Year 2 Maths Long Term Map

Autumn

Number **Place value**	Number **Addition and subtraction**
Geometry **Shape**	

Spring

Measurement **Money**	Number **Multiplication and division**
Measurement **Length and height**	Measurement **Mass, capacity and temperature**

Summer

Number **Fractions**	Measurement **Time**
Statistics	Geometry **Position and direction**
Consolidation	

White Rose Steps		
Number: Place Value	**Can you…**	**National Curriculum Objectives**
Step 1: Numbers to 20	Can you recognise, read and write numbers to 20?	• Read and write numbers from 1 to 20 in numerals and words (Y1) • Read and write numbers to at least 100 in numerals and in words
Step 2: Count objects to 100 by making 10s	Can you count objects to 100 by making 10s?	• Read and write numbers to at least 100 in numerals and in words • Identify, represent and estimate numbers using different representations, including the number line • Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward
Step 3: Recognise tens and ones	Can you recognise tens and ones?	• Read and write numbers to at least 100 in numerals and in words • Identify, represent and estimate numbers using different representations, including the number line
Step 4: Use a place value chart	Can you explore and use a place value chart?	• Identify, represent and estimate numbers using different representations, including the number line • Recognise the place value of each digit in a 2-digit number (tens, ones)
Step 5: Partition numbers to 100	Can you partition numbers to 100?	
Step 6: Write numbers to 100 in words	Can you write numbers to 100 in words?	• Read and write numbers to at least 100 in numerals and in words • Recognise the place value of each digit in a digit number tens, ones
Step 7: Flexibly partition numbers to 100	Can you partition numbers to 100 in different ways?	• Identify, represent and estimate numbers using different representations, including the number line
Step 8: Write numbers to 100 in expanded form	Can you write numbers to 100 in expanded form?	• Recognise the place value of each digit in a 2-digit number (tens, ones)
Step 9: 10s on the number line to 100	Can you position 10s on a number line to 100?	• Count in steps of 2, 3 and 5 from 0 and in 10s from any number, forward and backward • Identify, represent and estimate numbers using different representations, including the number line
Step 10: 10s and 1s on the number line to 100	Can you position 10s and 1s on a number line to 100?	
Step 11: Estimate numbers on a number line	Can you estimate numbers on a number line?	
Step 12: Compare objects	Can you compare objects?	• Recognise the place value of each digit in a 2-digit number (tens, ones)
Step 13: Compare numbers	Can you compare numbers?	

Step 14: Order objects and numbers	Can you order objects and numbers?	• Compare and order numbers from 0 up to 100; use <, > and = signs
Step 15: Count in 2s, 5s and 10s	Can you count in 10s? Can you count in 5s? Can you count in 2s?	Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward
Step 16: Count in 3s	Can you count in 3s?	

Number: Addition and Subtraction

Step 1: Bonds to 10	Can you identify number bonds to 10?	• Represent and use number bonds and related subtraction facts within 20 (Y1)
Step 2: Fact families – addition and subtraction bonds to 20	Can you represent and use numbers bonds to 20?	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Step 3: Related facts	Can you identify related facts for both addition and subtraction calculations?	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Step 4: Bonds to 100 (tens)	Can you identify multiples of 10 that have bonds to 100?	
Step 5: Add and subtract 1s	Can you add and subtract 1 from any given number?	• Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers
Step 6: Add by making 10	Can you use your numbers bonds to 10 to add numbers within 20?	
Step 7: Add three 1-digit numbers	Can you add three 1-digit numbers?	
Step 8: Add to the next 10	Can you add to the next ten using your knowledge of number bonds?	
Step 9: Add across a 10	Can you add across a 10?	
Step 10: Subtract across 10	Can you subtract across a 10?	
Step 11: Subtract from a 10	Can you subtract from a 10?	
Step 12: Subtract a 1-digit number from a 2-digit number (across a 10)	Can you subtract a 1-digit number from a 2-digit number?	
Step 13: 10 more, 10 less	Can you find 10 more or 10 less than a given number within 100?	
Step 14: Add and subtract 10s	Can you add and subtract multiples of 10 within 100?	
Step 15: Add two 2-digit numbers (not across a 10)	Can you add two 2-digit numbers?	
Step 16: Add two 2-digit numbers (across a 10)	Can you add two 2-digit numbers across a 10?	
Step 17: Subtract two 2-digit numbers (not across a 10)	Can you subtract two 2-digit numbers?	

Step 18: Subtract two 2-digit numbers (across a 10)	Can you subtract two 2-digit numbers across a 10?	
Step 19: Mixed addition and subtraction	Can you solve problems involving addition and subtraction?	
Step 20: Compare number sentences	Can you compare number sentences?	• Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers • Compare and order numbers from 0 up to 100; use <, > and = signs
Step 21: Missing number problems	Can you solve missing number problems?	• Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers

Geometry: Shape

Step 1: Recognise a 2-D shape and 3-D shape	Can you recognise and name both 2-D and 3-D shapes?	• Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line
Step 2: Count sides on 2-D shapes	Can you count the sides on a. 2-D shape?	
Step 3: Count vertices on 2-D shapes	Can you count the vertices on s 2-D shape?	
Step 4: Draw 2-D shapes	Can you draw 2-D shapes?	
Step 5: Lines of symmetry on shapes	Can you identify vertical lines of symmetry?	
Step 6: Use lines of symmetry to complete shapes	Can you use lines of symmetry to complete shapes?	
Step 7: Sort 2-D shapes	Can you sort 2-D shapes?	• Compare and sort common 2-D and 3-D shapes and everyday objects
Step 8: Count faces on 3-D shapes	Can you count faces on 3-D shapes?	• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • Identify 2-D shapes on the surface of 3-D shapes
Step 9: Count edges on 3-D shapes	Can you count edges on 3-D shapes?	• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
Step 10: Count vertices on 3-D shapes	Can you count vertices on 3-D shapes?	
Step 11: Sort 3-D shapes	Can you sort 3-D shapes?	• Compare and sort common 2-D and 3-D shapes and everyday objects
Step 12: Make patterns with 2-D and 3-D shapes	Can you make patterns with 2-D and 3-D shapes?	• Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line

		• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
Measurement: Money		
Step 1: Count money – pence	Can you count money in pence?	• Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
Step 2: count money – pounds (notes and coins)	Can you count money using coins and notes?	• Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
Step 3: Count money – pounds and pence	Can you count money using pounds and pence?	
Step 4: Choose notes and coins	Can you choose notes and coins to make a given amount?	
Step 5: Make the same amount	Can you explore different ways of making the same amount?	
Step 6: Compare amounts of money	Can you compare different amount of money?	
Step 7: Calculate with money	Can you perform calculations involving money?	
Step 8: Make a pound	Can you identify different ways to make 1 pound?	
Step 9: Find change	Can you find change from 1 pound?	
Step 10: Two-step problems	Can you solve two-step problems involving money?	
Number: Multiplication and Division		
Step 1: Recognise equal groups	Can you recognise equal groups?	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
Step 2: Make equal groups	Can you make equal groups?	
Step 3: Add equal groups	Can you add equal groups?	
Step 4: Introduce the multiplication symbol	Can you identify the multiplication symbol is used for multiplying?	
Step 5: Multiplication sentences	Can you solve multiplication sentences?	
Step 6: Use arrays	Can you use arrays to answer multiplication questions?	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
Step 7: Make equal groups – grouping	Can you make equal groups using your knowledge of division?	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
Step 8: Make equal groups – sharing	Can you explore division through sharing?	
Step 9: The 2 times-tables	Can you explore the 2 times-table?	• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Step 10: Divide by 2	Can you divide by 2?	

Step 11: Doubling and halving	Can you double and halve numbers?	
Step 12: Odd and even numbers	Can you identify odd and even numbers?	
Step 13: The 10 times-tables	Can you explore the 10 times-table?	
Step 14: Divide by 10	Can you divide by 10?	
Step 15: The 5 times-table	Can you explore the 5 times-table?	
Step 16: Divide by 5	Can you divide by 5?	
Step 17: The 5 and 10 times-tables	Can you identify the relationship between the 5 and 10 times-table?	

Measurement: Length and Height

Step 1: Measure in centimetres	Can you measure in centimetres?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels
Step 2: Measure in metres	Can you measure in metres?	
Step 3: Compare lengths and heights	Can you compare lengths and heights?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels
Step 4: Order lengths and heights	Can you order lengths and heights?	• Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Step 5: Four operations with lengths and heights	Can you solve length and height problems involving the four operations?	• Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Measurement: Mass, Capacity and Temperature

Step 1: Compare mass	Can you compare the mass of two or more objects?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Step 2: Measure in grams	Can you measure in grams?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
Step 3: Measure in kilograms	Can you measure in kilograms?	
Step 4: Four operations with mass	Can you solve mass problems involving the four operations?	

Step 5: Compare volume and capacity	Can you compare volume and capacity?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Step 6: Measure in millilitres	Can you measure in millilitres?	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
Step 7: Measure in litres	Can you measure in litres?	
Step 8: Four operations with volume and capacity	Can you solve volume and capacity problems involving the four operations?	
Step 9: Temperature	Can you read thermometers to identify the temperature?	

Number: Fractions

Step 1: Introduction to parts and whole	Can you explore parts and whole of a number?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity
Step 2: Equal and unequal parts	Can you explore equal and unequal parts?	
Step 3: Recognise a half	Can you recognise a half as a fraction?	
Step 4: Find a half	Can you find a half?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Step 5: Recognise a quarter	Can you recognise a quarter as a fraction?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity
Step 6: Find a quarter	Can you find a quarter?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Step 7: Recognise a third	Can you recognise a third as a fraction?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity
Step 8: Find a third	Can you find a third?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Step 9: Find the whole	Can you use a fraction of an amount to find the whole?	
Step 10: Unit fractions	Can you explore the concept of unit fractions?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity
Step 11: Non-unit fractions	Can you explore the concept of non-unit fractions?	

Step 12: Recognise the equivalence of half and two quarters	Can you recognise the equivalence of a half and two quarters?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Step 13: Recognise three-quarters	Can you recognise three-quarters as a fraction?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity
Step 14: Find three-quarters	Can you find three-quarters?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Step 15: Count in fractions up to a whole	Can you count in fractions up to 1 whole?	• Recognise, find, name and write fractions 1/3, ¼, 2/4 and 3/4 of a length, shape, set of objects or quantity

Measurement: Time

Step 1: O'clock and half past	Can you tell the time to the hour and half past the hour?	• Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clockface to show these times
Step 2: Quarter past and quarter to	Can you tell the time to quarter past and quarter to?	
Step 3: Tell time past the hour	Can you tell the time past the hour?	
Step 4: Tell time to the hour	Can you tell the time to the hour?	
Step 5: Tell the time to 5 minutes	Can you tell the time to 5 minutes?	
Step 6: Minutes in an hour	Can you identify how many minutes in an hour?	• Know the number of minutes in an hour and the number of hours in a day
Step 7: Hours in a day	Can you identify how many hour in 1 day?	

Statistics

Step 1: Make tally charts	Can you use tally charts to systematically record data?	• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
Step 2: Tables	Can you explore the use of simple tables?	• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • Ask and answer questions about totalling and comparing categorical data
Step 3: Block diagrams	Can you use block diagrams to represent data?	
Step 4: Draw pictograms (1-1)	Can you draw pictograms tor represent data?	
Step 5: Interpret pictograms (1-1)	Can you interpret pictograms?	
Step 6: Draw pictograms (2, 5 and 10)	Can you draw pictograms using your multiples of 2, 5 and 10?	
Step 7: Interpret pictograms (2, 5 and 10)	Can you interpret pictograms using your multiples of 2, 5 and 10?	

Geometry: Position and Direction

Step 1: Language of position	Can you use the language of position accurately?	• Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)
Step 2: Describe movement	Can you use your understanding of position to describe movement?	
Step 3: Describe turns	Can you describe turns?	
Step 4: Describe movement and turns	Can you describe movement and turns?	
Step 5: Shape patterns with turns	Can you shape patterns with turns?	
Consolidation		