



# Stanley Grove Primary Academy

# Year 1 Maths Overview



## Year 1 Scheme of Work

Maths — No Problem! is a comprehensive series that adopts a spiral design with carefully built-up mathematical concepts and processes adapted from the maths mastery approaches used in Singapore. The Concrete-Pictorial-Abstract (C-P-A) approach forms an integral part of the learning process through the materials developed for this series.

Maths — No Problem! incorporates the use of concrete aids and manipulatives, problem-solving and group work.

<b>Textbook 1A</b>	<b>Chapter 1 – Numbers to 10</b>	<p>Lesson 1 – Counting to 10: To be able to count numbers to 10 accurately – forwards and backwards.</p> <p>Lesson 2 – Counting Objects to 10: To be able to count similar objects up to 10 with accuracy and fluency.</p> <p>Lesson 3 – Writing to 10: To be able to write all numbers to 10 in numerals and in words; to count only objects of the same name in a group.</p> <p>Lesson 4 – Counting To Zero: To be able to understand what zero represents and use it when counting.</p> <p>Lesson 5 – Comparing Numbers of Objects: To compare objects using matching and counting; to use the terms 'greater than' and 'less than' as key terms.</p> <p>Lesson 6 – Ordering Numbers: To be able to order numbers to 10 and know which number is greater or is lesser in value.</p> <p>Lesson 7 – Comparing Numbers: To compare numbers using the terms '1 more' and '1 less'.</p> <p>Mind Workout – Mind Workout: To practice various concepts that were covered in the chapter, from writing the numbers in words to consolidating the correct value of digits.</p>
	<b>Chapter 2 – Number Bonds</b>	<p>Lesson 1 – Making Number Bonds: To understand that a number is made up of other numbers; to find as many ways as possible to construct a number.</p> <p>Lesson 2 – Making Number Stories : To use number bonds for storytelling.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 3 – Addition Within 10</b>	<p>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.</p> <p>Lesson 2 – Add by Counting On : To add by counting on.</p> <p>Lesson 3 – Completing Number Sentences : To complete number sentences and gain an understanding of inverse operations.</p> <p>Lesson 4 – Making Addition Stories : To be able to make addition stories using correct vocabulary.</p> <p>Lesson 5 – Solving Picture Problems : To be able to solve addition problems through pictures.</p> <p>Mind Workout – Mind Workout : Maths Journal and reflection of learning throughout the chapter.</p>
	<b>Chapter 4 – Subtraction Within 10</b>	<p>Lesson 1 – Subtract by Crossing Out : To understand that subtraction can be done by crossing out or taking away.</p> <p>Lesson 2 – Subtract by Using Number Bonds : To be able to subtract using number bonds.</p> <p>Lesson 3 – Subtract by Counting Back : To be able to solve a subtraction equation by counting back, using a number line as support.</p> <p>Lesson 4 – Making Subtraction Stories : To be able to make subtraction sentences.</p> <p>Lesson 5 – Solving Picture Problems : To be able to solve picture problems involving subtraction.</p> <p>Lesson 6 – Addition and Subtraction : To solve problems in the context of addition and subtraction and to find the corresponding number families.</p> <p>Mind Workout – Mind Workout : To consolidate the learning of subtraction equations and fact families.</p>
	<b>Chapter 5 – Positions</b>	<p>Lesson 1 – Naming Positions : To learn the appropriate positional language (ordinal numbers) for up to 10 positions.</p> <p>Lesson 2 – Naming Positions in Queues : To be able to name the positions in a queue.</p> <p>Lesson 3 – Naming Left and Right Positions : To be able to name positions including left and right.</p> <p>Mind Workout – Mind Workout : To consolidate the learning of positional language.</p>

## Mathematics Overview

<b>Textbook 1A</b>	<b>Chapter 6 - Numbers to 20</b>	<p>Lesson 1 – Counting to 20 : To count numbers up to 20. The key strategy is to begin by making 10.</p> <p>Lesson 2 – Writing to 20 : To recognise, read and write numbers up to 20 in words and numerals.</p> <p>Lesson 3 – Comparing Numbers: To use the terms 'greater than' or 'less than' to compare numbers within 20.</p> <p>Lesson 4 – Ordering Numbers : To be able to arrange numbers up to 20 in ascending and descending order.</p> <p>Lesson 5 – Number Patterns : To look for patterns with numbers up to 20, focusing on one more and one less than a number.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 7 - Addition and Subtraction Within 20</b>	<p>Lesson 1 – Add by Counting On : To learn to add by counting on from the largest number.</p> <p>Lesson 2 – Add by Making 10 : To add to numbers by first making 10 and then adding on the remainder.</p> <p>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.</p> <p>Lesson 4 – Counting Back : To learn how to subtract by counting back from the largest number.</p> <p>Lesson 5 – Subtract Ones : To learn how to subtract by subtracting from only the ones column.</p> <p>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.</p> <p>Lesson 7 – Addition and Subtraction Facts : To go through number facts derived from addition and subtraction sentences.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 8 - Shapes and Patterns</b>	<p>Lesson 1 – Recognising Solids : o recognise four basic 3-D solid shapes: spheres, cubes, cuboids and pyramids.</p> <p>Lesson 2 – Recognising Shapes : To recognise 2-D shapes in the everyday environment.</p> <p>Lesson 3 – Grouping Shapes : To be able to group shapes using different criteria.</p> <p>Lesson 4 – Making Patterns : To make patterns using common 2-D shapes.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 9 - Length and Height</b>	<p>Lesson 1 – Comparing Height and Length : To compare height and length using key terminology.</p> <p>Lesson 2 – Measuring Length Using Things : To be able to measure objects using other items, such as pencils or books.</p> <p>Lesson 3 – Measuring Height and Length Using Body Parts: To be able to measure items using other things – parts of the body in particular.</p> <p>Lesson 4 – Measuring Height and Length Using a Ruler : To introduce the concept of using rulers for measuring.</p> <p>Mind Workout – Mind Workout</p>

## Mathematics Overview

<b>Textbook 1B</b>	<b>Chapter 10 – Numbers to 40</b>	<p>Lesson 1 – Counting to 40 : To use the making 10 strategy to count numbers above 10; to represent numbers on a number line.</p> <p>Lesson 2 – Writing Numbers to 40 : To use the ten-frame method of organisation and place-value cards to assist pupils in writing number to 40; to encourage multiple ways of counting, including counting by 2, 5 and 10.</p> <p>Lesson 3 – Counting in Tens and Ones : To understand that digits represent tens and ones; to represent numbers using Base 10 materials and numbers.</p> <p>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.</p> <p>Lesson 5 – Finding How Much More : To compare numbers using number bonds, 100-squares and number lines to determine how much more/less.</p> <p>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.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 11 – Addition and Subtraction Word Problems</b>	<p>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.</p> <p>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.</p> <p>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.</p> <p>Lesson 4 – Solving Word Problems : To use pictorial representations to help solve word problems; to choose the correct operation to solve a word problem.</p> <p>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.</p> <p>Lesson 6 – Solving Word Problems : To apply addition and subtraction to multi-step word problems; to use number bonds to make 10 when adding.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 12 – Multiplication</b>	<p>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 have an impact on the number of objects.</p> <p>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.</p> <p>Lesson 3 – Making Equal Rows : To organise objects into equal rows in order to begin counting equal numbers efficiently.</p> <p>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.</p> <p>Lesson 5 – Solving Word Problems : To solve word problems using equal groupings as the basis for multiplication.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 13 – Division</b>	<p>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.</p> <p>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.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 14 – Fractions</b>	<p>Lesson 1 – Making Halves : To split an object (shape) into two equal parts; to identify shapes that have been split into two equal parts.</p> <p>Lesson 2 – Making Quarters : To split an object (shape) into four equal parts; to identify shapes that have been split into four equal parts.</p> <p>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.</p> <p>Mind Workout – Mind Workout</p>

## Mathematics Overview

<b>Textbook 1B</b>	<b>Chapter 15 – Numbers to 100</b>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 16 – Time</b>	<p>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.</p> <p>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'.</p> <p>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.</p> <p>Lesson 4 – Estimating Duration of Time : To estimate an amount of time using seconds, minutes and hours.</p> <p>Lesson 5 – Comparing Time : To use the terms 'quicker', 'slower', 'earlier' and 'later' when comparing time.</p> <p>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.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 17 – Money</b>	<p>Lesson 1 – Recognising Coins : To recognise coins and determine their value using size, colour, markings and shape.</p> <p>Lesson 2 – Recognising Notes : To recognise notes and determine their value using colour and markings.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 18 – Volume and Capacity</b>	<p>Lesson 1 – Comparing Volume and Capacity : To compare volume and capacity using the terms 'more than' and 'less than', 'full' and 'empty.'</p> <p>Lesson 2 – Finding Volume and Capacity : To find the volume and capacity of a container using non-standard units.</p> <p>Lesson 3 – Describing Volume Using Half and a Quarter : To describe volume using the terms 'half' and 'quarter'.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 19 – Mass</b>	<p>Lesson 1 – Comparing Mass : To compare the mass of objects using the terms 'heavy' and 'light', 'heavier than', 'lighter than' and 'as heavy as'.</p> <p>Lesson 2 – Finding Mass : To find the mass of an object using non-standard units; to use visualisation skills to estimate the number of units.</p> <p>Mind Workout – Mind Workout</p>
	<b>Chapter 20 – Space</b>	<p>Lesson 1 – Describing Positions : To describe the position of objects in relation to one another using varied vocabulary.</p> <p>Lesson 2 – Describing Movements : To describe movements of objects using varied language.</p> <p>Lesson 3 – Making Turns : To understand how to make turns using mathematical language and connecting this knowledge to time.</p> <p>Mind Workout – Mind Workout</p>