

Primary Maths Series, New Edition

Scheme of Work — Year 3

The New Edition of the **Maths — No Problem!** Primary Maths Series is fully aligned to the 2014 English national curriculum for maths and subsequent non-statutory guidance. This Scheme of Work outlines the content and topic order within Year 3 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.
- Reviewed by an expert team of consultants, including Dr Julie Alderton from Cambridge University and Dr Wong Khoo Yoong, former Head of Mathematics and Mathematics Education at the National Institute of Education, Singapore.
- Fully aligned with the 2014 English national curriculum for maths and the latest ready-to-progress guidance.

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 online Teacher Guides, which provides a step-by-step guide to each lesson, including assessment and differentiation support.

For a free demo of our Primary Maths Series go to

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Primary Maths Series — Year 3 at a glance

	Autumn Term	Spring Term	Summer Term
Week 1	Number and Place Value: Numbers to 1000 Lesson breakdown	Measurement: Length Lesson breakdown	Statistics: Pictographs and Bar Graphs Lesson breakdown
Week 2			
Week 3	Calculations: Addition and Subtraction Lesson breakdown	Measurement: Mass Lesson breakdown	Fractions, Decimals and Percentages: Fractions Lesson breakdown
Week 4		Measurement: Volume Lesson breakdown	
Week 5		Mid-Year (A) Tests and Remediation	Geometry – Properties of Shapes: Angles Lesson breakdown
Week 6			
Week 7			
Week 8	Calculations: Multiplication and Division Lesson breakdown	Measurement: Money Lesson breakdown	Geometry – Properties of Shapes: Lines and Shapes Lesson breakdown
Week 9		Measurement: Time Lesson breakdown	Measurement: Perimeter of Figures Lesson breakdown
Week 10			
Week 11	Calculations: Further Multiplication and Division Lesson breakdown		End-of-Year (B) Tests and Remediation
Week 12			

Primary Maths Series — Year 3 lesson breakdown

Autumn Term – Textbook 3A

Number and Place Value: Numbers to 1000

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 1 – Numbers to 1000	Lesson 1 – Counting in Hundreds	To learn to count in hundreds and understand the place value. Pupils will also understand how many hundreds are needed to make 1000.
	Lesson 2 – Counting in Hundreds, Tens and Ones	To compose and decompose numbers consisting of hundreds, tens and ones.
	Lesson 3 – Place Value	To understand the value of each digit in a 3-digit number.
	Lesson 4 – Comparing and Ordering Numbers	To be able to compare and order numbers.
	Lesson 5 – Counting in Fifties	To be able to count in fifties.
	Lesson 6 – Number Patterns	To recognise, describe and continue a number pattern.
	Lesson 7 – Number Patterns	To be able to recognise, describe and complete more complicated number patterns.
	Lesson 8 – Counting in Fours and Eights	To be able to count in fours and eights.
	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 3 lesson breakdown

Autumn Term – Textbook 3A

Calculations: Addition and Subtraction

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 2 – Addition and Subtraction	Lesson 1 – Addition and Subtraction Facts	To understand the commutative law of addition and the corresponding addition and subtraction facts.
	Lesson 2 – Adding Ones	To add a 3-digit number to a 1-digit number with no regrouping or renaming.
	Lesson 3 – Adding Tens	To add a 3-digit number to a multiple of 10 (2-digit number) without regrouping or renaming.
	Lesson 4 – Adding Hundreds	To add multiples of 100 to a 3-digit number without regrouping or renaming.
	Lesson 5 – Simple Adding	To add two 3-digit numbers without regrouping or renaming; introduction of the column method of addition.
	Lesson 6 – Adding with Renaming	To add a 3-digit number to a 1-digit number with renaming.
	Lesson 7 – Adding with Renaming	To add with renaming in tens.
	Lesson 8 – Adding with Renaming	To add two 3-digit numbers with renaming the ones.
	Lesson 9 – Adding with Renaming	To add two 3-digit numbers with renaming the tens.
	Lesson 10 – Adding with Renaming	To add with renaming in ones and tens.
	Lesson 11 – Subtracting Ones	To do simple subtraction by taking away a 1-digit number from a 3-digit number without renaming.
	Lesson 12 – Subtracting Tens	To subtract multiples of 10, up to 90, from a 3-digit number.

Primary Maths Series — Year 3 lesson breakdown

Autumn Term – Textbook 3A

Calculations: Addition and Subtraction – Continued

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
	Lesson 13 – Subtracting Hundreds	To subtract hundreds from a 3-digit number and to subtract multiples of 1 and 10 from a 3-digit number.
	Lesson 14 – Simple Subtracting	To understand simple subtraction of a 3-digit number by another 3-digit number using the column method.
	Lesson 15 – Subtracting with Renaming	To subtract with renaming in tens and ones.
	Lesson 16 – Subtracting with Renaming	To subtract with renaming hundreds.
	Lesson 17 – Subtracting with Renaming	To subtract with regrouping tens and hundreds.
	Lesson 18 – Subtracting with Renaming	To subtract a 3-digit number with zeros.
	Lesson 19 – Using Models	To solve addition and subtraction problems using the bar model.
	Lesson 20 – Using Models	To use the bar model to solve problems.
	Lesson 21 – Using Models	To solve complicated problems involving addition and subtraction using a comparative bar model heuristic.
	Lesson 22 – Using Models	To solve more complicated problems involving addition and subtraction using a comparative bar model heuristic.
	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 3 lesson breakdown

Autumn Term – Textbook 3A

Calculations: Multiplication and Division

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 3 – Multiplication and Division	Lesson 1 – Multiplying by 3	To multiply by 3.
	Lesson 2 – Multiplying by 3	To multiply by 3 using relational properties.
	Lesson 3 – Multiplying by 4	To multiply by 4.
	Lesson 4 – Multiplying by 4	To multiply by 4.
	Lesson 5 – Multiplying by 4 and 8	To multiply by 4 and 8.
	Lesson 6 – Multiplying by 8	To multiply by 8; to use commutative law to multiply.
	Lesson 7 – Multiplying by 8	To multiply by 8.
	Lesson 8 – Dividing by 3	To divide by 3.
	Lesson 9 – Dividing by 4	To divide by 4.
	Lesson 10 – Multiplying and Dividing	To find relationships between multiplication and division.
	Lesson 11 – Dividing by 4 and 8	To divide by 4 and 8.
	Lesson 12 – Solving Word Problems	To solve word problems with multiplication.
	Lesson 13 – Solving Word Problems	To solve word problems that involve division.
	Lesson 14 – Solving Word Problems	To solve more word problems involving multiplication and division using the bar model heuristic.
	Lesson 15 – Solving Word Problems	To solve problems using a variety of strategies.
Chapter Consolidation	To practise various concepts covered in the chapter.	

Primary Maths Series — Year 3 lesson breakdown

Autumn Term – Textbook 3A

Calculations: Further Multiplication and Division

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 4 – Further Multiplication and Division	Lesson 1 – Multiplying 2-Digit Numbers	To multiply multiples of 10 by a 1-digit number.
	Lesson 2 – Multiplying 2-Digit Numbers	To multiply any 2-digit number by a 1-digit number.
	Lesson 3 – Multiplying 2-Digit Numbers	To multiply more 2-digit numbers.
	Lesson 4 – Multiplying with Renaming	To multiply with renaming.
	Lesson 5 – Multiplying with Renaming	To multiply with renaming.
	Lesson 6 – Dividing 2-Digit Numbers	To understand simple division of a 2-digit number by a 1-digit number.
	Lesson 7 – Dividing with Renaming	To divide where there is a need to rename.
	Lesson 8 – Dividing with Renaming	To use long division to divide.
	Lesson 9 – Solving Word Problems	To solve word problems that involve multiplication.
	Lesson 10 – Solving Word Problems	To solve word problems involving division.
	Lesson 11 – Solving Word Problems	To solve more challenging word problems.
Chapter Consolidation	To practise various concepts that were covered in the chapter.	

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3A

Measurement: Length

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 5 – Length	Lesson 1 – Writing Length in Metres and Centimetres	To use metres and centimetres to measure objects.
	Lesson 2 – Writing Length in Centimetres	To write length in centimetres only by converting metres to centimetres.
	Lesson 3 – Writing Length in Centimetres and Millimetres	To convert centimetres to millimetres.
	Lesson 4 – Writing Length in Millimetres	To measure objects and write length in millimetres.
	Lesson 5 – Comparing Lengths	To compare two lengths.
	Lesson 6 – Solving Word Problems	To solve measurement-related word problems.
	Lesson 7 – Solving Word Problems	To solve other word problems.
	Lesson 8 – Solving Word Problems	To solve word problems further, involving multiplication.
	Lesson 9 – Solving Word Problems	To solve word problems associated with length using division.
	Lesson 10 – Solving Word Problems	To solve more challenging word problems.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3A

Measurement: Mass

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 6 – Mass	Lesson 1 – Reading Weighing Scales	To measure mass using weighing scales and compare the mass of objects using grams and kilograms.
	Lesson 2 – Reading Weighing Scales	To use weighing scales to measure mass when the mass is between multiples of 100 g.
	Lesson 3 – Reading Weighing Scales	To read values on a scale which are 1 kg or more.
	Lesson 4 – Reading Weighing Scales	To weigh heavier items where the markers in the scales represent 200 g each.
	Lesson 5 – Solving Word Problems	To solve word problems relating to mass with addition and subtraction.
	Lesson 6 – Solving Word Problems	To solve word problems relating to mass using multiplication.
	Lesson 7 – Solving Word Problems	To solve word problems relating to mass using division.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3A

Measurement: Volume

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 7 – Volume	Lesson 1 – Measuring Volume in Millilitres	To measure volume in millilitres.
	Lesson 2 – Measuring Capacity in Millilitres	To measure capacity in millilitres.
	Lesson 3 – Measuring Volume in Millilitres and Litres	To measure volume using millilitres and litres.
	Lesson 4 – Measuring Capacity in Millilitres and Litres	To measure volume in millilitres and litres from a 'homemade' bottle with markings.
	Lesson 5 – Writing Volume in Litres and Millilitres	To measure volume using millilitres and litres in comparison to 1 l.
	Lesson 6 – Writing Capacity in Litres and Millilitres	To measure larger capacity in litres and millilitres.
	Lesson 7 – Solving Word Problems	To solve basic word problems related to volume.
	Lesson 8 – Solving Word Problems	To solve more word problems.
	Lesson 9 – Solving Word Problems	To solve word problems through division.
	Lesson 10 – Solving Word Problems	To solve two-step word problems.
	Chapter Consolidation	To practise various concepts covered in the chapter.
Week 6	Mid-Year (A) Tests and Remediation	

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3B

Measurement: Money

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 8 – Money	Lesson 1 – Counting Money	To use simple addition to count amounts of money.
	Lesson 2 – Showing Amounts of Money	To find multiple ways of showing an amount of money.
	Lesson 3 – Adding Money	To add money by adding together the pounds and pence separately.
	Lesson 4 – Adding Money	To add pounds and pence with renaming.
	Lesson 5 – Subtracting Money	To subtract pounds and pence without renaming.
	Lesson 6 – Subtracting Money	To subtract pounds and pence with renaming.
	Lesson 7 – Subtracting Money	To compare amounts of money and find the difference by subtracting.
	Lesson 8 – Calculating Change	To find the amount of change left from a given amount of money after a purchase.
	Lesson 9 – Solving Word Problems	To solve word problems involving addition and subtraction of money.
	Lesson 10 – Solving Word Problems	To solve multi-step word problems involving the addition and subtraction of money.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3B

Measurement: Time

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 9 – Time	Lesson 1 – Telling the Time	To use the terms 'a.m.' and 'p.m.' correctly to identify morning or afternoon/evening.
	Lesson 2 – Telling the Time	To learn to tell time to the minute; to understand the relationship between the minute hand and hour hand.
	Lesson 3 – Telling the Time	To consolidate and apply a variety of vocabulary used to express the time.
	Lesson 4 – Telling the Time	To be able to tell time to the minute using appropriate vocabulary.
	Lesson 5 – Telling the Time	To be able to tell and write the time from 12-hour and 24-hour clocks.
	Lesson 6 – Telling the Time	To tell the time on an analogue clock using Roman numerals.
	Lesson 7 – Telling the Time	To be able to measure time in seconds.
	Lesson 8 – Measuring and Comparing Time in Seconds	To measure time in seconds using a stopwatch.
	Lesson 9 – Measuring Time in Seconds	To measure time in seconds using an analogue clock.
	Lesson 10 – Finding Duration in Minutes	To find durations of time in minutes.
	Lesson 11 – Finding Start Times and End Times	To find start or end times for events given the duration in minutes.
	Lesson 12 – Finding Durations in Hours	To find durations of events in hours.
	Lesson 13 – Finding Start Times and End Times	To find start or end times for events given the duration in hours.

Primary Maths Series — Year 3 lesson breakdown

Spring Term – Textbook 3B

Measurement: Time – Continued

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 9 – Time	Lesson 14 – Converting Minutes to Seconds	To convert minutes into seconds.
	Lesson 15 – Converting Seconds to Minutes	To convert seconds into minutes.
	Lesson 16 – Finding Number of Days	To calculate the number of days in a month; to learn which months have 31, 30 and 28/29 days.
	Lesson 17 – Finding Number of Days	To find the duration of days for different activities.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Summer Term – Textbook 3B

Statistics: Pictograms and Bar Graphs

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 10 – Pictograms and Bar Graphs	Lesson 1 – Drawing Pictograms	To construct picture graphs from a set of data; to present data with pictures that represent more than one item.
	Lesson 2 – Drawing Bar Graphs	To construct bar graphs from a set of data; to use proportion to reflect precise difference in quantity.
	Lesson 3 – Reading Bar Graphs	To read and interpret information from a bar graph; to use and understand vocabulary related to bar graphs.
	Lesson 4 – Reading Bar Graphs	To interpret data presented in scaled bar graphs.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Summer Term – Textbook 3B

Fractions, Decimals and Percentages: Fractions

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 11 – Fractions	Lesson 1 – Counting in Tenths	To count in tenths; to recognise tenths and be able to determine how many tenths are shaded.
	Lesson 2 – Fractions as Division	To relate fractions to division.
	Lesson 3 – Finding Part of a Set	To recognise, find and write fractions of a discrete set of objects.
	Lesson 4 – Finding Part of a Set	To recognise, find and write fractions of a discrete set of objects.
	Lesson 5 – Finding Equivalent Fractions	To find equivalent fractions through paper folding and shading.
	Lesson 6 – Finding Equivalent Fractions	To find equivalent fractions using pictorial representations and multiplication.
	Lesson 7 – Comparing and Ordering Fractions	To compare and order fractions with the same denominator.
	Lesson 8 – Comparing and Ordering Fractions	To compare and order unit fractions.
	Lesson 9 – Comparing Fractions	To compare fractions with different names (denominators) using pictorial representations and number lines.
	Lesson 10 – Adding Fractions	To add fractions using pictorial representations; to simplify fractions after adding them.
	Lesson 11 – Subtracting Fractions	To subtract fractions using pictorial representations.
	Lesson 12 – Subtracting Fractions	To subtract fractions from a whole amount; to use pictorial representations of whole numbers to help subtract fractions.
	Lesson 13 – Solving Word Problems	To apply bar modelling to represent fractions in word problems; to solve word problems using pictorial representations and abstract methods.
	Lesson 14 – Solving Word Problems	To use bar models to solve word problems involving addition and subtraction of fractions with the same denominator.
Chapter Consolidation	To practise various concepts covered in the chapter.	

Primary Maths Series — Year 3 lesson breakdown

Summer Term – Textbook 3B

Geometry – Properties of Shapes: Angles

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 12 – Angles	Lesson 1 – Making Angles	To learn what makes an angle and identify angles in objects.
	Lesson 2 – Finding Right Angles	To find right angles in everyday objects; to understand what makes a right angle.
	Lesson 3 – Finding Different Angles	To see angles on the inside and outside of objects; to find angles in letters.
	Lesson 4 – Finding Angles in Shapes	To find angles in shapes; to determine the relationship between the number of angles in a shape and the number of sides.
	Lesson 5 – Comparing Angles	To identify right angles and acute angles; to recognise and define an obtuse angle.
	Lesson 6 – Making Turns	To make turns using angles vocabulary; to align the language of angles and fractions to describe turns.
	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 3 lesson breakdown

Summer Term – Textbook 3B

Geometry – Properties of Shapes: Lines and Shapes

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 13 – Lines and Shapes	Lesson 1 – Identifying Perpendicular Lines	To identify, define and create perpendicular lines; to find perpendicular lines in everyday objects.
	Lesson 2 – Identifying Parallel Lines	To identify, define and create parallel lines; to find parallel lines in everyday objects.
	Lesson 3 – Finding Horizontal and Vertical Lines	To define and identify vertical and horizontal lines; to find vertical and horizontal lines in everyday life.
	Lesson 4 – Drawing 2D Shapes	To draw 2D shapes in proportion to their size; to identify how big a shape is.
	Lesson 5 – Describing 3D Shapes	To describe and compare 3D shapes.
	Chapter Consolidation	To practise various concepts covered in the chapter.

Primary Maths Series — Year 3 lesson breakdown

Summer Term – Textbook 3B

Measurement: Perimeter of Figures

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 14 – Perimeter of Figures	Lesson 1 – Measuring Total Length Around a Shape	To determine the perimeter of basic shapes; to use grid paper to measure the perimeter of a shape.
	Lesson 2 – Measuring Perimeter	To measure the perimeter of a shape using 1 cm grid paper.
	Lesson 3 – Measuring Perimeter	To determine the perimeter of different shapes; to create shapes with a specific perimeter.
	Lesson 4 – Measuring Perimeter	To find the perimeter of shapes using 2 cm grids.
	Lesson 5 – Measuring Perimeter	To calculate the perimeter of a shape using a ruler to measure the side lengths.
	Lesson 6 – Calculating Perimeter	To calculate the perimeter of a rectangle using multiplication and addition.
	Lesson 7 – Calculating Perimeter	To calculate the perimeter of a square and a rectangle using addition and multiplication.
	Lesson 8 – Calculating Perimeter	To consolidate learning about perimeter using practical word problems; to calculate the perimeter of a rectangle using properties of shapes.
	Lesson 9 – Calculating Perimeter	To calculate the perimeter of a square and a rectangle using information previously learned about the properties of shapes.
	Chapter Consolidation	To practise various concepts covered in the chapter.
Week 12	End-of-Year (B) Tests and Remediation	

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- b) To allow prospective users to assessment the suitability of the **Maths — No Problem!** Programme, or
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