# Primary Maths Series, New Edition Scheme of Work - Year 6

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 6 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 Khoon 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 www.mathsnoproblem.com/demo

- Phone +44 (0) 1892 537 706
- MathsNoProblem.com
- @MathsNoProblem
- **f** /MathsNoProblem
- @mathsnoproblem\_
- in /maths-no-problem





# Primary Maths Series - Year 6 at a Glance

	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Number and Place Value: Numbers to 10 Million  LESSON BREAKDOWN	Measurement: Measurements  LESSON BREAKDOWN	Geometry – Position and Direction: Position and Movement LESSON BREAKDOWN
Week 2			Statistics: Graphs and Averages  LESSON BREAKDOWN
Week 3		Word Problems  LESSON BREAKDOWN	
Week 4	Calculations: Four Operations on Whole Numbers LESSON BREAKDOWN	Mid-year (A) Tests and Remediation	SATs
Week 5	Fractions, Decimals and Percentages: Fractions LESSON BREAKDOWN	Fractions, Decimals and Percentages: Percentage  LESSON BREAKDOWN	Number and Place Value: Negative Numbers  LESSON BREAKDOWN
Week 6		Ratio and Proportion: Ratio  LESSON BREAKDOWN	Measurement: Volume LESSON BREAKDOWN
Week 7			Geometry – Properties and Shapes: Geometry LESSON BREAKDOWN
Week 8		Algebra: Algebra	
Week 9		<u>LESSON BREAKDOWN</u>	Geometry – Position and Direction: Position and Movement <u>LESSON BREAKDOWN</u>
Week 10	Fractions, Decimals and Percentages: Decimals  LESSON BREAKDOWN	Measurement: Area and Perimeter  LESSON BREAKDOWN	Statistics: Graphs and Averages  LESSON BREAKDOWN
Week 11			Revision and End-of-year (B) Tests
Week 12	EESSON BICARDOWN	Geometry – Properties and Shapes: Geometry  LESSON BREAKDOWN	Revisit Topics



#### Autumn Term – Textbook 6a Number and Place Value: Numbers to 10 Million Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 1 Lesson 1 – Reading and Writing To construct and record numbers to 10 000 000; to recognise the value of digits to 10 000 000. - Numbers to Numbers to 10 Million 10 Million Lesson 2 – Comparing Numbers To compare numbers to 10 000 000 using place value. to 10 Million Lesson 3 – Comparing and Ordering To compare and order numbers to 10 000 000; to create combinations of numbers using a fixed number of digits. Numbers to 10 Million To round numbers to 10 000 000 to the nearest milijon, hundred thousand and ten thousand. Lesson 4 – Rounding Numbers To round numbers to the nearest appropriate number up to and including millions; to determine when rounding is appropriate Lesson 5 – Rounding Numbers and to which value.

To practise various concepts covered in the chapter.



Chapter consolidation

#### Autumn Term – Textbook 6a Calculations: Four Operations on Whole Numbers Maths — No Problem! Lesson Name Lesson Objective **Book Reference** Chapter 2 Lesson 1 – Using Mixed Operations To use multiple operations and create expressions from a picture; to use the order of operations to solve expressions. - Four Operations on Whole Numbers Lesson 2 – Order of Operations To create and solve expressions using the four operations. Lesson 3 – Multiplying by Tens To multiply numbers by multiples of 10; to use number bonds as a key strategy in multiplication. To multiply 3- and 4-digit numbers by 2-digit numbers without regrouping or renaming; to use both number bonds and the column Lesson 4 – Multiplying a 3-Digit Number by a 3-Digit Number method as key strategies. Lesson 5 – Multiplying To multiply 3- and 4-digit numbers by 2-digit numbers without regrouping or renaming; to use both number bonds and the column by a 2-Digit Number method as key strategies. Lesson 6 – Multiplying by a 3-Digit To multiply 3- and 4-digit numbers by 2-digit numbers with regrouping and renaming; to use number bonds and pattern Number by a 2-Digit Number recognition as key strategies for multiplication. Lesson 7 – Multiplying a 4-Digit To multiply 3- and 4-digit numbers by 2-digit numbers with regrouping and renaming; to use number bonds and the column Number by a 2-Digit Number method as key strategies. Lesson 8 – Multiplying by a To estimate products of multiplying 3- and 4-digit numbers by a 2-digit numbers; to use knowledge of multiplication to create specific products. 2-Digit Number Lesson 9 – Dividing To divide 3-digit numbers by 2-digit numbers using a variety of strategies; to use number bonds, long division and bar models to facilitate division by 2-digit numbers. by a 2-Digit Number Lesson 10 – Dividina To divide 4-digit numbers by 2-digit numbers; to use number bonds and long division as the key strategies. by a 2-Digit Number Lesson 11 – Dividing To divide 4-digit numbers by 2-digit numbers using a variety of methods; to use number bonds, long and short division as key by a 2-Digit Number methods.

key strategies to solve division problems.

money or decimal.

To divide 3-digit numbers by 2-digit numbers giving rise to remainders; to use number bonds and long and short division as

To divide 4-digit numbers by 2-digit numbers giving rise to a remainder; to represent the remainder as part of a whole amount of

Continued overleaf



Lesson 12 – Dividing by a 2-Digit Number with Remainder

Lesson 13 – Dividing by a 2-Digit Number with Remainder

#### Autumn Term – Textbook 6a Calculations: Four Operations on Whole Numbers (continued) Maths — No Problem! Lesson Name **Lesson Objective** Book Reference Chapter 2 Lesson 14 – Solving Word To use the bar model heuristic to solve word problems involving multiplication and division. - Four Operations Problems Using Bar Models on Whole Numbers Lesson 15 – Solving Word To solve word problems using division as the main strategy; to use pictorial representations to support word problems. **Problems Using Patterns** Lesson 16 - Solving Word To solve word problems involving multiple operations, including multiplication and division. Problems Using Multiple Methods Lesson 17 – Finding To find common multiples in real-life situations; to use common multiples in tandem with knowledge of time. Common Multiples Lesson 18 – Finding To use common multiples to solve problems; to organise mathematical thinking into tables and lists. Common Multiples Lesson 19 - Finding To find the largest common factor of 3-digit numbers; to use multiplication and division to find largest common factors. Common Factors Lesson 20 – Finding To find common factors using concrete materials. **Common Factors** Lesson 21 – Finding Prime Numbers To use prime numbers to create other numbers; to explore prime numbers above 100. Lesson 22 - Finding Prime Numbers To explore prime numbers using concrete materials; to identify prime numbers using multiplication or division. To practise various concepts covered in the chapter. Chapter consolidation

Autumn Term – Textbook 6a			
Fractions, Decimals and Percentages: Fractions			
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective	
Chapter 3 - Fractions	Lesson 1 – Simplifying Fractions Using Common Factors	To use concrete materials to simplify fractions; to recognise equivalence in fractions to 1/4.	
	Lesson 2 – Simplifying Fractions Using Common Factors	To simplify fractions using division and common factors; to represent fractions using concrete materials and pictorial representations.	
	Lesson 3 – Comparing and Ordering Fractions	To compare fractions and place them in order from smallest to largest.	
	Lesson 4 – Comparing and Ordering Improper Fractions	To compare and order fractions by finding common denominators.	
	Lesson 5 – Comparing and Ordering Fractions and Mixed Numbers	To compare and order fractions using common factors.	
	Lesson 6 – Adding and Subtracting Unlike Fractions	Adding and subtracting fractions with different denominators; using pictorial representations to compare fractions and add/subtract.	
	Lesson 7 – Adding and Subtracting Unlike Fractions	To add and subtract fractions with different denominators.	
	Lesson 8 – Adding and Subtracting Mixed Numbers	To add and subtract mixed numbers, including fractions with different denominators; to subtract from the whole and add the remainder back on.	
	Lesson 9 – Adding and Subtracting Mixed Numbers	To add and subtract fractions with different denominators; to add and subtract mixed numbers.	
	Lesson 10 – Multiplying Pairs of Proper Fractions	To multiply fractions using pictorial representations and abstract methods.	
	Lesson 11 – Multiplying Pairs of Proper Fractions	To determine if the commutative law applies to fractions; to multiply fractions using concrete materials and pictorial representations.	
	Lesson 12 – Multiplying Pairs of Proper Fractions	To use concrete materials to understand and solve the multiplication of fractions; to simplify equations using pattern blocks.	
	Lesson 13 – Dividing a Fraction by a Whole Number	To divide a fraction by a whole number; to use pictorial representation to divide whole numbers into fractions.	
	Lesson 14 – Dividing a Fraction by a Whole Number	To divide fractions by whole numbers using concrete materials and pictorial representations; to divide fractions when the numerator and divisor are not easily divisible.	
	Lesson 15 – Dividing a Fraction by a Whole Number	To divide fractions by a whole number; to use pictorial representations to support division.	
	Chapter consolidation	To practise various concepts covered in the chapter.	



#### Autumn Term – Textbook 6a

	_	
, Decimals and	Danasakasas	
	PARCANTAINAS.	
	i cicciitaqes.	Deciliais

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 4 – Decimals	Lesson 1 – Reading and Writing Decimals	To read and write decimals to thousandths; to use concrete materials to represent decimals.
	Lesson 2 – Dividing Whole Numbers by Multiples of 10	To divide whole numbers by larger whole numbers; to use Base 10 materials to represent tenths, hundredths and thousandths.
	Lesson 3 – Dividing Whole Numbers	To divide whole numbers that give rise to decimals; to calculate decimal fraction equivalents using long division.
	Lesson 4 – Writing Fractions as Decimals	To convert fractions into decimals using bar models and long division.
	Lesson 5 – Writing Fractions as Decimals	To write fractions as decimals; to use long division as the key strategy for turning fractions into decimals.
	Lesson 6 – Multiplying Decimals without Regrouping	To multiply decimals by whole numbers using partitioning or the worded method to help find the solution.
	Lesson 7 – Multiplying Decimals with Regrouping	To multiply whole numbers that include a decimal by other whole numbers; to use partitioning and the worded method as key strategies.
	Lesson 8 – Multiplying Decimals with Regrouping	To multiply decimals by whole numbers, including regrouping and renaming.
	Lesson 9 – Multiplying Decimals with Regrouping	To multiply decimals by whole numbers using a variety of methods; to use the heuristic 'making a list' to help solve a problem.
	Lesson 10 – Dividing Decimals without Regrouping	To divide decimals using number bonds and number discs as the key strategies.
	Lesson 11 – Dividing Decimals with Regrouping	To divide decimals using bar models, number bonds and long division as key strategies, including regrouping and renaming.
	Lesson 12 – Multiplying a Decimal by a 2-Digit Whole Number	To multiply decimals by a 2-digit whole number using number discs and the column method.
	Lesson 13 – Dividing a Decimal by a 2-Digit Whole Number	To divide decimals by 2-digit numbers using number bonds and the worded method.
	Lesson 14 – Dividing a Decimal by a 2-Digit Whole Number	To divide decimals by 2-digit whole numbers using number bonds and the worded method.
	Chapter consolidation	To practise various concepts covered in the chapter.



Spring Term – Textbook 6a		
Measurement: Measurements		
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 5 - Measurements	Lesson 1 – Converting Units of Length : Millimetres and Centimetres	To convert common measurements into centimetres and millimetres.
	Lesson 2 – Converting Units of Length : Metres and Centimetres	To convert units of measure into different units; to use knowledge of decimals and fractions to help convert units.
	Lesson 3 – Converting Units of Length : Kilometres and Metres	To convert metres into kilometres as units of measure.
	Lesson 4 - Converting Units of Length: Miles and Kilometres.	To convert distances between miles and kilometres.
	Lesson 5 – Converting Units of Mass	To convert units of mass from grams to kilograms using decimals and fractions.
	Lesson 6 – Converting Units of Volume	To convert units of volume from millilitres to litres.
	Lesson 7 – Converting Units of Time	To convert units of time from minutes to hours; to represent time using 24-hour notation.
	Chapter consolidation	To practise various concepts covered in the chapter.

Spring Term – Textbook 6a		
Word Problems		
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 6	Lesson 1 – Solving Word Problems	To use bar models to solve word problems involving the four operations.
- Word Problems	Lesson 2 – Solving Word Problems	To use the bar model heuristic to solve word problems involving money.
	Lesson 3 – Solving Word Problems	To use the bar model heuristic to solve complex word problems involving ratio.
	Lesson 4 – Solving Word Problems	To use the bar model heuristic to solve complex word problems involving time.
	Lesson 5 – Solving Word Problems	To solve word problems that apply the bar model heuristic and involve fractions.
	Lesson 6 – Solving Word Problems	To create and solve complex word problems using the four operations.
	Chapter consolidation	To practise various concepts covered in the chapter.
Week 3	Mid-Year (A) Tests and Remediation	

#### Spring Term – Textbook 6b

#### Fractions, Decimals and Percentages: Percentage

Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 7 – Percentage	Lesson 1 – Finding the Percentage of a Number	To find the percentage of a whole number using division and multiplication; to use bar modelling as a pictorial approach to calculating percentage.
	Lesson 2 – Finding the Percentage of a Quantity	To find the percentage of a quantity; to use bar model diagrams to support the division and multiplication of numbers towards the percentage.
	Lesson 3 – Finding Percentage Change	To find the percentage change in an amount over time; to calculate the percentage change where the number gives rise to a decimal.
	Lesson 4 – Using Percentage to Compare	To use percentage, bar models and fractions to compare amounts.
	Chapter consolidation	To practise various concepts covered in the chapter.



#### Spring Term - Textbook 6b **Ratio and Proportion: Ratio** Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 8 Lesson 1 – Comparing Quantities To use ratios and fractions to compare objects; to find the relationship between ratios, percentages and fractions. - Ratio Lesson 2 – Comparing Quantities To determine the ratio of a quantity using concrete materials; to simplify ratios using concrete materials in addition to division. To compare more than two quantities using the term 'ratio'; to use bar models to express ratios where there is more than Lesson 3 – Comparing Quantities one quantity. Lesson 4 – Comparing Quantities To compare quantity using both fractions and ratios; to use bar model diagrams to represent ratios. Lesson 5 – Comparing Quantities To compare quantities using bar models and common factors; to use multiplication and division to simplify ratios. Lesson 6 – Comparing Numbers To compare numbers using ratios; to make decisions about simplifying ratios using division. To solve word problems using a variety of heuristics including guess-and-check and bar models; to apply knowledge of Lesson 7 – Solving Word Problems ratios to word problems. To solve word problems using the bar model heuristic; to employ division and multiplication as primary strategies when solving Lesson 8 - Solving Word Problems word problems visually. Lesson 9 - Solving Word Problems To apply the guess-and-check and advanced bar model heuristic to ratio word problems. Chapter consolidation To practise various concepts covered in the chapter.



Spring Term – Textbook 6b		
Algebra: Algebra		
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 9 - Algebra	Lesson 1 – Describing a Pattern	To determine a pattern using concrete materials and pictorial representation; to use a table to identify a repeating pattern; to express a rule using a letter or symbol.
	Lesson 2 – Describing a Pattern	To determine a pattern using concrete materials and pictorial representation; to use a table to identify a repeating pattern; to express the relationship between consecutive numbers in terms of a symbol or letter.
	Lesson 3 – Describing a Pattern	To determine a pattern using concrete materials and pictorial representation; to use a table to identify a pattern; to express the relationship between consecutive numbers in terms of a symbol or letter.
	Lesson 4 – Describing a Pattern	To determine a pattern using concrete materials and pictorial representation; to use a table to identify a pattern; to express unknown numbers in terms of a letter or symbol, including using a number before a letter for multiplication.
	Lesson 5 – Writing Algebraic Expressions	To use a table to identify a pattern; to write algebraic expressions using each of the four operations.
	Lesson 6 – Writing and Evaluating Algebraic Expressions	To use examples to identify rules; to write algebraic expressions using each of the four operations; to evaluate algebraic expressions including the use of inverse operations.
	Lesson 7 – Writing and Evaluating Algebraic Expressions	To recognise patterns; to write algebraic expressions with two steps; to evaluate algebraic expressions with two steps.
	Lesson 8 – Writing Formulae	To recognise patterns; to write and evaluate algebraic expressions with two steps; to write and use formulae.
	Lesson 9 – Using Formulae	To use formulae to solve problems; to replace a letter/variable with a number then solve the equation; to use inverse operations to solve equations.
	Lesson 10 – Solving Equations	To solve equations; to use equations to find unknown values.
	Chapter consolidation	To practise various concepts covered in the chapter.



#### Spring Term - Textbook 6b Measurement: Area and Perimeter Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 10 Lesson 1 – Finding the Area and To find the area and perimeter of rectangles; to calculate perimeter using the known area and vice versa. - Area and Perimeter the Perimeter of Rectangles To find and calculate the area of a parallelogram; to use concrete materials and prior understanding of area to construct a formula for Lesson 2 – Finding the Area Lessons 1–6 of Parallelograms the area. To use prior knowledge of area to determine and solve the area of a triangle; to use and apply the formula for the area Lesson 3 – Finding the Area of a rectangle to solve problems involving triangles. of Triangles Lesson 4 – Finding the Area To calculate the area of a triangle using a formula; to calculate the area of a triangle in multiple ways. of Triangles Lesson 5 – Finding the Area To use multiple methods to solve the area of a triangle. of Triangles Lesson 6 – Finding the Area To find the area of a parallelogram using an understanding of triangles; to use concrete materials to find the area of Parallelograms of a parallelogram. 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.



#### Spring Term - Textbook 6b Geometry – Properties and Shapes: Geometry Maths — No Problem! **Lesson Name Lesson Objective Book Reference** Chapter 12 Lesson 1 – Investigating Vertically To investigate opposite angles; to use prior knowledge of angles to solve problems involving angles. - Geometry Opposite Angles Lesson 2 – Solving Problems Lessons 1–5 To solve problems involving angles using the bar model heuristic; to solve problems involving angles without protractors. Involving Angles Lesson 3 – Investigating Angles To determine and show the sum of the angles inside a triangle. in Triangles Lesson 4 – Investigating Angles To investigate and determine angles in quadrilaterals. in Quadrilaterals Lesson 5 – Solving Problems Involving Angles in Triangles To use the knowledge of angles inside a triangle and a quadrilateral to solve problems involving angles in other shapes. and Quadrilaterals



#### Spring Term - Textbook 6b Geometry - Position and Direction: Position and Movement Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 12 Lesson 1 – Showing To represent negative numbers on both vertical and horizontal number lines. - Position and **Negative Numbers** Movement Lesson 2 – Describing Position To describe the positions of objects on a coordinate grid; to use x and y axes to determine the position of objects on a grid. Lessons 1-5 Lesson 3 – Describing Position To describe the position of points using coordinates on a grid. Lesson 4 – Drawing Polygons To draw polygons on a coordinate grid; to recognise polygons on a coordinate grid. on a Coordinate Grid Lesson 5 – Describing Translations To describe the translation of shapes on a coordinate grid.



#### Summer Term - Textbook 6b **Statistics: Graphs and Averages** Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 14 Lesson 1 – Understanding Averages To calculate the average (mean) of sets of values. - Graphs and Averages Lesson 2 – Calculating the Mean To calculate the mean. Lessons 1-10 Lesson 3 – Calculating the Mean To calculate the mean. Lesson 4 – Solving Problems To solve problems involving the mean; to use the mean and the number of values to calculate the total; to use given Involving the Mean information to find unknown values. Lesson 5 – Showing Information To show information on graphs; to transfer information from a table to a pie chart. on Graphs Lesson 6 – Reading Pie Charts To read and interpret pie charts. Lesson 7 – Reading Pie Charts To read and interpret pie charts; to use percentages in pie charts. Lesson 8 – Reading Pie Charts To read and interpret pie charts; to use knowledge of angles to interpret pie charts. Lesson 9 – Reading Line Graphs To read line graphs; to interpret the information in line graphs that show distance and time. Lesson 10 – Reading Line Graphs To read and interpret line graphs; to answer questions about the information in line graphs.



#### Summer Term - Textbook 6b **Number and Place Value: Negative Numbers** Maths — No Problem! **Lesson Name Lesson Objective Book Reference** Chapter 15 Lesson 1 – Adding and Subtracting To add and subtract negative numbers using a number line. - Negative Numbers **Negative Numbers** Lesson 2 – Using Negative Numbers To create number stories using negative 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. Week 4 SATs



Summer Term – Textbook 6b		
Measurement: Volume		
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 11 - Volume	Lesson 1 – Finding the Volume of Cubes and Cuboids	To find the volume of cubes and cuboids using concrete materials.
	Lesson 2 – Finding the Volume of Cubes and Cuboids	To determine the formula for the volume of cubes and cuboids and apply it to calculate the volume of shapes.
	Lesson 3 – Finding the Volume of Cubes and Cuboids	To estimate the volume of objects and spaces; to calculate the volume of boxes using the formula for volume of cubes and cuboids.
	Lesson 4 – Finding the Volume of Cubes and Cuboids	To calculate the volume of boxes using the formula for volume of a cube; to expose common misconceptions in volume through a 3-box arrangement.
	Lesson 5 – Solving Problems Involving the Volume of Solids	To solve word problems involving the volume of cubes and cuboids; to apply the formula for the volume of a cube or cuboid.
	Chapter consolidation	To practise various concepts covered in the chapter.



#### Summer Term - Textbook 6b Geometry – Properties and Shapes: Geometry Maths — No Problem! Lesson Name **Lesson Objective Book Reference** Chapter 12 Lesson 6 – Naming Parts of a Circle To name the parts of a circle; to calculate diameter and radius using parts of a circle. - Geometry Lesson 7 – Solving Problems To solve problems involving angles in a circle. Involving Angles in a Circle Lessons 6-12 To draw quadrilaterals with specific side lengths and parallel lines; to find the perimeter of shapes and name trapeziums Lesson 8 – Drawing Quadrilaterals and parallelograms. Lesson 9 – Drawing Triangles To draw triangles using measurements and angles as the starting point; to use a protractor to draw triangles using angles. Lesson 10 – Drawing Triangles To construct triangles using a protractor and ruler; to use ratio to determine the dimensions of a triangle. Lesson 11 – Drawing Nets To construct the nets of 3-D shapes by identifying the faces and the 2-D shapes that construct them. of Three-Dimensional Shapes Lesson 12 – Drawing Nets To construct the nets of 3-D shapes by identifying the faces and the 2-D shapes that construct them. of Three-Dimensional Shapes 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.



#### Summer Term - Textbook 6b Geometry – Position and Direction: Position and Movement Maths — No Problem! **Lesson Name Lesson Objective Book Reference** Chapter 13 Lesson 6 – Describing Reflections To describe reflection using a mirror line and the terms 'object' and 'image'. - Position and Movement Lesson 7 – Describing Movements To reposition objects so they can be reflected in the x and y axis as the mirror line. Lessons 6-10 Lesson 8 – Describing Movements To describe the movement of objects using the terms 'translation' and 'reflection'. Lesson 9 – Using Algebra To use algebra to describe the positions of coordinates in relationship to one another. to Describe Position Lesson 10 – Using Algebra To represent translation and reflection using algebraic notation. to Describe Movements Chapter consolidation To practise various concepts covered in the chapter.



Summer Term – Textbook 6b		
Statistics: Graphs and Averages		
Maths — No Problem! Book Reference	Lesson Name	Lesson Objective
Chapter 14  – Graphs and Averages	Lesson 11 – Converting Miles into Kilometres	To convert miles into kilometres and kilometres into miles.
Lessons 11–12	Lesson 12 – Reading Line Graphs	To read and interpret line graphs.
	Chapter consolidation	To practice 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 10	Revisit Topics	
Week 11	Revision And End-Of-Year (B) Tests	
Week 12	Revisit Topics	



# By downloading these documents, you agree to these terms and conditions terms of download

This terms of use agreement sets out the terms on which you may make use of our Primary Maths Series scheme of work. By downloading and using our scheme of work you confirm that you accept these terms of use and that you agree to comply with them. If you do not agree to these terms of use, you must not use our scheme of work.

#### Eligibility

We have developed the scheme of work to work alongside our textbook, workbooks and online Teacher Hub. The scheme of work is designed for teachers and parents only. The express purpose of the scheme of work is;

- a) To support existing users, with a current annual subscription to our Teacher Guide, with their lesson and curriculum planning, or
- To allow prospective users to assessment the suitability of the Maths — No Problem! Programme, or
- For schools, with a current annual subscription to our Teacher Guide, to share with parents to demonstrate the school's maths curriculum The scheme of work may not be reproduced or used for any other purpose whatsoever without the express written permission of the publisher.

#### Intellectual property rights

We are the owner or the licensee of all intellectual property rights in our scheme of work. Those works are protected by copyright laws and treaties around the world. All such rights are reserved. You may print off one copy and you may draw the attention of others within your organisation to content. You must not use any part of the content for commercial purposes without obtaining a licence to do so from us or our licensors.

If you print off, copy or modify any part of our scheme of work in breach of these terms of use, your right to use our scheme of work will cease immediately and you must, at our option, return or destroy any copies of the materials you have made.

Our status (and that of any identified contributors) as the authors of content on our website must always be acknowledged.