



Stanley Grove Primary Academy

Year 2 Maths Overview



Year 2 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.

Textbook 2A	Chapter 1 – Numbers to 100	<p>Lesson 1 – Counting to 100 : To count numbers up to 100 using concrete objects: counting up by ones and tens.</p> <p>Lesson 2 – Place Value : To understand each digit in a number has its own value.</p> <p>Lesson 3 – Comparing Numbers : To be able to compare numbers using place-value knowledge gained from previous lessons.</p> <p>Lesson 4 – Number Bonds : To use the number bond strategy to deepen understanding of place value.</p> <p>Lesson 5 – Number Patterns : To count in ones and tens; to introduce boundary crossing using tens and ones.</p> <p>Lesson 6 – Number Patterns : To recognise and describe patterns with more complex numbers, in particular 3 and 5.</p> <p>Mind Workout – Mind Workout : To use place-value knowledge to think about the effects of each digit in a number.</p>
	Chapter 2 – Addition and Subtraction	<p>Lesson 1 – Simple Adding To be able to add a single-digit number to a double-digit number without regrouping the ones.</p> <p>Lesson 2 – Simple Adding : To add tens by recognising its relationship to adding ones.</p> <p>Lesson 3 – Simple Adding : To add double-digit numbers where one is a multiple of 10</p> <p>Lesson 4 – Simple Adding : To add with tens and ones where the units are both more than 0.</p> <p>Lesson 5 – Adding with Renaming : To add single-digit numbers to a double-digit number resulting in renaming of ones.</p> <p>Lesson 6 – Adding with Renaming : To add 2 double-digit numbers where renaming is expected.</p> <p>Lesson 7 – Simple Subtracting : To subtract ones from a 2-digit number.</p> <p>Lesson 8 – Simple Subtracting : To subtract 2-digit multiples of 10 from 2-digit multiples of 10.</p> <p>Lesson 9 – Simple Subtracting : To subtract tens from a 2-digit number with the ones being more than zero.</p> <p>Lesson 10 – Simple Subtracting : To subtract a 2-digit number by another 2-digit number.</p> <p>Lesson 11 – Subtracting with Renaming : To subtract a 2-digit number by a 1-digit number with renaming.</p> <p>Lesson 12 – Subtracting with Renaming : To subtract a 2-digit number from another 2-digit number where renaming has to occur.</p> <p>Lesson 13 – Addition of Three Numbers : To add three single-digit numbers.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 3 – Multiplication of 2, 5 and 10	<p>Lesson 1 – Multiplication as Equal Groups To realise that multiplication is the same as repeated addition with equal groups.</p> <p>Lesson 2 – 2 Times Table : To focus on understanding and learning the 2 times table.</p> <p>Lesson 3 – 2 Times Table : To use concrete materials and pictorial representations to multiply by 2.</p> <p>Lesson 4 – 5 Times Table : To cover the basics of the 5 times table and to highlight multiplication visually as equal groups.</p> <p>Lesson 5 – 5 Times Table : Recall and use the 5 times table.</p> <p>Lesson 6 – 10 Times Table : To introduce the 10 times table by focusing on the numbers found in the 10 times table.</p> <p>Lesson 7 – 10 Times Table : To look at the 10 times table in more detail by looking at patterns and relationships.</p> <p>Lesson 8 – Multiplying by 2, 5 and 10 : To investigate links between the 2, 5 and 10 times tables. To understand commutative law.</p> <p>Lesson 9 – Multiplying by 2, 5 and 10 : To use knowledge of the 2, 5 and 10 times tables to further investigate commutative law.</p> <p>Lesson 10 – Solving Word Problems : To use the 2, 5 and 10 times tables to solve word problems.</p> <p>Mind Workout – Mind Workout : To use the newly-gained knowledge of multiplication to solve problems.</p>

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Textbook 2A	Chapter 4 – Multiplication and Division of 2, 5 and 10	<p>Lesson 1 – Grouping : To understand that grouping is a way of dividing.</p> <p>Lesson 2 – Sharing : To be able to divide by sharing an amount.</p> <p>Lesson 3 – Dividing by 2 : To be able to divide by 2. The two strategies used here are splitting into groups of x and splitting into equal groups of many.</p> <p>Lesson 4 – Dividing by 5 : To be able to divide by 5 and identify links with multiplying by 5.</p> <p>Lesson 5 – Dividing by 10 : To be able to divide by 10 and identify links with multiplying by 10.</p> <p>Lesson 6 – Multiplication and Division : Use multiplication and division skills to identify family facts in a number sentence.</p> <p>Lesson 7 – Solving Word Problems : Understand and solve word problems which require the use of the multiplication and division skills covered in this chapter.</p> <p>Lesson 8 – Odd and Even Numbers : To be able to link whether odd or even numbers can be divisible by 2, 5 or 10.</p> <p>Mind Workout – Mind Workout : To use multiplication and division knowledge in problem solving and to create equations from questions.</p>
	Chapter 5 – Length	<p>Lesson 1 – Measuring Length In Metres : To measure length in metres.</p> <p>Lesson 2 – Measuring Length in Centimetres : To measure length in centimetres.</p> <p>Lesson 3 – Comparing Length in Metres : To be able to compare length for objects using 'greater than' and 'less than' symbols.</p> <p>Lesson 4 – Comparing Length in Centimetres : To be able to compare different lengths using centimetres as the unit of measure.</p> <p>Lesson 5 – Comparing the Length of Lines : To be able to compare and measure various line lengths: both straight and curvy.</p> <p>Lesson 6 – Solving Word Problems : To be able to solve problems involving measurement in the context of word problems.</p> <p>Lesson 7 – Solving Word Problems : To be able to solve addition and multiplication word problems involving measurement.</p> <p>Lesson 8 – Solving Word Problems : To be able to solve addition and division word problems involving measurement.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 6 – Mass	<p>Lesson 1 – Measuring Mass in Kilograms : To understand that mass is measured in kilograms and by using weighing scales.</p> <p>Lesson 2 – Measuring Mass in Grams : To be able to measure mass in grams and to understand that it is a smaller unit of measure than kilograms.</p> <p>Lesson 3 – Measuring Mass in Grams : To be able to measure mass accurately in grams using weighing scales.</p> <p>Lesson 4 – Comparing Masses of Two Objects : To be able to compare the mass of two different objects accurately.</p> <p>Lesson 5 – Comparing the Mass of Three Objects : To be able to compare the mass of three objects and use the appropriate vocabulary.</p> <p>Lesson 6 – Solving Word Problems : To solve word problems in the context of mass.</p> <p>Lesson 7 – Solving More Word Problems : To solve word problems involving mass.</p> <p>Mind Workout – Mind Workout : To solve problems that involve comparing, using scales and balances to measure mass accurately.</p>
	Chapter 7 – Tempera ture	<p>Lesson 1 – Reading Temperature : To be able to accurately read temperature in Celsius.</p> <p>Lesson 2 – Estimating temperature : To be able to estimate temperature and to read thermometers to confirm the estimate.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 8 – Picture Graphs	<p>Lesson 1 – Reading Picture Graphs : To be able to read a picture graph with confidence.</p> <p>Lesson 2 – Reading Picture Graphs : To be able to read and interpret a picture graph with confidence.</p> <p>Lesson 3 – Reading Picture Graphs : To read and interpret a picture graph where the value of the picture can represent more than 1.</p> <p>Lesson 4 – Reading Picture Graphs : To read and interpret a picture graph where the value of the picture can represent more than one.</p> <p>Lesson 5 – Reading Picture Graphs : To be able to read, interpret and create a picture graph where the value of the picture can represent more than one.</p> <p>Mind Workout – Mind Workout</p>

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Textbook 2B	Chapter 9 – More Word Problems	<p>Lesson 1 – Solving Word Problems : To decide when it is appropriate to add and/or subtract when solving word problems; to improve the use of bar modelling and decision making based on visual representations.</p> <p>Lesson 2 – Solving Word Problems : To use the bar model method to solve word problems looking at the difference between two amounts.</p> <p>Lesson 3 – Solving Word Problems : To solve multi-step word problems using bar modelling; to use more than one bar model in a problem to work out the answer.</p> <p>Lesson 4 – Solving Word Problems : To use bar modelling to solve multi-step word problems involving unknown quantities.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 10 – Money	<p>Lesson 1 – Writing Amounts of Money : To identify standard UK coins and notes and write their names.</p> <p>Lesson 2 – Counting Money : To count notes in sequences of 5 and 10; to recognise the value of notes by appearance.</p> <p>Lesson 3 – Counting Money : To count coins in sequences of their value; to recognise the value of coins by appearance.</p> <p>Lesson 4 – Counting Money : To represent amounts of money using coins and notes; to count coins and notes using their denominations.</p> <p>Lesson 5 – Showing Equal Amounts of Money : To create equal amounts of money using different coins.</p> <p>Lesson 6 – Exchanging Money : To exchange denominations of money for different coins.</p> <p>Lesson 7 – Comparing Amounts of Money : To compare different amounts of money using coins.</p> <p>Lesson 8 – Calculating Total Amount : To add money together to determine the total amount.</p> <p>Lesson 9 – Calculating Change : To calculate change from £100 or less; to use the bar model approach to represent amounts of money.</p> <p>Lesson 10 – Solving Word Problems : To solve more complex word problems using bar modelling as a primary method.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 11 – Two-Dimensional Shapes	<p>Lesson 1 – Identifying Sides : To identify the number of sides on basic 2-D shapes.</p> <p>Lesson 2 – Identifying Vertices : To identify and count the vertices in regular polygons.</p> <p>Lesson 3 – Identifying Lines of Symmetry : To identify lines of symmetry in basic 2-D shapes.</p> <p>Lesson 4 – Making Figures : To construct shapes using pattern blocks that have lines of symmetry.</p> <p>Lesson 5 – Sorting Shapes : To sort shapes based on number of sides, vertices and other factors.</p> <p>Lesson 6 – Drawing Shapes : To draw shapes using square grid and dot grid paper; to copy shapes from sight using grid paper.</p> <p>Lesson 7 – Making Patterns : To recognise patterns of familiar shapes and colours of up to three objects.</p> <p>Lesson 8 – Describing Patterns : To describe patterns using ordinal numbers and shape names.</p> <p>Lesson 9 – Moving Shapes : To move shapes on a square grid from one position to another using common language.</p> <p>Lesson 10 – Turning Shapes : To turn objects using quarter, half and three-quarter turns both clockwise and anticlockwise on a square grid.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 12 – Three-Dimensional Shapes	<p>Lesson 1 – Recognising Three-Dimensional Shapes : To recognise 3-D shapes by identifying their properties.</p> <p>Lesson 2 – Describing Three-Dimensional Shapes : To describe 3-D shapes and classify them using faces, vertices and edges.</p> <p>Lesson 3 – Describing Three-Dimensional Shapes : To describe 3-D shapes based on the number of faces and the 2-D shapes of these faces; to construct nets of shapes into 3-D shapes.</p> <p>Lesson 4 – Grouping Three-Dimensional Shapes : To group 3-D shapes by similar properties.</p> <p>Lesson 5 – Forming Three-Dimensional Structures : To form 3-D structures using multiple 3-D objects.</p> <p>Lesson 6 – Making Patterns : To make and recognise patterns using 3-D shapes.</p> <p>Mind Workout – Mind Workout</p>

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Textbook 2B	Chapter 13 – Fractions	<p>Lesson 1 – Making Equal Parts : To make equal parts from a whole using simple and complex methods.</p> <p>Lesson 2 – Showing Half and Quarter : To show and recognise halves and quarters.</p> <p>Lesson 3 – Showing Quarters : To show and identify more than one quarter using materials and pictures.</p> <p>Lesson 4 – Showing Thirds : To show and identify thirds in shapes; to use the vocabulary 'numerator' and 'denominator' when referring to fractions.</p> <p>Lesson 5 – Naming Fractions : To identify and name fractions by looking at the number of pieces and how many are shaded.</p> <p>Lesson 6 – Making Equal Fractions : To recognise equivalent fractions in quarters, thirds and halves.</p> <p>Lesson 7 – Comparing and Ordering Fractions : To compare and order similar fractions by looking at the size of the pieces shaded.</p> <p>Lesson 8 – Comparing and Ordering Fractions : To compare and order fractions with different denominators.</p> <p>Lesson 9 – Counting Wholes and Parts : To count the number of wholes and parts to form mixed numbers.</p> <p>Lesson 10 – Counting in Halves : To count in halves and place halves on a number line using pictures.</p> <p>Lesson 11 – Counting in Quarters : To count in quarters and place quarters on a number line using pictures.</p> <p>Lesson 12 – Counting in Thirds : To count in thirds and place thirds on a number line using pictures.</p> <p>Lesson 13 – Finding Part of a Set : To find fractions (half) of whole numbers.</p> <p>Lesson 14 – Finding Part of a Set : To find a fraction (third) of a whole number.</p> <p>Lesson 15 – Finding Part of a Set : To find a fraction (quarter) of a number.</p> <p>Lesson 16 – Finding Part of a Quantity : To find a fraction (half, third, quarter) of a quantity (length).</p> <p>Mind Workout – Mind Workout</p>
	Chapter 14 – Time	<p>Lesson 1 – Telling and Writing Time to 5 Minutes : To tell and write the time to 5-minute intervals.</p> <p>Lesson 2 – Telling and Writing Time : To tell time to 5-minute intervals and to the hour.</p> <p>Lesson 3 – Sequencing Events : To sequence events of the day by looking at analogue clocks and pictures.</p> <p>Lesson 4 – Drawing Clock Hands :To draw hands on an analogue clock to show the correct time.</p> <p>Lesson 5 – Finding Durations of Time : To find the duration of time using an analogue clock in 30- and 60-minute intervals.</p> <p>Lesson 6 – Finding Durations of Time : To find the duration of time to 5-minute intervals.</p> <p>Lesson 7 – Finding Ending Times : To find the ending time of a duration of time from different 5-minute starting points.</p> <p>Lesson 8 – Finding Ending Times : To find the ending time in intervals of 5-minutes from delayed starts.</p> <p>Lesson 9 – Finding Starting Times : To find the starting time from 30-minute and 1-hour interval durations.</p> <p>Lesson 10 – Finding Starting Times : To find the start of multiple durations of time using a common end time.</p> <p>Lesson 11 – Comparing Time : To compare durations of time from the least amount to the most amount of time and vice versa.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 15 – Volume	<p>Lesson 1 – Comparing Volume : To compare volume in different-sized containers using the terms 'greater than', 'less than', 'greatest' and 'least'.</p> <p>Lesson 2 – Comparing Volume : To compare the volume of different containers using non-standard units.</p> <p>Lesson 3 – Measuring Volume in Litres : To measure volume using litres and determine whether an amount is more than, less than or equal to a litre.</p> <p>Lesson 4 – Measuring Volume in Millilitres : To measure volume using millilitres and litres; to determine how many millilitres there are in 1 l.</p> <p>Lesson 5 – Solving Word Problems : To solve word problems involving bar models with litres as the standard unit.</p> <p>Lesson 6 – Solving Word Problems : To solve word problems using millilitres and litres, including problems involving difference.</p> <p>Lesson 7 – Solving Word Problems :To solve word problems involving volume and multiplication.</p> <p>Mind Workout – Mind Workout</p>