity of a container using non-standard ones.
	Lesson 3 – Describing Volume Using Half and a Quarter	To describe volume using the terms 'half' and 'quarter'.
	Chapter consolidation	To practise various concepts covered in the chapter:
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Measurement: Mass

Maths — No Problem!  
Book Reference

Lesson Name

Lesson Objective

**Chapter 19**  
– Mass

Lesson 1 – Comparing Mass

To compare the mass of objects using the terms 'heavy' and 'light', 'heavier than', 'lighter than' and 'as heavy as'.

Lesson 2 – Finding Mass

To find the mass of an object using non-standard ones; to use visualisation skills to estimate the number of ones.

Chapter consolidation

To practise various concepts covered in the chapter.

2 consolidation days

To be used if lessons take longer than expected or a topic needs to be revisited.

# PRIMARY MATHS SERIES – YEAR 1 LESSON BREAKDOWN

## SUMMER TERM – TEXTBOOK 1B

### Geometry – Position and Direction: Space

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
<b>Chapter 20</b> – Space	Lesson 1 – Describing Positions	To describe the position of objects in relation to one another using varied vocabulary.
	Lesson 2 – Describing Movements	To describe movements of objects using varied language.
	Lesson 3 – Making Turns	To understand how to make turns using mathematical language and connect this knowledge to time.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.
<b>Week 11</b>	<b>REVISION AND END-OF-YEAR (B) TESTS</b>	
<b>Week 12</b>	<b>REVIEW AND REMEDIATION</b>	