Limestone Federation

Mixed Maths Planning

Year 1/2

Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place Value (within 20)			Number Addition and subtraction (within 20)			Number Place Value (within 100)			Geometry Shape		Assessment Week
Spring	Number Addition and subtraction (within 100)				Number Multiplication and Division				Measurement Length and Height		Statistics	Assessment Week
Summer	Number Money		Number Fractions			Measurement Time			Measurement Mass, capacity and temperature		Geometry Position and Direction	Assessment Week

Autumn Term – 3 Weeks

Place Value within 20

Year 1	Year 2
Pupils should be taught to: • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s • given a number, identify 1 more and 1 less • identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words	Pupils should be taught to: • count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward • recognise the place value of each digit in a two-digit number (10s, 1s) • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems

Progressive Planning

Small Step	Planning Notes	Next Steps
Count objects within 10 **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Say all the numbers to ten in order. • Understand that the last number they say is the number of objects. • Count up to ten objects by counting each object once. **Resources** **Y1/2 White Rose Maths Step 1:** Count Objects with 10. **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.9 Teaching Point 1 **NCETM Prioritisation:** Comparison of Quantities and Part Whole Relationships Unit 2 Outcome 3	**Date(s):** **Mental Starter:** **Fluency Skills:** **Reasoning:**	

Represent numbers to 10 **Y1 - NC Statement:** Read and write numbers from 1 to 20 in numerals. Identify and represent numbers using objects and pictorial representations. • Match a numeral to a set of objects. • Say or write the numeral that represents a set of objects. • Use mathematical equipment to represent a set of objects. **Resources** **Y1 White Rose Maths Step 4:** Represent Objects (Place Value Within 10) **Y1/2 White Rose Maths Step 2:** Represent numbers to 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Count forwards and backwards within 20 **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number. • Say number sequences counting forwards and backwards within 10. • Use different representations to count forwards and backwards within 10. • Use number tracks to count forwards and backwards within 10. • Solve problems by counting forwards and backwards within 10. **Resources** **Y1 White Rose Maths Step 6:** Count On from Any Number (Place Value Within 10) **Y1 White Rose Maths Step 8:** Count Backwards Within 10 (Place Value Within 10) **Y1/2 White Rose Maths Step 3:** count on and back within 20	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

NCETM Spine 1: Number, Addition and Subtraction Topic 1.9 Teaching Point 1		
Understanding numbers 11-20 **Y1 - NC Statement:** Read and write numbers from 1 to 20 in numerals. Identify and represent numbers using objects and pictorial representations. • Read numbers from ten to twenty in numerals. • Read numbers from ten to twenty in words. • Write numbers from ten to twenty in numerals. • Write numbers from ten to twenty in words. **Resources** **Y1/2 White Rose Maths Step 4:** Understand 10 **Y1/2 White Rose Maths Step 5:** Understand 11-15 **Y1/2 White Rose Maths Step 6:** Understand 16 - 20 **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.10 Teaching Point 1 **White Rose Maths Step 1:** Count within 20 (Place Value Within 20)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Count one more **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number. • Find one more by moving objects. • Find one more by drawing pictures. • Find one more on a number track. • Find one more to solve problems. **Resources** **Y1 White Rose Maths Step 7:** 1 More (Place Value Within 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

NCETM Spine 1: Number, Addition and Subtraction Topic 1.3 Teaching Point 6 **Y1/2 White Rose Maths Step 7:** 1 more		
<u>Count One Less</u> **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number. • Find one less by moving objects. • Find one less by crossing out pictures. • Find one less on a number track. • Find one less to solve problems. **<u>Resources</u>** **Y1 White Rose Maths Step 9:** 1 Less (Place Value Within 10) **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.3 Teaching Point 6 **Y1/2 White Rose Maths Step 8:** 1 Less	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Finding One More and One Less Than Numbers within 20</u> **Y1 - NC Statement:** Given a number, identify one more and one less. • Find one more and one less than numerals to twenty. • Find one more and one less than a group of up to twenty objects or pictures. • Find one more and one less than numbers in different representations. **<u>Resources</u>** **Y1 White Rose Maths Step 7:** 1 More and 1 Less (Place Value Within 20) **NCETM Spine 1**: Number, Addition and Subtraction Topic 1.7 Teaching Point 3	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Number Lines</u> **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Identify, represent and estimate numbers using different representations including the number line. • Recognise and describing the features of a number line. • Find numbers on a number line. • Place numbers on a number line. • Use the terms greater and smaller to compare numbers on a number line. **<u>Resources</u>** **Y1 White Rose Maths Step 15:** The Number Line (Place Value Within 10) **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.9 Teaching Point 3. **Y1/2 - White Rose Maths Step 9:** Number lines	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Estimate on Number Lines</u> **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Identify, represent and estimate numbers using different representations including the number line. • Begin to estimate on a number line. • Explore the halfway point **<u>Resources</u>** **Y1/2 White Rose Maths Step 10:** Number lines	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Less Than, Greater Than, Equal To **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Compare numbers using the terms less than, greater than and equal to. • Represent numbers to show less than, greater than and equal to a given number • Solve problems by comparing numbers using the terms less than, greater than and equal to. **Resources** **Y1 White Rose Maths Step 12:** Less Than, Greater Than, Equal to (Place Value Within 10) **NCETM Spine 1:** Number, Addition and Subtraction. Topic 1.1 Teaching Point 2 **Y1/2 White Rose Maths Step 11:** Less than, greater than, equal to	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Compare Numbers (20) **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Compare and order numbers from 0 up to 100: use and = signs. • Describe numbers by saying one number is more than another number. • Describe numbers by saying one number is less than another number. • Describe numbers by saying one number is equal to another number. **Resources** **Y1 White Rose Maths Step 11:** Compare Numbers to 20	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Y2 White Rose Maths Step 13: Compare numbers **Y1/2 White Rose Maths Step 12:** Compare numbers **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.1 Teaching Point 2		
Order Objects and Numbers **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language: equal to, more than, less than (fewer), most, least. • Use the terms most and fewest to order groups of objects or pictures. • Use the terms greatest and smallest to order numbers. • Solve problems by ordering objects and numbers. **Resources** **Y1 White Rose Maths Step 14:** Order Objects and Numbers (Place Value Within 10) **NCETM Spine 1**: Number, Addition and Subtraction **Y1/2 White Rose Maths Step 13:** Order Numbers	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Autumn Term – 3 Weeks

Addition and Subtraction (within 20)

Year 1	Year 2
Pupils should be taught to: • read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including 0 • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9	Pupils should be taught to: • solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and 1s, a two-digit number and 10s, 2 two-digit numbers, adding 3 one-digit numbers • show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problem.

Progressive Planning

Small Step	Planning Notes	Next Steps
Part whole model **Y1 - NC Statement:** Represent and use number bonds and related subtraction facts within 20. • Make a number up to ten from two parts using objects/images. • Use a part-whole model • Work systematically to find all possibilities. • Understand the difference between a 'whole' and a 'part'; • Partition numbers up to ten into two parts using equipment. • Partitioning numbers up to ten into two parts using a part-whole model. **Resources** **Y1/2 White Rose Maths Step 1**: Parts and Wholes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Systematic number bonds within 10 **Y1 - NC Statement:** Represent and use number bonds and related subtraction facts within 20. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs • Draw an addition picture and make an addition story. • Use the addition symbol in a number sentence. • Work systematically to find all possibilities. **Resources** **Y1/2 White Rose Maths Step 2:** Systematic number bonds within 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Number Bonds to 10 **Y1 - NC Statement**: Represent and use number bonds and related subtraction facts within 20. • Find number bonds of ten by adding two numbers • Recall number bonds of ten • work systematically to find all possibilities. **Resources** **Y1/2 White Rose Maths Step 3:** Number bonds to 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Number bonds to 20 **Y1 - NC Statement:** Represent and use number bonds and related subtraction facts within 20 **Y2 - NC Statement:** Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Use number bonds within ten to work out number bonds within twenty. • Work out number bonds within twenty. • Represent number bonds within twenty. **Resources** **Y1/2 White Rose Maths Step 4:** Number bonds to 20 **Y1 White Rose Maths Step 2:** Add Ones Using Number Bonds **Y1 White Rose Maths Step 3:** Find and make number bonds to 20.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Addition – Adding together **Y1 - NC Statement:** Add and subtract one-digit and two-digit numbers to 20, including zero. **Y2 - NC Statement:** 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 (Y2) • Start and stopping in different places when they count. • counting on from the first number. • Keep track of how many numbers they have counted on. • Identify the greatest number. • Keep track of how many numbers they have counted on. • Explain why counting on from the greatest number is the most efficient way to add. **Resources** **Y1 White Rose Maths Step 8:** Addition – Add Together **Y1/2 White Rose Maths Step 5:** Addition – Add Together	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Addition – Adding more **Y1 – NC Statement**: Add and subtract 1-digit and 2-digit numbers to 20, including zero. **Y2 – NC Statement:** 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. • Identify the greatest number • Keep track of how many numbers they have counted on • Explain why counting on from the greatest number is the most efficient way to add. • Understand what happens when adding zero. **Resources** **Y1/2 White Rose Maths Step 6:** Addition – Add More	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Doubles **Y1 - NC Statement:** Represent and use numbers bonds and related subtraction facts within 20. • Explain what double means. • Use equipment to double numbers. **Resources** **Y1 White Rose Maths Step 4**: Doubles **Y1/2 White Rose Maths Step 7:** Doubles	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Near Doubles **Y1 - NC Statement:** Represent and use number bonds and related subtraction facts within 20. **Y2 - NC Statement:** Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. • Recall known number facts within twenty • Use a known number fact to find a near number fact. **Resources** **Y1 White Rose Maths Step 9:** Related Facts **Y1/2 White Rose Maths Step 8:** Near Doubles	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add three 1-digit numbers **Y2 - NC Statement**: Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Use number facts to add three one-digit numbers • Use number doubles to add three one-digit numbers. • Select strategies to add three one-digit numbers. **Resource** **Y2 White Rose Maths Step 7:** Add Three 1-Digit Numbers **Y1/2 White Rose Maths Step 9:** Add Three 1-Digit Numbers	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Finding a part	**Mental Starter:**	

Y1 - NC Statement: Add and subtract one-digit and two-digit numbers to 20, including zero. • Use a part-whole model to subtract numbers within ten using objects. • Use a part-whole model to subtract numbers within ten using pictures. • Use a part-whole model to subtract numbers within ten using numerals • Work systematically to find all possibilities. **Resources** **Y1 White Rose Maths Step 12:** Subtraction – Find a Part **Y1/2 White Rose Maths Step 10:** Find a Part	**Fluency Skills:** **Reasoning:**	
Fact families- addition facts **Y1 - NC Statement:** Represent and use number bonds and related subtraction facts within 20. **Y2 - NC Statement:** Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 (Y2) • Write related addition facts within ten. • Write related subtraction facts within ten. • Check they have found all eight related number facts of a given number within ten. **Resources** **Y1 White Rose Maths Step 13:** Fact Families – The Eight Facts **Y1/2 White Rose Maths Step 11:** Fact Families – The Eight Facts	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Subtraction: Take Away/Cross Out (How many left?) **Y1 - NC Statement:** Read, write and interpret mathematical statements involving addition, subtractions and equals signs. • Tell a subtraction story. • Draw a subtraction picture. • Make a subtraction story. • Use the subtraction symbol in a mathematical calculation. **Resources** **Y1 White Rose Maths Step 14:** Subtraction – Take Away/Cross Out (How Many Left?) **Y1 White Rose Maths Step 15:** Take Away (How Many Left?) **Y1/2 White Rose Maths Step 12:** Take Away (How Many Left?)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Find the difference **Y1 - NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Use a number line to find the difference. • Use a bar model to find the difference. • Solve problems by finding the difference. **Resources** **Y1 White Rose Maths Step 16:** Subtraction on a Number Line **Y1/2 White Rose Maths Step 13:** Find the difference	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Missing number problems **Y1- NC Statement**: Solve one-step number problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. • Work out the best way to solve a problem. • Use number facts to solve missing number problems. • Use a number line or equipment to explain their thinking. **Resources** **Y1/2 White Rose Maths Step 14:** Missing number problems **Y1 White Rose Maths Step 10:** Missing Number Problems	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Autumn Term – 3 Weeks

Place Value (within 100)

Year 1	Year 2
Pupils should be taught to: • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s • given a number, identify 1 more and 1 less • identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words	Pupils should be taught to: • count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward • recognise the place value of each digit in a two-digit number (10s, 1s) • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems

Progressive Planning

Small Step	Planning Notes	Next Steps
Count beyond 20 **Y1 – NC Statement:** Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Count up to twenty pictures. • Keep track of their counting by marking the pictures • Count up to twenty objects. • Keep track of their counting by arranging objects into rows or groups. **Resources** **Y1 White Rose Maths Step 1:** Count within 20 (Place Value Within 20) **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.9 Teaching Point 1	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Y1/2 White Rose Maths Step 1: Count within 20		
Count tens **Y1 – NC Statement:** Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number. Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s. • Count up to one hundred using a hundred square. • Count to find numbers on a hundred square. • Count on from different numbers. • Count up to one hundred to find missing numbers. **Resources** **Y1 White Rose Maths Step 2:** Tens to 100 **Y1/2 White Rose Maths Step 2:** Count tens **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.9 Teaching Point 1	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Groups of Tens and ones **Y1 - NC Statement:** Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s. **Y2 - NC Statement:** Read and write numbers to at least 100 in numerals and in words. • Identify numbers represented in tens and ones. • Identify how many tens are in a number. • Identify how many ones are in a number. **Resources** **Y1 White Rose Maths Step 3:** Partition into Tens and Ones (Place Value Within 100) **Y2 White Rose Maths Step 3:** Recognise Tens and Ones NCETM Spine 1: Number, Addition and Subtraction Topic 1.9 Teaching Point 5	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Y1/2 White Rose Maths Step 3: Groups of tens and ones		
<u>Partitioning into tens and ones</u> **Y1 - NC Statement:** Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s. **Y2 - NC Statement:** Recognise the place value of each digit in a two-digit number. • Find the value of each digit in a two-digit number. • Write two-digit numbers as tens and ones. • Write two-digit numbers in the expanded form. • Show two-digit numbers as tens and ones using equipment. **<u>Resources</u>** **Y2 White Rose Maths Step 5:** Partition Numbers to 100 **Y1/2 White Rose Maths Step 4:** Partition into tens and ones	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Use a place value chart</u> **Y2 - NC Statement:** Recognise the place value of each digit in a two-digit number. • Make two-digit numbers with concrete resources and matching them to representations and numerals. • Explore what happens when there are more than 9 ones (exchanging). • Use a place value chart. **<u>Resources</u>** **Y2 White Rose Maths Step 4:** Use a Place Value Chart **Y1/2 White Rose Maths Step 5:** Use a Place Value Chart	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Flexible Partitioning</u> **Y2 - NC Statement:** 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). • Find the value of each digit in a two-digit number. • Partitioning a two-digit number into tens and ones. • Partition two-digit numbers in more than one way. **<u>Resources</u>** **Y1/2 White Rose Maths Step 6:** Flexibly Partitioning **Y1 White Rose Maths Step 7:** Flexibly Partition Numbers to 100	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Number lines</u> **Y2 - NC Statement:** Identify, represent and estimate numbers using different representations including the number line. **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language: equal to, more than, less than (fewer), most, least. • Find the value of each interval on a number line • Identify the number shown by counting the intervals on a number line. • Estimate the position shown on an unmarked number line. **<u>Resources</u>** **Y2 White Rose Maths Step 10:** 10s and 1s on the Number Line to 100. **Y2 White Rose Maths Step 11:** Estimate Numbers on a Number Line	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

NCETM Spine 1: Number, Addition and Subtraction Topic 1.9 Teaching Point 3. **Y1/2 White Rose Maths Step 7:** Number lines		
Estimate on number lines **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Identify, represent and estimate numbers using different representations, including the number line. making sensible estimates for a number of items. • Read a marked number on a scale or number line. • Identify intervals on a scale or number line. • Use place value to estimate a number on a scale or number line. **Resources** **Y1/2 White Rose Maths Step 8:** Estimate on number lines **Y2 White Rose Maths Step 11:** Estimate Numbers on a Number Line	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
1 more and 1 less **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Given a number, identify 1 more and 1 less. **Y2 - NC Statement:** Identify, represent and estimate numbers using different representations, including the number line. • Count forwards and backwards within one hundred. • Find one more than numbers to one hundred. • Find one less than numbers to one hundred. **Resources** **White Rose Maths Step 5:** 1 More, 1 Less (Place Value Within 100) **NCETM Spine 1:** Number, Addition and Subtraction Topic 1.7 Teaching Point 3 **Y1/2 White Rose Maths Step 9:** 1 more and 1 less	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Compare numbers with the same number of tens **Y1 - NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Compare and order numbers from 0 up to 100; use and = signs • Say which number is greater. • Say which number is less. • Use the symbols and =. **Resources** **Y2 White Rose Maths Step 13:** Compare numbers **Y1/2 White Rose Maths Step 10:** Compare numbers with the same number of tens	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Compare any two numbers **Y1 -NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Compare and order numbers from 0 up to 100; use and = signs. • Say which number is greater. • Say which number is less. • Use using the symbols < and >and =. **Resources** **Y2 White Rose Maths Step 13:** Compare numbers **Y1/2 White Rose Maths Step 11:** Compare any two numbers	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Order Objects and Numbers **Y1 – NC Statement:** Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. **Y2 - NC Statement:** Compare and order numbers from 0 up to 100: use and = signs. • Order numbers to 100. • Use place value knowledge to find the smallest or the greatest number • Order numbers from smallest to greatest • Order numbers from greatest to smallest. **Resources** **Y2 White Rose Maths Step 14:** Order Objects and Numbers **Y1/2 White Rose Maths Step 12:** Order Objects and Numbers **NCETM Spine 1**: Number, Addition and Subtraction	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Autumn Term – 2 Weeks

Shape and Properties

Year	Year 2
Pupils should be taught to: • recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]	Pupils should be taught to: • 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 • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D and 3-D shapes and everyday objects

Progressive Planning

Small Step	Planning Notes	Next Steps
2D shapes **Y1 NC Statement:** Recognise and name common 2-D and 3-D shapes. • Identify common 2D shapes. • Draw common 2D shapes. • Describe common 2D shapes by: • Describe 2D shapes. • Find 2D shapes around them. **Resources** **Y1 White Rose Maths Step 3:** Recognise and Name 2D Shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

3D shapes **Y1 NC Statement:** Recognise and name common 2-D and 3-D shapes. • Recognise 3D shapes shown in different sizes. • Recognise 3D shapes shown in different orientations. • Recognise 3D shapes found in everyday objects. • Find 3D shapes in response to their names. • Name the 3D shapes that they work with. • Identify 3D shapes in the environment. • Make models of 3D shapes. **Resources** **Y1 White Rose Maths Step 1:** Recognise and Name 3D Shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Recognise 2D and 3D shapes **Y1 NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 NC Statement:** 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 • Recognise 3D shapes shown in different sizes. • Recognise 3D shapes shown in different orientations. • Recognise 3D shapes found in everyday objects. • Identify common 2D shapes. • Draw common 2D shapes. • Describe common 2D shapes. **Resources** **Y2 White Rose Maths Step 1:** Recognise 2D and 3D Shapes **Y1/2 White Rose Maths Step 1:** Recognise and name 2D and 3D Shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Describe 3D shapes **Y1 NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 NC Statement:** Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. • Match 3D shapes to their descriptions. • Describe 3D shapes according to faces, edges and vertices. **Resources** **Y2 White Rose Maths Step 8:** Count Faces on 3D Shapes **Y2 White Rose Maths Step 9:** Count Edges on 3D Shapes **Y2 White Rose Maths Step 10:** Count Vertices on 3D Shapes **Y1/2 White Rose Maths Step 2:** Count faces on 3D shapes **Y1/2 White Rose Maths Step 3:** Count edges on 3D shapes **Y1/2 White Rose Maths Step 4:** Count vertices on 3D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Year 2 - Count sides and vertices on 2D shapes **Y1 NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 NC Statement:** Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line. • Describe the properties of 2D shapes using the words 'sides' and 'vertices'. • Recognise quadrilaterals by counting their sides. **Resources** **Y2 White Rose Maths Step 2:** Count Sides on 2D Shapes **Y2 White Rose Maths Step 3:** Count Vertices on 2D Shapes **Y1/2 White Rose Maths Step 5:** Count sides on 2D shapes **Y1/2 White Rose Maths Step 6:** Count vertices on 2D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Draw 2D shapes **Y2 NC Statement:** Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. • Use geoboards to create polygons. • Draw polygons. • Describe the polygons using mathematical language. **Resources** **Y2 White Rose Maths Step 4:** Draw 2D Shapes **Y1/2 White Rose Maths Step 7:** Draw 2D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Lines of symmetry **Y2 NC Statement:** Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. • Recognise and describing common 2D shapes; • Fold 2D shapes to explore symmetry; • Use a mirror to explore symmetry. **Resources** **Y2 White Rose Maths Step 5:** Lines of Symmetry on Shapes **Y2 White Rose Maths Step 6:** Use Lines of Symmetry to Complete Shapes. **Y1/2 White Rose Maths Step 8:** Lines of symmetry	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Sort 2D shapes **Y1 -NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 - NC Statement:** Compare and sort common 2-D and 3-D shapes and everyday objects. • Identify a shape that doesn't belong in a set. • Label groups of 2D shapes. • Sort 2D shapes into groups and sets. • Add a shape to a set. • Describe the properties of 2D shapes. **Resources** **Y1 White Rose Maths Step 4:** Sort 2D Shapes **Y2 White Rose Maths Step 7:** Sort 2D Shapes **Y1/2 White Rose Maths Step 9:** Sort 2D and 3D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Sort 3D shapes **Y1 -NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 - NC Statement:** Compare and sort common 2-D and 3-D shapes and everyday objects. • Identify a shape that doesn't belong in a set. • Group and labelling 3D shapes. • Describe the properties of 3D shapes. • Use a Venn diagram to sort 3D shapes. **Resources** **Y1 - White Rose Maths Step 2:** Sort 3D Shapes **Y2 - White Rose Maths Step 11:** Sort 3D Shapes **Y1/2 White Rose Maths Step 9:** Sort 2D and 3D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Year 1 - Patterns with 3D and 2D shapes **Y1 - NC Statement:** Recognise and name common 2-D and 3-D shapes. **Y2 - NC Statement:** Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. • Identify the core of 2D and 3D shape patterns. • Continue 2D and 3D shape patterns. • Complete 2D and 3D shape patterns. • Create 2D and 3D shape patterns. identifying the core of 3D shape patterns. • Spot and describe the core of a 2D and 3D shape pattern. • Predict which 3D shape will appear in a sequence. **Resources** **Y1 White Rose Maths Step 5:** Patterns with 2D and 3D Shapes **Y2 - White Rose Maths Step 12:** Make Patterns with 2D and 3D Shapes **Y1/2 White Rose Maths Step 10:** Patterns with 2D and 3D shapes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Spring Term – 6 Weeks

Addition and Subtraction

Year 1	Year 2
Pupils should be taught to: • read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including 0 • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9	Pupils should be taught to: • solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and 1s, a two-digit number and 10s, 2 two-digit numbers, adding 3 one-digit numbers • show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problem.

Progressive Planning

Small Step	Planning Notes	Next Steps
Related Facts **Y2 - NC Statement**: Recall and use facts to 20 fluently and derive and use related facts up to 100. • Derive addition and subtraction facts of one hundred (multiples of ten). • Use these addition and subtraction facts in a context. **Resources** **Y1/2 White Rose Maths Step 1:** Related facts **Y2 White Rose Maths Step 3:** Related Facts	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Add and subtract 1s **Y1 NC Statement:** add and subtract one-digit and two-digit numbers to 20, including 0 **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Add a one-digit number to a multiple of ten. • Subtract a one-digit number to target a multiple of ten. • spot and continue a pattern. **Resources** **Y1 White Rose Maths Step 5:** Add and Subtract 1s **Y2 White Rose Maths Step 19:** Mixed Addition and Subtraction **Y1/2 White Rose Maths Step 2:** Add and subtract 1s.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add to the next 10 **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Use ten-frames to add across ten. • Use part-whole models to add across ten. **Resources** **Y1/2 White Rose Maths Step 3:** Add to the next 10 **Y2 White Rose Maths Step 1:** Bonds to 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Add from a 10 **Y2 NC Statement**: Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Use ten-frames to add across ten. • Use part-whole models to add across ten. **Resources** **Y1/2 White Rose Maths Step 4:** Add from a 10 **Y2 White Rose Maths Step 6:** Add by Making 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add across a 10 **Y2 NC Statement**: Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Use ten-frames to add across ten. • Use part-whole models to add across ten. **Resources** **Y1/2 White Rose Maths Step 5:** Add across a 10 **Y2 White Rose Maths Step 9:** Add across a 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Subtract to a 10 **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Using ten-frames to subtract across ten • Models to subtract across ten. **Resources** **Y1/2 White Rose Maths Step 6:** Subtract to a 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Subtract from a 10 **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Using ten-frames to subtract across ten • Models to subtract across ten. **Resources** **Y1/2 White Rose Maths Step 7:** Subtract from a 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Subtract across a 10 **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Recall number facts of ten. • Using ten-frames to subtract across ten • Models to subtract across ten. **Resources** **Y1/2 White Rose Maths Step 8:** Subtract across a 10 **Y2 White Rose Maths Step 10:** Subtract Across 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add 10s **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Add and subtract a two-digit number and a multiple of ten. • Use number facts to add a multiple of ten to any two-digit number. Use number facts to subtract a multiple of ten from any two-digit number • Use patterns to add a multiple of ten to any two-digit number • Use using patterns to subtract a multiple of ten from any two-digit number. **Resources** **Y1/2 White Rose Maths Step 9:** Add 10s **Y2 White Rose Maths Step 14:** Add and Subtract 10s	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Subtract 10s **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Add and subtract a two-digit number and a multiple of ten. • Use number facts to add a multiple of ten to any two-digit number. Use number facts to subtract a multiple of ten from any two-digit number • Use patterns to add a multiple of ten to any two-digit number • Use using patterns to subtract a multiple of ten from any two-digit number. **Resources** **Y1/2 White Rose Maths Step 10:** Subtract 10s **Y2 White Rose Maths Step 14:** Add and Subtract 10s	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add 2-digits numbers (not across 10) **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Add ones not crossing ten. • Use number facts to add 2 two-digit numbers. • Use a number line to add 2 two-digit numbers. • Set working out in a formal method (column) **Resources** **Y2 White Rose Maths Step 15:** Add Two 2-Digit Numbers (Not across a 10) **Y1/2 White Rose Maths Step 11:** Add Two 2-Digit Numbers (Not across a 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Add 2-digit numbers (across 10) **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Set working out in a formal method (column) • Use known number facts to add numbers that cross a ten boundary • Use a number line to solve addition calculations that cross a ten boundary. • Use number patterns to solve addition calculations that cross a ten boundary. **Resources** **Y2 White Rose Maths Step 16**: Add Two 2-Digit Numbers (Across a 10) **Y1/2 White Rose Maths Step 12**: Add Two 2-Digit Numbers (Across a 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Subtract 1-digit from 2-digits **Y2 NC Statement**: Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Use known number facts to subtract a one-digit number from a two-digit number, crossing a ten boundary • Use a number line to subtract a one-digit number from a two-digit number, crossing a ten boundary • Use number patterns to subtract a one-digit number from a two-digit number, crossing a ten boundary **Resources** **Y1/2 White Rose Maths Step 13:** Subtract a 1-Digit Number from a 2-Digit Number (Across a 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Subtract with 2-digits (not across a 10) **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers • Use known number facts to subtract a one-digit number from a two-digit number. • Use a number line to subtract a one-digit number from a two-digit number. • Use number patterns to subtract a one-digit number from a two-digit number. **Resources** **Y1/2 White Rose Maths Step 13:** Subtract Two 2-Digit Numbers (not across a 10) **Y2 White Rose Maths Step 17:** Subtract Two 2-Digit Numbers (Not Across a 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Subtract with 2-digits (across a 10) **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers • Use known number facts to subtract a one-digit number from a two-digit number, crossing a ten boundary • Use a number line to subtract a one-digit number from a two-digit number, crossing a ten boundary • Use number patterns to subtract a one-digit number from a two-digit number, crossing a ten boundary **Resources** **Y1/2 White Rose Maths Step 14**: Subtract Two 2-Digit Numbers (across a 10) **Y2 White Rose Maths Step 18:** Subtract Two 2-Digit Numbers (Across a 10)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Mixed addition and subtraction **Y2 NC Statement:** Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. • Add and subtract nine • Spot a pattern. • Explain the pattern and use it to help them . **Resources** **Y1/2 White Rose Maths Step 15:** mixed addition and subtraction **Y2 White Rose Maths Step 19:** Mixed Addition and Subtraction	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Compare number sentences **Y2 NC Statements:** 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 • Use inequality to compare number sentences. • Focus on not just on working out the values of the calculations, but rather comparing the numbers within them **Resources** **Y1/2 White Rose Maths Step 16:** compare number sentences	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Missing number problems **Y1 - NC Statement:** Solve one-step number problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. **Y2 - NC Statement:** Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. • Say what 'inverse' means. • Use equipment to explain why addition and subtraction are the inverse of each other • Say what the inverse calculation is for an addition or subtraction calculation • Write an inverse calculation for addition and subtraction. • Use addition to check subtraction calculations. • Use subtraction to check addition calculations. **Resources** **Y1/2 White Rose Maths Step 17**: Missing number problems **Y1 White Rose Maths Step 10:** Missing Number Problems **Y2 White Rose Maths Step 21:** Missing Number Problems	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Spring Term – 3 weeks

Place Value and Multiplication (within 50)

Year 1	Year 2
Number - Multiplication and Division • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher *Through grouping and sharing small quantities, pupils begin to understand* • *multiplication and division* • *doubling numbers and quantities* • *finding simple fractions of objects, numbers and quantities* *They make connections between arrays, number patterns, and counting in 2s, 5s and 10s.*	**Number - Multiplication and Division** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • 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 2 numbers can be done in any order (commutative) and division of 1 number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Progressive Planning

Small Step	Planning Notes	Next Steps
Count in 2s **Y2 - NC Statement**: Count in steps of 2, 3, and 5 from 0 and in tens from any number, forward and backward. **Y1 - NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Count in steps of two, counting objects in twos • Spot patterns • Count forwards and backwards in twos. **Resources** **Y1/2 White Rose Maths Step 1:** Count in 2s, 5s and 10s **Y1 White Rose Maths Step 1**: Count in 2s **Y2 White Rose Maths Step 15**: Count in 2s, 5s and 10s	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Count in 5s **Y2 - NC Statement**: Count in steps of 2, 3, and 5 from 0 and in tens from any number, forward and backward. **Y1 - NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Count in steps of five. • Count on and back in fives using hands. • Count on and back in fives using objects. • Read and write multiples of fives • Find and making patterns when counting in fives. **Resources** **Y1/2 White Rose Maths Step 1:** Count in 2s, 5s and 10s **Y1 White Rose Maths Step 3:** Count in 5s **Y2 White Rose Maths Step 15:** Count in 2s, 5s and 10s	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Count in 10s **Y2 - NC Statement**: Count in steps of 2, 3, and 5 from 0 and in tens from any number, forward and backward. **Y1 - NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Count in steps of ten. Use place value to spot a pattern • Work out the next numbers in a sequence • Explain what happens to the ones digit and the tens digit • Use the pattern to help count on and back from any number. **Resources** **Y1/2 White Rose Maths Step 1:** Count in 2s, 5s and 10s **Y1 White Rose Maths Step 2:** Count in 10s **Y2 - White Rose Maths Step 15:** Count in 2s, 5s and 10s	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Count in 3s	**Mental Starter:**	

Y2 NC Statement: Count in steps of 2, 3, and 5 from 0 and in tens from any number, forward and backward. • Count in steps of three • Count on and back in threes by counting objects • Count on and back in threes using pictures. • Read and write in steps of three. **Resources** **Y1/2 White Rose Maths Step 2 :** Count in 3s **White Rose Maths Step 16:** Count in 3s	**Fluency Skills:** **Reasoning:**	
Recognise and Make Equal Groups **Y1 NC Statement:** Pupils work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. • Group objects • Describe groups as equal and unequal • Identify equal groups • Identify unequal groups **Resources** **Y1/2 White Rose Maths Step 3:** Recognise equal groups **Y2 White Rose Maths Step 1**: Recognise Equal Groups **Y1 White Rose Maths Step 4:** Recognise Equal Groups **Y1/2 White Rose Maths Step 4:** Recognise equal groups	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Make Arrays **Y1 -** NC Statement: Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Y2 NC Statement: Show that multiplication of two numbers can be done in any order and division of one number by another cannot. • Identify and describe arrays, using columns and rows • Make arrays with objects and counters. • Explain the link between an array and a repeated addition expression • Know that multiplication is commutative • Write two multiplication expressions to match an array • Draw an array and writing a multiplication expression to represent a picture. **Resources** **Y1/2 White Rose Maths Step 5:** Make Arrays **Y1 White Rose Maths Step 6:** Make Arrays **Y2 White Rose Maths Step 6:** Use Arrays	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Add equal groups **Y1 NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Describing equal groups. • Represent equal groups with an addition expression. • Add equal groups to find the total. **Resources** **Y1/2 White Rose Maths Step 6:** Add equal groups **Y1 White Rose Maths Step 5:** Add Equal Groups	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Multiplication sentences **Y2 - NC Statement:** Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs. • Write a repeated addition expression as a multiplication expression. • Write multiplication expressions when the group size is zero or one. • Use the multiplication symbol (×) accurately **Resources** **Y1/2 White Rose Maths Step 7:** Multiplication Sentences **Y2 White Rose Maths Step 4:** Introduce the Multiplication Symbol **Y2 White Rose Maths Step 5:** Multiplication Sentences	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Commutativity **Y2 NC Statement:** Pupils work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition • Use repeated addition expressions to represent equal groups. • Create equal groups to represent a repeated addition expression. **Resources** **Y1/2 White Rose Maths Step 8:** Commutativity	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Make equal groups (grouping) **Y1 NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Y2 NC Statement:** Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. • Group objects in groups of two, five and ten. • Group pictures in groups of two, five and ten. • Count how many groups of two, five or ten there are. • Solve problems involving grouping objects. • Use division expressions, explaining what each part of a division calculation represents. **Resources** **Y1/2 White Rose Maths Step 9**: Make equal groups (grouping) **Y2 White Rose Maths Step 7:** Make Equal Groups – Grouping **Y1 White Rose Maths Step 8:** Make Equal Groups – Grouping	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Make equal groups (Sharing) **Y1 NC Statement:** Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Y2 NC Statement:** Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. • Share objects into two, five or ten groups. • Count how many there are in each group. • Solve problems involving sharing objects. • Use division expressions, explaining what each part of a division calculation represents. **Resources** **Y1/2 White Rose Maths Step 10:** Make equal groups (sharing) **Y2 White Rose Maths Step 8:** Make Equal Groups – Sharing **Y1 White Rose Maths Step 9:** Make Equal Groups – Sharing	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Year 2 - The 2 times-tables **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Count in twos. • Spot patterns within multiples of two • Recall multiplication facts up to 12 × 2. **Resources** **Y1/2 White Rose Maths Step 11:** The 2 times-tables **Y2 White Rose Maths Step 9**: The 2 Times Table	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Divide by 2 **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Use skip counting to divide by two. • Use related multiplication facts to divide by two. • Use halving facts to divide by two. **Resources** **Y1/2 White Rose Maths Step 12:** Divide by 2 **Y2 White Rose Maths Step 10:** Divide by 2	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Doubling and halving **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Use facts from the two times table to double numbers. • Double larger numbers • Use two times table facts to solve doubling problems. • Recall that halving is the inverse of doubling. • Recall facts from the two times table. • Use two times table facts to find half of a number. • Use doubles facts to find half of a two-digit number. **Resources** **Y1/2 White Rose Maths Step 13:** Doubling and halving **Y2 White Rose Maths Step 11:** Doubling and Halving	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Odd and Even **Y2 NC Statement**: Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. Lesson Aim: To recognise odd and even number. • Explain why a number is odd or even. • Identify larger odd and even numbers. • Look for patterns of odd and even numbers in the two, five and ten times tables. **Resources** **Y1/2 White Rose Maths Step 14:** Odd and Even **Y1/2 White Rose Maths Step 12**: Odd and Even Numbers	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

The 10 times-tables **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Count in tens. • Spot patterns within multiples of ten. • Multiplication facts up to 12 × 10. **Resources** **Y1/2 White Rose Maths Step 15**: The 10 times-tables **Y2 White Rose Maths Step 13:** The 10 Times Table	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Divide by 10 **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Use skip counting to divide by ten. • Use related multiplication facts to divide by ten. • Recall division facts up to 120 ÷ 10. **Resources** **Y1/2 White Rose Maths Step 16:** Divide by 10 **Y2 White Rose Maths Step 14:** Divide by 10	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

The 5 times-table **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Count in fives. • Spot patterns within multiples of five. • Multiplication facts up to 12 × 5. **Resources** **Y1/2 White Rose Maths Step 17:** The five times-table **Y2 White Rose Maths Step 15:** The 5 Times Table	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Divide by 5 **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Use skip counting to divide by five. • Use related multiplication facts to divide by five. • Recall division facts up to 60 ÷ 5. **Resources** **Y1/2 White Rose Maths Step 18**: Divide by 5 **Y2 White Rose Maths Step 16:** Divide by 5	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

The 5 and 10 times-tables **Y2 NC Statement:** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Multiplication facts up to 12 × 10. • Recall division facts up to 120 ÷ 10. • Multiplication facts up to 12 × 5. • Recall division facts up to 60 ÷ 5. **Resources** **Y1/2 White Rose Maths Step 19:** The 5 and 10 times-tables	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Spring Term – 2 Weeks

Length and Height

Year	Year 2
Pupils should be taught to: compare, describe and solve practical problems for: • lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] measure and begin to record the following: • lengths and heights	Pupils should be taught to: • 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 =

Progressive Planning

Small Step	Planning Notes	Next Steps
Measure length using objects **NC Statement**: Measure and begin to record lengths and heights. • Measuring the length of objects using a variety of non-standard units. • Record the length of various objects using a range of non-standard units. **Resources** **Y1 White Rose Maths Step 2:** Measure Length using Objects **Y1 White Rose Maths Step 1:** Measure Length using Objects	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Measure length- cm **Y1- NC Statement:** Measure and begin to record lengths and heights. **Y2 - NC Statement:** Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers. • Measure length using a ruler marked in centimetre intervals. • Accurately measure the height or length of familiar objects. • Use their measurements to make comparisons by saying which is the longest, shortest or tallest. • Measure length to the nearest centimetre, including lines in different directions. (include drawing lines) **Resources** **Y1 White Rose Maths Step 3:** Measure Length in Centimetres **Y2 White Rose Maths Step 1:** Measure in Centimetres **Y1/2 White Rose Maths Step 2:** Measure in Centimetres	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Measure length- m **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers. • Write measures in mixed units of centimetres and metres. • Measure large objects. • Choose suitable units (centimetres or metres) to measure objects. **Resources** **Y2 White Rose Maths Step 2:** Measure in Metres **Y1/2 White Rose Maths Step 3:** Measure length in Metres	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Compare lengths and heights **Y1 - NC Statement:** Compare, describe and solve practical problems for lengths and heights. **Y2 - NC Statement:** Compare and order lengths and record the results using >, < and =. • Compare the heights of familiar objects. • Use accurate vocabulary for describing height such as tall, short, taller, shorter, tallest and shortest. • Compare both lengths and heights using the language of greater than, less than and equal to. • Use inequality symbols to compare lengths and heights. **Resources** **Y1 White Rose Maths Step 1**: Compare Lengths and Heights **Y2 White Rose Maths Step 3:** Compare Lengths and Heights **Y1/2 White Rose Maths Step 4:** Compare Lengths and Heights	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Order lengths and Heights **Y2 NC Statement:** Compare and order lengths and record the results using >, < and =. • Ordering both lengths and heights. • Use measuring skills to ordering. **Resources** **Y2 White Rose Maths Step 4:** Order Lengths and Heights **Y1/2 White Rose Maths Step 5:** Order Lengths and Heights	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Four operations with lengths</u> **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure length/height in any direction; mass; temperature; capacity to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. • Use addition, subtraction multiplication and division strategies they are familiar with and that will be most efficient for the problem. **<u>Resources</u>** **Y2 White Rose Maths Step 5**: Four Operations with Lengths and Heights **Y1/2 White Rose Maths Step 6**: Four Operations with Lengths and Heights	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Spring Term – 2 Weeks

Statistics

Year 1	Year 2
	Pupils should be taught to: • interpret and construct simple pictograms, tally charts, block diagrams and 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

Progressive Planning

Small Step	Planning Notes	Next Steps
Make tally charts and tables **Y2 NC Statement:** Ask and answer questions about totalling and comparing categorical data. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Interpret and construct simple tally charts. • Interpret the information in tally charts to answer questions, explaining their answers using reasoning. • Collect and record information in a tally chart. • Simple retrieval questions will be followed by comparison questions, including finding the difference and working out 'How many more …' **Resources** **Y2 White Rose Maths Step 1:** Make Tally Charts **Y1/2 White Rose Maths Step 1:** Tally Charts	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Block diagrams **Y2 NC Statement:** Ask-and-answer questions about totalling and comparing categorical data. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Interpret simple block diagrams. • Learn how blocks can be represented as squares coloured in on paper and how these can represent other items. • Answer simple retrieval questions and use their reasoning skills to justify their answers. **Resources** **Y2 White Rose Maths Step 3:** Block Diagrams **Y1/2 White Rose Maths Step 3:** Block Diagrams	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Draw pictograms **Y2 NC Statement:** Ask and answer questions about totalling and comparing categorical data. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Interpret and construct simple pictograms. • Complete partially drawn pictograms using data presented in tables and tally charts. • Choose their own symbols and add them to pre-drawn pictogram structures. **Resources** **Y1/2 White Rose Maths Step 4:** Draw Pictograms (1 -1) **Y2 White Rose Maths Step 4:** Draw Pictograms (1 -1)	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Interpret pictograms **Y2NC Statement:** Ask and answer questions about totalling and comparing categorical data. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Interpret and construct simple pictograms. • Count the number of objects in each category to answer simple retrieval activities. • Total and compare data from two or more categories. • Subtraction as 'finding the difference' and 'how many more…?' **Resources** **Y2 White Rose Maths Step 5:** Interpret Pictograms (1-1) **Y1/2 White Rose Maths Step 5:** Interpret Pictograms	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Summer Term – 2 Weeks

Money

Year 1	Year 2
Pupils should be taught to: • recognise and know the value of different denominations of coins and notes	Pupils should be taught to: • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • find different combinations of coins that equal the same amounts of money • solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Progressive Planning

Small Step	Planning Notes	Next Steps
Recognising Coins (pence) **Y1 - NC Statement**: Recognise and know the value of different denominations of coins and notes. **Y2 - NC Statement:** Recognise and use symbols for pounds (£) and pence (p). Year 1 • Recognise coins and their values. • Look at coin value, colour, shape and size Year 2 • Recognise the coins that represent a value of pence • Use knowledge of counting in twos to count in twenties. • Count money with coins of different values, again using skip counting. **Resources** **Y1 - White Rose Maths Step 2:** Recognise Coins **Y2 - White Rose Maths Step 1**: Count Money – Pence	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Recognising Notes (pounds) **Y1 - NC Statement:** Recognise and know the value of different denominations of coins and notes. **Y2 - NC Statement:** Recognise and use symbols for pounds (£) and pence (p). Year 1 • Recognise notes up to and including £50, exploring their similarities and differences. • Practise writing the pound symbol. • understand that one note can be worth many pounds. • explore equivalence between notes Year 2 • Identify pound coins and notes and learn the symbol for pounds (£). • Count groups of the same coin/mixed coins and notes. **Resources** **Y1 - White Rose Maths Step 3:** Recognise Notes **Y2 - White Rose Maths Step 2:** Count Money - Pounds	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Count Money - Notes and Coins **Y1 - NC Statement:** Recognise and know the value of different denominations of coins and notes. **Y2 - NC Statement:** Recognise and use symbols for pounds (£) and pence (p). • Count in 2s, 5s and 10s to count money efficiently. • Record amounts of pounds and pence separately, using the symbols £ and p. do not need to write amounts of money using a decimal point, but instead record the pounds and pence separately: for example, £1 and 50p. **Resources** **Y1/2 - White Rose Maths Step 2:** Count Money – pence **Y1/2 - White Rose Maths Step 3:** Count Money – pounds (notes and coins) **Y2 - White Rose Maths Step 3:** Count Money - Pounds and Pence	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Choose Notes and Coins **Y2- NC Statement:** Combine amounts to make a particular value. • Select money to make a particular value by starting with the greatest possible value coin or note and adding on from there. **Resources** **Y2 - White Rose Maths Step 4:** Choose Notes and Coins **Y1/2 - White Rose Maths Step 5:** Choose Notes and Coins	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Compare money **Y2 -NC Statement**: Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Compare amounts of money using the language of "greater than", "less than", "most" and "least", together with the inequality symbols. **Resources** **Y1/2 -White Rose Maths Step 6:** Compare amounts of money.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Make the same amount **Y2- NC Statement:** To use different coins to make the same amount of money. • Explore using different coins to make the same value. • Make an amount using one set of coins and then using a different combination of coins to make the same amount. **Resources** **Y2 - White Rose Maths Step 5:** Make the Same Amount	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Calculate with Money **Y2- NC Statement:** Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Revise strategies for adding three one-digit numbers, two-digit numbers and ones, two-digit numbers and tens and two two-digit numbers, all in the context of money. • Apply these skills to solve money problems. • Counting pence then pounds. **Resources** **Y1/2 White Rose Maths Step 9:** Calculate with Money **Y2 - White Rose Maths Step 10:** Two-Step Money Problems	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Find change **Y2 - NC Statement:** Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Find change from a pound by relating this to their knowledge of bonds to 100. • Use a hundred square to count up through tens and ones as a tool for finding the correct **Resources** **Y1/2 White Rose Maths Step 9:** Calculate with Money **Y2 - White Rose Maths Step 9:** Find Change	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Evaluation of Learning

Summer Term – 3 Weeks

Fractions

Year 1	Year 2
Pupils should be taught to: • recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	Pupils should be taught to: • recognise, find, name and write fractions 1/3 , 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2 .

Progressive Planning

Small Step	Planning Notes	Next Steps
Parts and Wholes **Resources** **Y1/2 White Rose Maths Step 1:** Parts and wholes	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Equal and unequal</u> **Y1 NC Statement:** Recognise, find and name a half as one of two equal parts of an object, shape or quantity. **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children how to recognise and represent equal parts. They identify 2D shapes that have been split into equal parts, then explore further possibilities. • The children identify groups of objects and pictures that have been split into equal parts, then use small manipulatives and jottings to investigate more ideas. **<u>Resources</u>** **Y1/2 White Rose Maths Step 2:** Equal and unequal	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Recognise a half</u> **Y1 NC Statement:** Recognise, find and name a half as one of two equal parts of an object, shape or quantity. **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children to recognise and represent one-half. They learn that 'one-half' refers to one of two equal parts that make a whole. • The children are introduced to the notation 1/2. They identify 2D shapes split into two equal parts, then	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

explore groups of objects and pictures split into two equal parts. **<u>Resources</u>** **Y1/2 White Rose Maths Step 3:** Recognise a half		
<u>Find a half</u> **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children different ways to find a half. They colour sections of shapes, draw rings around groups of images and move objects. • The children apply known number facts and complete bar models to find one-half. Children choose their preferred method to find one-half and complete number sentences that include the 1/2 notation. **<u>Resources</u>** Y1/2 White Rose Maths Step 4: Find a half		
<u>Recognise a quarter</u> **Y1 NC Statement:** Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children to recognise and represent one-quarter. They learn that 'one-quarter' refers to one	**Mental Starter:** **Fluency Skills:**	

of four equal parts that make a whole. Children are introduced to the notation 1/4 . • They identify 2D shapes that have been split into four equal parts, then explore groups of objects and pictures that have been split into four equal parts. **Resources** Y1/2 White Rose Maths Step 5: Recognise a quarter	**Reasoning:**	
Find a quarter **Y1 NC Statement:** Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children different ways to find a quarter. They colour sections of shapes, draw rings around groups of images and move objects. • The children complete bar models to find one-quarter. Children choose their preferred method to find one-quarter and complete number sentences that include the 1/4 notations. **Resources** Y1/2 White Rose Maths Step 6: Find a quarter	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Recognise a third **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children to recognise a third. They learn that 'one-third' refers to one of three equal parts that make a whole. • The children are introduced to the notation 1/3. They identify 2D shapes that have been split into three equal parts, then explore groups of objects and pictures that have been split into three equal parts. **Resources** Y1/2 White Rose Maths Step 7: Recognise a quarter	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Find a third **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children different ways to find a third. They colour sections of shapes, draw rings around groups of images and move objects. • The children complete bar models to find one-third. Children choose their preferred method to find one-third and complete number sentences that include the 1/3 notation. **Resources** Y1/2 White Rose Maths Step 8: Find a quarter		

Find a whole **Resources** Y1/2 White Rose Maths Step 9: Find a whole	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Unit Fractions **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson introduces children to unit fractions. They learn that a unit fraction is one equal part of a whole, so the numerator of a unit fraction is always one. • They learn that the denominator shows the number of equal parts that the whole has been divided into. **Resources** Y1/2 White Rose Maths Step 10: Unit Fractions	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Non-unit Fractions **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson introduces children to non-unit fractions. They learn that a non-unit fraction is more than one equal part of a whole, so the numerator of a unit fraction is always greater than one. • The children also discover that when the numerator and denominator match, it shows one-whole **Resources** Y1/2 White Rose Maths Step 11: Non-unit Fractions	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Equivalence of 1/2 and 2/4 ***Y2*** **NC Statement:** Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2. • This lesson invites children to explore the equivalence of 1 2 and 2 4. They investigate shapes that have been divided into 1 2 and 2 4 and discover their similarities. • The children also find and compare 1 2 and 2 4 of quantities. They use fraction notation to complete number sentences to accompany the representations. **Resources** Y1/2 White Rose Maths Step 12: Recognise the equivalence of a half and two-quarters	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Recognise three-quarters **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson teaches children how to find three-quarters of shapes and quantities. They learn that the denominator tells us that the whole is divided into four equal parts and the numerator focuses on three of them. **Resources** Y1/2 White Rose Maths Step 13: Recognise three-quarters	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Find three-quarters **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • The children find different ways to shade shapes to show the fraction. They also draw rings around groups of images to find three-quarters of quantities and complete number sentences that include the 1/4 notation. **Resources** Y1/2 White Rose Maths Step 14: Find three-quarters		

Count in Fractions **Y2 NC Statement:** Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • This lesson introduces children to counting in fractions. They apply their knowledge of halves, quarters and thirds to count fractions of objects, pictures and shapes. • The children also use number lines to count in fractions. They are introduced to different ways to record the fractions: 1/2, 2/2, 3/2 or 1/2, 1, 1 1/2. **Resources** Y1/2 White Rose Maths Step 15: Count in Fractions up to a whole	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Summer Term – 3 Weeks

Time

Year 1	Year 2
Pupils should be taught to: • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	Pupils should be taught to: • compare and sequence intervals of time • tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times • know the number of minutes in an hour and the number of hours in a day

Progressive Planning

Small Step	Planning Notes	Next Steps
<u>Days of the Week</u> **Y1 NC Statement:** Recognise and use language relating to dates, including days of the week, weeks, months and years. • This lesson supports language relating to dates by introducing children to the days of the week. They spot similarities and differences in the names and discover that each name ends with 'day'. The children count the number of days in a week and practise sequencing them. They apply this knowledge to investigate challenges, including finding 'yesterday' and 'tomorrow • This lesson further supports language relating to dates by investigating the months of the year. As the children are introduced to the names of the months, they are invited to	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

share any that have personal significance to them. The children count the number of months in a year and practise sequencing them. They are shown how a year can be divided into four seasons and discover which months belong to each one. **White Rose Maths Step 2: Days of the Week**		
Months of the Years **Y1 NC Statement:** Recognise and use language relating to dates, including days of the week, weeks, months and years. • This lesson introduces children to dates and calendars. They identify the parts of a date that show the day, month and year. Children discover how to use calendars to organise and retrieve information. • They apply their knowledge to investigate challenges, including finding the dates of events marked on a calendar. **White Rose Maths Step 3: Months of the Year**		

<u>Hours, minutes and seconds</u> **Y1 NC Statement:** Compare, describe and solve practical problems for time. • This lesson introduces hours and days by investigating the number of minutes in an hour. The children are shown a bar labelled with sixty minutes; below the bar, the time is presented in five-minute blocks. • The children show different intervals of time within an hour by placing coloured blocks or colouring the spaces. They plan activities to fill a lunch hour and use the coloured blocks to check their plans. The children apply this knowledge to solve further challenges. **Y2 White Rose Maths Step 7: Hours in a Day** **Y2 White Rose Maths Step 6: Minutes in an Hour** Y1 White Rose Maths Step 4: **Hours, Minutes and Seconds** **Y1/2 White Rose Maths Step 9:** Minutes in an hour **Y1/2 White Rose Maths Step /10: Hours in a day**	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Times to the hour **Y1 NC Statement:** Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. • This lesson introduces children to telling the time to the hour. They explore the concept of one hour and relate this period of time to familiar events. • The children investigate the role of the hour and minute hands when reading and showing hourly times on analogue clocks. • They use the term 'o'clock' to name the start of a new hour. The children apply their knowledge of time to the hour to solve challenges, including finding one hour later than a given o'clock time White Rose Maths Step 5: Tell the Time to the Hour	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Times to the half hour **Y1 NC Statement:** Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times • Children investigate the role of the hour and minute hands when reading and showing half-hourly times on analogue clocks. They use the term 'half past' during their investigations. • The children apply their knowledge to solve challenges, including finding the time half an hour later than a given o'clock time. **White Rose Maths Step 6: Tell the Time to the Half Hour**	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Quarter past</u> **Y2 NC Statement:** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock to show these times. • This lesson teaches children to tell the time to quarter past and quarter to the hour. The children compare the position of the hour and minute hands when reading and showing quarter past and quarter to times on analogue clocks. • They apply this knowledge to solve time challenges. This is the third in a series of six lessons supporting the year 2 national curriculum aim, 'Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times'. White Rose Maths Step 2: Quarter Past and Quarter To	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Tell time past the hour</u> **Y2 NC Statement:** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock to show these times.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

<u>Quarter to</u> **Y2 NC Statement:** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock to show these times. • This lesson teaches children to tell the time to quarter to the hour. The children investigate the role of the hour and minute hands when reading and showing quarter to times on analogue clocks. • They apply this knowledge to solve time challenges. This is the second in a series of six lessons supporting the year 2 national curriculum aim, 'Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times' **White Rose Maths Step 2: Quarter Past and Quarter To**	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
<u>Tell time to the hour</u> **Y2 NC Statement:** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock to show these times.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Telling time to 5 mins **Y2 NC Statement:** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • This lesson investigates telling the time to five minutes. The children compare the position of the hour and minute hands when reading and showing five-minute intervals past and to the hour on analogue clocks. • They apply this knowledge to solve time challenges. This is the last in a series of six lessons supporting the year 2 national curriculum aim, 'Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times'. White Rose Maths Step 3: Tell the Time Past the Hour	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Time problems **Y1 NC Statement:** Compare, describe and solve practical problems for time. **Y2 NC Statement:** Compare and sequence intervals of time. • Compare, sequence and describe when events take place, the pace of actions and the duration of activities. • Compare time in hours, minutes and seconds. **Resources** **White Rose Maths Step 4:** Hours, Minutes and Seconds	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Summer – 3 Weeks

Weight, volume, mass, capacity and temperature

Year 1	Year 2

Pupils should be taught to:
• compare, describe and solve practical problems for:
  • mass/weight [for example, heavy/light, heavier than, lighter than]
  • capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
  • time [for example, quicker, slower, earlier, later]
• measure and begin to record the following:
  • mass/weight
  • capacity and volume
	Pupils should be taught to:
	• 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 =

Progressive Planning

Small Step	Planning Notes	Next Steps
Introduce weight and mass **Y1 NC Statement:** Compare, describe and solve practical problems for mass/weight. • Children learn how to use balance scales to compare the mass of different objects. They discover that mass is not always related to size. • Children are introduced to mathematical which includes the terms heavier, lighter, heaviest and lightest. **Resources** **White Rose Maths Step 1:** Heavier and Lighter	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Measure mass **Y1 NC Statement:** Compare, describe and solve practical problems for mass/weight. Children learn to measure mass with non-standard units. • They learn to place an object on one side of a balance scale and add non-standard units to the other until the scales are balanced. • They understand equal mass. **Resources** **White Rose Maths Step 2:** Measure Mass	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Measure mass (g) **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales. Children to estimate and measure mass in grams (g). • find the mass of objects by using balance scales and gram masses. introduced to analogue scales with increments of two, five and ten grams. • mass of the object placed on the scales by checking the position of the arrow. • use their knowledge of the number system to deduce the value when the arrow points between numbers on the scales. • draw arrows on scales to show given masses. **Resources** **White Rose Maths Step 2:** Measure in Grams **Ready-to-Progress Criteria:** 2NPV–2 Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Measure mass (kg) **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales. Children to estimate and measure mass in kilograms (kg). • find the mass of objects by using balance scales and gram masses. introduced to analogue scales with increments of two, five and ten grams. • mass of the object placed on the scales by checking the position of the arrow. • use their knowledge of the number system to deduce the value when the arrow points between numbers on the scales. • draw arrows on scales to show given masses. **Resources** **White Rose Maths Step 3:** Measure in Kilograms **Ready-to-Progress Criteria:** 2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Compare mass **Y1 - NC Statement:** Compare, describe and solve practical problems for mass/weight. **Y2 - NC Statement:** Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales. Children learn to compare mass by showing: • Measure the mass of objects measured with non-standard units. • use the terms heavier and lighter to compare and describe mass. order objects according to their mass, using the terms heaviest and lightest. • Children to estimate and measure mass in grams (g). They find the mass of objects by using balance scales and gram masses. • Children are then introduced to analogue scales with increments of two, five and ten grams. They find the mass of	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

the object placed on the scales by checking the position of the arrow. • The children use their knowledge of the number system to deduce the value when the arrow points between numbers on the scales. They also draw arrows on scales to show given masses. **Resources** **Y1 - White Rose Maths Step 3:** Compare Mass **Y2 - White Rose Maths Step 2:** Measure in Grams **Y2 - Ready-to-Progress Criteria:** 2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.		
Measure capacity **Y1 NC Statement:** Compare, describe and solve practical problems for capacity and volume. Children learn that capacity describes how much a container could hold. • compare different containers and describe which has the greatest capacity and which has the smallest capacity. • use the terms full, nearly full, half full, nearly empty and empty to describe volume. • Children use the terms full, fill, most, fewest, greatest and smallest capacity to describe their discoveries. **Resources** **White Rose Maths Step 4:** Full and Empty **White Rose Maths Step 5:** Measure Capacity	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Millimetres **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure capacity (l/ml) to the nearest appropriate unit, using measuring vessels. Children learn to estimate and measure volume and capacity in millilitres (ml). They will: • use 5-millilitre and 10-millilitre spoonfuls to find the capacity of containers. • find volumes by reading scales of 5, 10 and 100 millilitres on measuring vessels. • deduce the value when the line is placed between numbers on the scales. • draw lines or shade measuring vessels to show given volumes. **Resources** **White Rose Maths Step 6:** Measure in Millilitres **Ready-to-Progress Criteria:** 2NPV–2 Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Litres **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure capacity (l/ml) to the nearest appropriate unit, using measuring vessels. Children learn to estimate and measure volume and capacity in litres (l). Children will: • use containers with one, two or five litres to find the capacity of others. • use containers with scales of one, two, five and ten litres. • deduce the value when scales are marked between numbers. • draw marks on containers to show given volumes. • sequence containers according to their volume or capacity and identify those that are a number of litres greater or smaller. **Resources** **White Rose Maths Step 7:** Measure in Litres	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Ready-to-Progress Criteria: 2NPV–2 Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.		

<u>Compare capacity</u>
Y1 - NC Statement: Compare, describe and solve practical problems for capacity and volume.
Y2 - NC Statement: Compare and order volume/capacity and record the results using >, < and =.
 	
• Children to compare capacity. Children are shown the capacity of containers measured with non-standard units. Use the terms greater and smaller to compare and describe capacity. Children to order containers according to their capacity, using the terms greatest and smallest.
• Comparing Volume and Capacity with Non-Standard Units, children will:
  • compare the capacity of different containers using the comparison symbols and the terms 'greater than', 'smaller than' and 'equal to'.
  • sequence containers from the greatest to the smallest capacity and from the smallest to the greatest.
  • Children find the capacity of containers by counting the number of non-standard units taken to fill them or the number of smaller units that the container can fill.
 	
<u>Resources</u>
Y1 - White Rose Maths Step 7: Compare Capacity
Y2 - White Rose Maths Step 5: Compare Volume and Capacity
	Mental Starter:
	
	Fluency Skills:
	
	Reasoning:	

Temperature **Y2 NC Statement:** Choose and use appropriate standard units to estimate and measure temperature (°C) to the nearest appropriate unit, using thermometers. Children consider when it is useful to measure the temperature. They will: • describe temperatures and sequence adjectives from the coldest to the hottest or hottest to the coldest. • Degrees Celsius (°C) is introduced as a standard unit to measure temperature. • use a thermometer with a simple scale of one to read temperatures. • find temperatures higher, lower and between given measurements. Children use thermometers with different scales to measure temperature in degrees Celsius (°C) counting in steps of two, five and ten to read and show measurements. **Resources** **White Rose Maths Step 9:** Temperature **Ready-to-Progress Criteria:** 2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Summer Term – 1 Week

Position and Direction

Year 1	Year 2
Pupils should be taught to: • describe position, direction and movement, including whole, half, quarter and three-quarter turns	Pupils should be taught to: • order and arrange combinations of mathematical objects in patterns and sequences • 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 anti-clockwise)

Progressive Planning

Small Step	Planning Notes	Next Steps
Describing Turns **Y1 NC Statement:** Describe position, direction and movement, including whole, half, quarter and three-quarter turns. • This practical lesson teaches children to describe turns. Children investigate quarter and half turns moving in a clockwise direction. They do not need to name this direction but begin to associate it with the movement of hands on a clock. Children use 2D shapes to identify turns and use these to complete patterns and shape pictures. Children also create their own designs and describe how 2D shapes are turned to create them • Children investigate three-quarter and whole turns. They are introduced to clockwise and anticlockwise directions. They do not need to name these but begin to associate them with the movement of hands on a clock. Children use 3D shapes to identify turns and use these to complete patterns and models. Children also create their own designs and describe how 3D shapes are turned to create them.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Resources **White Rose Maths Step 1: Describe Turns**		
Describe position **Y1 NC Statement:** Describe position, direction and movement, including whole, half, quarter and three-quarter turns. • This lesson teaches children how to use the words 'left', 'right', 'above' and 'below' to describe position. They compare the position of 2D shapes in arrangements and find different ways to describe where they are placed. • This practical lesson teaches children how to use the words 'on top of', 'between', 'in front of' and 'behind' to describe position. They compare the position of 3D shapes in arrangements and find different ways to describe where they are placed. Children practise giving and following directions to place 3D shapes in different positions. **Resources** **White Rose Maths Step 1:** Describe Position - Left and Right **White Rose Maths Step 4:** Describe Position - Above and Below	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Describing movement **Y1 NC Statement:** Describe position, direction and movement, including whole, half, quarter and three-quarter turns. **Y2 NC Statement:** 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 anti-clockwise). • This lesson teaches children how to use the words 'left', 'right', 'forwards' and 'backwards' to describe movement. The theme of the lesson is a fun day out. • Children follow and give directions to places to visit shown on a grid. They explore ways to move from starting points to different destinations and investigate further possibilities. The lesson pack includes mastery cards to	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

provide further opportunities for reasoning and problem-solving. **Resources** **White Rose Maths Step 3:** Describe Position - Forwards and Backwards		
Describing movement and turns **Y2 NC Statement:** 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 anti-clockwise). • This colourful and engaging lesson helps children to follow instructions for position, direction and movement. Children use and respond to new key vocabulary, such as 'clockwise' and 'anticlockwise'. They move on to read and follow instructions to make a paper quilt. • This fun lesson supports children to recognise movement in a straight line. Children are introduced to right angles. They follow and give instructions for moving along a route in straight lines **Resources** **White Rose Maths Step:** Describing movement. Describing turns. Describing movements and turns.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	

Making patterns with shapes **Y2 NC Statement:** Order and arrange combinations of mathematical objects in patterns and sequences. • This visually-engaging lesson shows children how to make and describe shape patterns and sequences. Children explore real-life patterns in their environment, before being challenged to colour a pattern according to a given rule. • This lesson develops children's skills to make and describe pattern with 2D shapes. They make predictions about where the next shape will appear in a sequence and draw their extended shape sequences, following a rule. • This lesson extends children's ability to make and describe pattern with 3D shapes. They make predictions about where the next shape will appear in a sequence; cutting and sticking their extended shape sequences, following a rule. **Resources** **White Rose Maths Step:** Describing movement. Making patterns with shapes.	**Mental Starter:** **Fluency Skills:** **Reasoning:**	
Year 1 – Ordinal Numbers	**Mental Starter:** **Fluency Skills:** **Reasoning:**	