



Stanley Grove Primary Academy

Year 3 Maths Overview



Year 3 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 3A	Chapter 1 – Numbers to 1000	<p>Lesson 1 – Counting in Hundreds : To learn to count in hundreds and understand their place-value. Pupils will also understand how many hundreds are needed to make 1000.</p> <p>Lesson 2 – Counting in Hundreds, Tens and Ones : To compose and decompose numbers consisting of hundreds, tens and ones.</p> <p>Lesson 3 – Place Value : To understand the value of each digit in a 3-digit number.</p> <p>Lesson 4 – Comparing and Ordering Numbers : To be able to compare and order numbers.</p> <p>Lesson 5 – Counting in Fifties : To be able to count in fifties.</p> <p>Lesson 6 – Number Patterns : To recognise, describe and continue a number pattern.</p> <p>Lesson 7 – Number Patterns : To be able to recognise, describe and complete more complicated number patterns.</p> <p>Lesson 8 – Counting in Fours and Eights : To be able to count in fours and eights.</p> <p>Mind Workout – Mind Workout : Use problem solving skills.</p>
	Chapter 2 – Addition and Subtraction	<p>Lesson 1 – Addition and Subtraction Facts : To understand commutative law of addition and the corresponding addition and subtraction facts.</p> <p>Lesson 2 – Simple Adding : To add a 3-digit number to a 1-digit number with no regrouping or renaming.</p> <p>Lesson 3 – Simple Adding : To add a 3-digit number to a multiple of 10 (2-digit number) without regrouping or renaming.</p> <p>Lesson 4 – Simple Adding : To add multiples of 100 to a 3-digit number without regrouping or renaming.</p> <p>Lesson 5 – Simple Adding : To add two 3-digit numbers without regrouping or renaming; introduction of the column method of addition.</p> <p>Lesson 6 – Adding with Renaming : To add a 3-digit number to a 1-digit number, with renaming.</p> <p>Lesson 7 – Adding with Renaming : To add with renaming in tens.</p> <p>Lesson 8 – Adding with Renaming : To add two 3-digit numbers with renaming the ones.</p> <p>Lesson 9 – Adding with Renaming : To add two 3-digit numbers with renaming the tens.</p> <p>Lesson 10 – Adding with Renaming : To add with renaming in ones and tens.</p> <p>Lesson 11 – Simple Subtracting : To do simple subtraction by taking away a single-digit number from a double-digit number without renaming.</p> <p>Lesson 12 – Simple Subtracting : To do simple subtraction by taking away a 1-digit number from a 3-digit number without renaming.</p> <p>Lesson 13 – Simple Subtracting : To subtract multiples of 10, up to 90, from a 3-digit number.</p> <p>Lesson 14 – Simple Subtracting : To subtract hundreds from a 3-digit number and to subtract multiples of 1 and 10 from a 3-digit number.</p> <p>Lesson 15 – Simple Subtracting : To understand simple subtraction of a 3-digit number by another 3-digit number using the column method.</p> <p>Lesson 16 – Subtracting with Renaming : To subtract with renaming in the tens and ones.</p> <p>Lesson 17 – Subtracting with Renaming : To subtract with renaming hundreds.</p> <p>Lesson 18 – Subtracting with Renaming : To subtract with regrouping tens and hundreds.</p> <p>Lesson 19 – Subtracting with Renaming : To subtract a 3-digit number with zeros.</p> <p>Lesson 20 – Using Models : To solve addition and subtraction problems using the bar model.</p> <p>Lesson 21 – Using Models : To use the bar model to solve problems.</p>

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Textbook 3A	Chapter 2 cont.	<p>Lesson 22 – Using Models : To solve complicated problems involving addition and subtraction using a comparative bar model heuristic.</p> <p>Lesson 23 – Using Models : To solve more complicated problems involving addition and subtraction using the comparative bar model heuristic.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 3 – Multiplication and Division	<p>Lesson 1 – Multiplying by 3 : To multiply by 3.</p> <p>Lesson 2 – Multiplying by 3 : To multiply by 3 using relational properties.</p> <p>Lesson 3 – Multiplying by 4 : To multiply by 4.</p> <p>Lesson 4 – Multiplying by 4 : To multiply by 4.</p> <p>Lesson 5 – Multiplying by 4 and 8 : To multiply by 4 and 8.</p> <p>Lesson 6 – Multiplying by 8 : To multiply by 8; to use commutative law to multiply.</p> <p>Lesson 7 – Multiplying by 8 : To multiply by 8.</p> <p>Lesson 8 – Dividing by 3 : To divide by 3.</p> <p>Lesson 9 – Dividing by 4 : To divide by 4.</p> <p>Lesson 10 – Multiplying and Dividing : To find relationships between multiplication and division.</p> <p>Lesson 11 – Dividing by 4 and 8 : To divide by 4 and 8.</p> <p>Lesson 12 – Solving Word Problems : To solve word problems with multiplication.</p> <p>Lesson 13 – Solving Word Problems : To solve word problems that involve division.</p> <p>Lesson 14 – Solving Word Problems : To solve more word problems involving multiplication and division using the bar model heuristic.</p> <p>Lesson 15 – Solving Word Problems : To solve problems using a variety of strategies.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 4 – Further Multiplication and Division	<p>Lesson 1 – Multiplying 2-Digit Numbers : To multiply multiples of 10 by a 1-digit number.</p> <p>Lesson 2 – Multiplying 2-Digit Numbers : To multiply any 2-digit number by a 1-digit number.</p> <p>Lesson 3 – Multiplying 2-Digit Numbers : To multiply more 2-digit numbers.</p> <p>Lesson 4 – Multiplying with Regrouping : To multiply with regrouping.</p> <p>Lesson 5 – Multiplying with Regrouping : To multiply with regrouping.</p> <p>Lesson 6 – Simple Dividing : To understand simple division of a 2-digit number by a 1-digit number.</p> <p>Lesson 7 – Dividing with Regrouping : To divide where there is a need to regroup.</p> <p>Lesson 8 – Dividing with Regrouping : To use long division to divide.</p> <p>Lesson 9 – Solving Word Problems : To solve word problems that involve multiplication.</p> <p>Lesson 10 – Solving Word Problems : To solve word problems involving division.</p> <p>Lesson 11 – Solving Word Problems : To solve more challenging word problems.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 5 – Length	<p>Lesson 1 – Writing Length in Metres and Centimetres : To use metres and centimetres to measure objects.</p> <p>Lesson 2 – Writing Length in Centimetres : To write length in centimetres only by converting metres to centimetres.</p> <p>Lesson 3 – Writing Length in Metres : To convert kilometres to metres.</p> <p>Lesson 4 – Writing Length in Kilometres and Metres : To convert length from metres to kilometres and metres.</p> <p>Lesson 5 – Comparing Length : To compare two lengths.</p> <p>Lesson 6 – Solving Word Problems : To solve measurement-related word problems.</p> <p>Lesson 7 – Solving Word Problems : To solve other word problems.</p>

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Textbook 3A	Chapter 5 cont.	<p>Lesson 8 – Solving Word Problems : To solve word problems further, involving multiplication.</p> <p>Lesson 9 – Solving Word Problems : To solve word problems associated with length using division.</p> <p>Lesson 10 – Solving Word Problems : To solve more challenging word problems.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 6 - Mass	<p>Lesson 1 – Reading Weighing Scales : To measure mass using weighing scales and compare the mass of objects using grams and kilograms.</p> <p>Lesson 2 – Reading Weighing Scales : To use weighing scales to measure mass when the mass is between multiples of 100 g.</p> <p>Lesson 3 – Reading Weighing Scales : To read values on a scale which are 1 kg or more.</p> <p>Lesson 4 – Reading Weighing Scales : To weigh heavier items where the markers on the scales represent 200 g each.</p> <p>Lesson 5 – Solving Word Problems : To solve word problems relating to mass with addition and subtraction.</p> <p>Lesson 6 – Solving Word Problems : To solve word problems relating to mass using multiplication.</p> <p>Lesson 7 – Solving Word Problems : To solve word problems relating to mass using division.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 7 - Volume	<p>Lesson 1 – Measuring Volume in Millilitres : To measure volume in millilitres.</p> <p>Lesson 2 – Measuring Capacity in Millilitres : To measure capacity in millilitres.</p> <p>Lesson 3 – Measuring Volume in Millilitres and Litres : To measure volume using millilitres and litres.</p> <p>Lesson 4 – Measuring Capacity in Millilitres and Litres : To measure volume in millilitres and litres from a 'homemade' bottle with markings.</p> <p>Lesson 5 – Writing Volume in Litres and Millilitres : To measure volume using millilitres and litres in comparison to 1 l.</p> <p>Lesson 6 – Writing Capacity in Litres and Millilitres : To measure larger capacity in litres and millilitres.</p> <p>Lesson 7 – Solving Word Problems : To solve basic word problems related to volume.</p> <p>Lesson 8 – Solving Word Problems : To solve more word problems.</p> <p>Lesson 9 – Solving Word Problems : To solve word problems through division.</p> <p>Lesson 10 – Solving Word Problems : To solve two-step word problems.</p> <p>Mind Workout – Mind Workout</p>

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Textbook 3B	Chapter 8 – Money	<p>Lesson 1 – Naming Amounts of Money : To consolidate previous learning about denominations of both notes and coins; to use simple addition to count amounts of money.</p> <p>Lesson 2 – Naming Amounts of Money : To name amounts of money including coins adding to more than 100p; to regroup and rename 100p as £1 as a key strategy.</p> <p>Lesson 3 – Showing Amounts of Money : To find multiple ways of showing an amount of money.</p> <p>Lesson 4 – Adding Money : To add money by adding together the pounds and pence separately.</p> <p>Lesson 5 – Adding Money : To add amounts of money together using different methods; to consolidate the addition of pounds and pence separately.</p> <p>Lesson 6 – Adding Money : To consolidate 'making a pound' as a strategy for adding amounts of money where the coins equal more than 99p.</p> <p>Lesson 7 – Adding Money : To learn the 'make a pound' strategy with number bond diagrams; to consolidate the strategies associated with the addition of money.</p> <p>Lesson 8 – Subtracting Money : To use multiple methods for subtracting amounts of money, including concrete materials and the column method.</p> <p>Lesson 9 – Subtracting Money : To use visual comparison to subtract amounts of money; to consolidate column subtraction where there is no regrouping of pence required.</p> <p>Lesson 10 – Subtracting Money : To use number bonds to subtract amounts of money; to develop number sense through decision making.</p> <p>Lesson 11 – Subtracting Money : To use number bonds as the primary strategy for subtracting amounts of money; to split pounds and pence simultaneously when subtracting amounts of money.</p> <p>Lesson 12 – Calculating Change : To learn the 'counting on' strategy for calculating change; to consolidate the number bonds strategy for calculating change.</p> <p>Lesson 13 – Solving Word Problems : To solve word problems involving money using bar modelling as the key strategy; to learn how to use comparative models where pupils are solving by seeing the smaller amount inside of the larger amount.</p> <p>Lesson 14 – Solving Word Problems : To use part-whole bar models to represent word problems; to apply addition and subtraction strategies to solve word problems.</p> <p>Mind Workout – Mind Workout</p>
	Chapter 9 - Time	<p>Lesson 1 – Telling the Time : To use the terms 'a.m.' and 'p.m.' correctly to identify morning or afternoon/evening.</p> <p>Lesson 2 – Telling the Time : To learn to tell time to the minute; to understand the relationship between the minute hand and hour hand.</p> <p>Lesson 3 – Telling the Time : To consolidate and apply a variety of vocabulary used to express the time.</p> <p>Lesson 4 – Telling the Time : To compare analogue and digital time; to represent time using both analogue and digital methods.</p> <p>Lesson 5 – Telling the Time : To tell time before the hour using the hour and minute hands.</p> <p>Lesson 6 – Telling the Time : To learn to tell time using 24-hour notation; to use analogue time and 24-hour notation interchangeably.</p> <p>Lesson 7 – Telling the Time : To tell the time on an analogue clock using Roman numerals.</p> <p>Lesson 8 – Measuring and Comparing Time in Seconds : To measure time in seconds and milliseconds.</p> <p>Lesson 9 – Measuring Time in Seconds : To measure time in seconds using a stopwatch; to consolidate previous learning about seconds.</p> <p>Lesson 10 – Measuring Time in Seconds : To consolidate measuring time in seconds; to conduct a time experiment using seconds.</p> <p>Lesson 11 – Measuring Time in Hours : To measure time in hours using an analogue clock.</p> <p>Lesson 12 – Measuring Time in Hours : To consolidate the measurement of time in hours.</p> <p>Lesson 13 – Measuring Time in Hours : To measure time in hours using analogue clocks and timelines; to count backwards in time by the hour.</p> <p>Lesson 14 – Measuring Time in Minutes : To measure the passage of time in minutes using an analogue clock and a timeline.</p> <p>Lesson 15 – Measuring Time in Minutes : To measure time to the minute when it crosses into the next hour; to use number bonds to calculate the passage of time.</p> <p>Lesson 16 – Measuring Time in Minutes : To measure time in minutes, counting backwards to determine the starting point; to use number bonds and timelines to calculate the passage of time.</p>

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Textbook 3B	Chapter 9 - Time	<p>Lesson 17 – Changing Minutes to Seconds : To determine how many seconds are in a minute; to use multiplication to calculate the number of seconds in a given number of minutes.</p> <p>Lesson 18 – Changing Seconds to Minutes : To convert seconds into minutes using number bonds.</p> <p>Lesson 19 – Finding Number of Days : To calculate the number of days in a month; to learn which months have 31, 30 and 28/29 days.</p> <p>Lesson 20 – Finding Number of Days : To find the duration of days for different activities.</p> <p>Lesson 21 – End Of Chapter</p>
	Chapter 10 - Picture Graphs and Bar Graphs	<p>Lesson 1 – Drawing Picture Graphs : To construct picture graphs from a set of data; to present data with pictures that represent more than one item.</p> <p>Lesson 2 – Drawing Bar Graphs : To construct bar graphs from a set of data; to use proportion to reflect precise difference in quantity.</p> <p>Lesson 3 – Reading Bar Graphs : To read and interpret information from a bar graph; to use and understand vocabulary related to bar graphs.</p> <p>Lesson 4 – Reading Bar Graphs : To read bar graphs where the scale is not a multiple of all quantities measured.</p> <p>Lesson 5 – Reading Bar Graphs : To read bar graphs where the scale is made up of larger increments.</p> <p>End of Chapter – End of Chapter</p>
	Chapter 11 - Fractions	<p>Lesson 1 – Counting in Tenths : To count in tenths; to recognise tenths and be able to determine how many tenths are shaded.</p> <p>Lesson 2 – Making Number Pairs : To make number pairs to create 1; to combine fractions to make 1.</p> <p>Lesson 3 – Adding Fractions : To add fractions with the same denominator.</p> <p>Lesson 4 – Adding Fractions : To consolidate adding fractions with the same name; to learn how fractions can add to 1.</p> <p>Lesson 5 – Subtracting Fractions : To subtract fractions with the same name.</p> <p>Lesson 6 – Finding Equivalent Fractions : To find equivalent fractions through paper folding and shading.</p> <p>Lesson 7 – Finding Equivalent Fractions : To find equivalent fractions using paper folding and shading.</p> <p>Lesson 8 – Finding Equivalent Fractions : To find equivalent fractions; to place fractions on a number line.</p> <p>Lesson 9 – Finding Equivalent Fractions : To find fractions equivalent to $\frac{1}{2}$; use pictorial representations and multiplication to show equivalence.</p> <p>Lesson 10 – Finding Equivalent Fractions : To find equivalent fractions using concrete objects and pictorial representations.</p> <p>Lesson 11 – Finding Equivalent Fractions : To find equivalent fractions using pictorial representations and multiplication.</p> <p>Lesson 12 – Finding the Simplest Fraction : To find the simplest fraction using visualisation and concrete materials.</p> <p>Lesson 13 – Finding the Simplest Fraction : To find the simplest fraction using pictorial representations and division.</p> <p>Lesson 14 – Finding Equivalent Fractions : To find equivalent fractions using multiplication and division; to determine whether or not a fraction is equivalent.</p> <p>Lesson 15 – Comparing Fractions : To compare the fractions $\frac{1}{2}$ and $\frac{1}{4}$ using pictorial representations and concrete materials.</p> <p>Lesson 16 – Comparing Fractions : To compare fractions using pictorial representations; to understand the numerical nature of the numerator.</p> <p>Lesson 17 – Comparing Fractions : To compare fractions with different names (denominators) using pictorial representations and number lines.</p> <p>Lesson 18 – Adding Fractions : To add fractions using pictorial representations; to simplify fractions after adding them.</p> <p>Lesson 19 – Subtracting Fractions : To subtract fractions using pictorial representations; to simplify fractions after they have been subtracted.</p> <p>Lesson 20 – Subtracting Fractions : To subtract fractions from a whole amount; to use pictorial representations of whole numbers to help subtract fractions.</p> <p>Lesson 21 – Finding Part of a Set : To determine a fraction of a whole number using pictorial representations.</p> <p>Lesson 22 – Finding Part of a Set : To find a fraction of a whole number using pictorial representations, multiplication and concrete objects.</p> <p>Lesson 23 – Finding the Fraction of a Number : To consolidate finding the fraction of a whole number.</p> <p>Lesson 24 – Sharing One : To divide 1 between more than 1; to share 1 whole equally between more than 1.</p> <p>Lesson 25 – Sharing More Than 1 : To share more than 1 using pictorial representations and division.</p> <p>Lesson 26 – Sharing More Than 1 : To share more than 1; to recognise a whole and its parts using pictures and number lines.</p> <p>Lesson 27 – Sharing More Than 1 : To show more than 1 whole after sharing a number of items equally; to use pictorial representations to share whole items equally.</p>

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Textbook 3B	Chapter 11 - Fractions	<p>Lesson 28 – Solving Word Problems : To apply bar modelling to represent fractions in word problems; to solve word problems using pictorial representations and abstract methods.</p> <p>Lesson 29 – Solving Word Problems : To use bar models to solve word problems involving the fraction $\frac{1}{2}$.</p> <p>Lesson 30 – Solving Word Problems : To use bar models to solve word problems involving the fractions $\frac{1}{3}$ and $\frac{1}{5}$.</p> <p>Lesson 31 – Chapter End</p>
	Chapter 12 - Angles	<p>Lesson 1 – Making Angles : To learn what makes an angle and identify angles in objects.</p> <p>Lesson 2 – Making Angles : To see angles on the inside and outside of objects; to find angles in letters.</p> <p>Lesson 3 – 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.</p> <p>Lesson 4 – Finding Right Angles : To find right angles in everyday objects; to understand what makes a right angle.</p> <p>Lesson 5 – Comparing Angles : To compare angles using the terms 'right' angle and 'acute' angle; to identify acute angles as smaller angles than right angles.</p> <p>Lesson 6 – Comparing Angles : To identify right angles and acute angles; to recognise and define an obtuse angle.</p> <p>Lesson 7 – Making Turns : To make turns using angles vocabulary; to align the language of angles and fractions to describe turns.</p> <p>Chapter End – Chapter End</p>
	Chapter 13 – Lines and Shapes	<p>Lesson 1 – Identifying Perpendicular Lines : To identify, define and create perpendicular lines; to find perpendicular lines in everyday objects.</p> <p>Lesson 2 – Identifying Parallel Lines : To identify, define and create parallel lines; to find parallel lines in everyday objects.</p> <p>Lesson 3 – Finding Vertical and Horizontal Lines : To define and identify vertical and horizontal lines; to find vertical and horizontal lines in everyday life.</p> <p>Lesson 4 – Describing Two-Dimensional Shapes : To describe 2-D shapes using familiar vocabulary about lines and angles.</p> <p>Lesson 5 – Drawing Two-Dimensional Shapes : To draw 2-D shapes in proportion to their size; to identify how big a shape is.</p> <p>Lesson 6 – Making Three-Dimensional Shapes : To create 3-D shapes out of nets; to use vocabulary related to 3-D shapes and their properties.</p> <p>Lesson 7 – Making Three-Dimensional Shapes : To construct 3-D shapes out of clay and discuss their properties.</p> <p>Lesson 8 – Describing Three-Dimensional Shapes : To describe 3-D shapes using familiar terms; to identify properties of 3-D shapes.</p> <p>Lesson 9 – Chapter End</p>
	Chapter 14 – Perimeter of Figures	<p>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.</p> <p>Lesson 2 – Measuring Perimeter : To measure the perimeter of a shape using 1 cm grid paper.</p> <p>Lesson 3 – Measuring Perimeter : To determine the perimeter of different shapes; to create shapes with a specific perimeter.</p> <p>Lesson 4 – Measuring Perimeter : To find the perimeter of shapes using 2 cm grids; to identify mistakes in others' work.</p> <p>Lesson 5 – Measuring Perimeter : To calculate the perimeter using a ruler to measure the side lengths.</p> <p>Lesson 6 – Calculating Perimeter : To calculate the perimeter of a rectangle using multiplication and addition.</p> <p>Lesson 7 – Calculating Perimeter : To calculate the perimeter of a square using addition and multiplication; to calculate the perimeter of rectangles and irregular shapes by adding up the length of each side.</p> <p>Lesson 8 – Calculating Perimeter : To consolidate learning about perimeter using practical word problems; to calculate the perimeter of a rectangle using properties of shapes.</p> <p>Lesson 9 – Calculating Perimeter : To calculate the perimeter of a square and a rectangle using information previously learned about the properties of shapes.</p> <p>Lesson 10 – Calculating Perimeter : To calculate the perimeter of a rectangle when a square piece has been removed; to determine the lengths of sides that are not marked based on information about the piece removed.</p> <p>Chapter End – Chapter End</p>