Maths Curriculum Map

Year 1 (Autumn)

Key to NCETM colours		
Subitising		Subitising is being able to recognise numbers of things without counting them.
Counting, ordinality and cardinality		https://www.ncetm.org.uk/classroom-resources/ey-cardinality-and-counting/
Composition		https://www.ncetm.org.uk/classroom-resources/ey-composition/
Comparison		https://www.ncetm.org.uk/classroom-resources/ey-comparison/
Number facts and arithmetic		https://www.ncetm.org.uk/classroom-resources/lv-number-facts/

White Rose Maths	Block 1 Week 1-5 16.9.24 – 18.10.24			Block 2 Week 6 – 11 (21.10.24-6.12.24) Week 9 is consolidation week (w/c 18/11/24)							Block 3 Week 12 – 9.12.24	Week 13 16.12.24
	Place Value (within 10)			**Addition and Subtraction (within 10)**							**Shape**	Consolidation
Mastering Number (NCETM)			Week 0 – Learning to use the rekenreks	Week 1 - Recap the composition of 5	Week 2 - Focus on the composition of 6, 7, 8 and 9 as '5 and a bit'	Week 3 - Focus on the composition of 6, 7, 8 and 9 as '5 and a bit'	Week 4 - Compare sets of objects by matching	Week 5 - Recap the order of numbers to 10 using the 'staircase' pattern	Week 6 - Focus on numbers that can be made with 'doubles'	Week 7 - Focus on odd and even numbers	Week 8 - Focus on the composition of 6	Week 9 - Focus on the composition of 8	Week 10 - Focus on the composition of 10
KIRFS	I can recall number bonds to 10 including 9, 8, 7 etc					I can add 2 to a number.						
Vocabulary	Sort, group, number track, digit, pattern, one more, one less, matched, fewer, greater than (>), less than (<), equal to (=), most, least, fewest, greatest, number line, order, tens (10s), ones (1s), more, smallest, number bond, fact family, compare, 100 square, number square, place value grid.			Group, plus, part-whole model, whole, part, number sentence altogether, in total, add, count on, missing part, how many are left?, in total, taken away, subtract, subtraction, addition, count backwards, How many more?, How many fewer?, difference.							3D, cube, cuboid, sphere, pyramid, cylinder, cone, 2D, circle, triangle, square, rectangle, face, repeated.	

Declarative knowledge	• number bonds [2, 3, 4, 5, 6, 7, 8, 9 and 10] • Count, read and write numbers to 10 in numerals and words. • Given a 10 number, identify one more or one less.	• Given a 10 number, identify one more or one less. • Count, read and write numbers to 10 in numerals and words. • Identify the names for the symbols + - and =		
Procedural knowledge	• add and subtract one single digit with another single digit • 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.	Represent and use number bonds and related subtraction facts within 10. Read, write and interpret mathematical statements involving addition subtraction and equals (=) signs. Add and subtract one digit numbers to 10, including zero. Add three single digits, spotting pairs which make 10	Recognise and name common regular and irregular 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles). Recognise and name common 3-D shapes, including: (e.g. cuboid (including cubes), pyramids and spheres).	

Conditional knowledge (examples where a pupil will be expected to reason and apply efficient use of declarative and procedural knowledge)			
	Spot the mistake: 5,6,8,9 What is wrong with this sequence of numbers? **True or False?** I start at 2 and count in twos. I will say 9 **What comes next?** 10+1 = 11, 11+1= 12, 12+1 = 13 **Do, then explain** Look at the objects (in a collection). Are there more of one type than another? How can you find out?	**Problem questions** Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. **Convince me** In my head I have two odd numbers with a difference of 2. What could they be? Convince me **Missing numbers** Fill in the missing numbers (using a range of practical resources to support) 12 + = 19 20 - = 3 **Fact families** Which four number sentences link these numbers? 12, 15, 3 **What else do you know?** If you know; $12 - 9 = 3$ what other facts do you know? **Missing symbols** Write the missing symbols (+ - =) in these number sentences: 17 3 20 18 20 2 **Working backwards** Through practical games on number tracks and lines ask questions such as "where have you landed?" and "what numbers would you need to throw to land on other given numbers?" **What do you notice?** $11 - 1 = 10$ $11 - 10 = 1$ Can you make up some other number sentences like this involving 3 different numbers? **Continue the pattern** $10 + 8 = 18$ $11 + 7 = 18$ Can you make up a similar pattern for the number 17? How would this pattern look if it included subtraction? **Missing numbers** 9 + = 10 10 - = 9 What number goes in the missing box? **Making an estimate** Pick (from a selection of number sentences) the ones where the answer is 8 or 9. **Is it true that?** Is it true that 3+4 = 4 + 3?	**What's the same, what's different?** Find a rectangle and a triangle in this set of shapes. Tell me one thing that's the same about them. Tell me one thing that is different about them. **Visualising** Put some shapes in a bag. Find me a shape that has more than three edges. **True or false?** All 2-D shapes have at least 4 sides **Other possibilities** Can you find shapes that can go with the set with this label? *"Have straight sides"*	

Learning End Points (White Rose)	Sort objects. Count objects. Represent objects. Count, read and write forwards from any number 0 to 10. Count, read and writing backwards from any number 0 to 10. Count one more./Count one less. One to one correspondence to start to compare groups. Compare groups using language such as equal, more/greater, less/fewer. Introduce = , > and < symbols. Compare numbers. Order groups of objects. Order numbers. Ordinal numbers (1st, 2nd, 3rd ….). The number line.	Part whole model. Addition symbol.. Fact families — Addition facts. Find number bonds for numbers within 10. Systematic methods for number bonds within 10. Number bonds to 10. Compare number bonds. Addition: Adding together. Addition: Adding more. Finding a part. Subtraction: Taking away, how many left? Crossing out. Subtraction: Taking away, how many left? Introducing the subtraction symbol. Subtraction: Finding a part, breaking apart. Fact families — The 8 facts. Subtraction: Counting back. Subtraction: Finding the difference. Comparing addition and subtraction statements a + b > c. Comparing addition and subtraction statements a + b > c + d.	Recognise and name 3D shapes. Sort 3D shapes. Recognise and name 2D shapes. Sort 2D shapes. Patterns with 3D and 2D shapes.
NCETM	**The Big Ideas** The position a digit is placed in a number determines its value. The language used to name numbers does not always expose the place value, for example the word 'twelve' does not make it transparent that the value of this number is ten and two. It is important that children develop secure understanding of the value of each digit. Place value is based on unitising: treating a group of things as one 'unit'. In mathematics, units can be any size, for example units of 1, 2, 5 and 10 are used in money. In place value units of 1, 10 and 100 are used.	**The Big Ideas** Relating numbers to 5 and 10 helps develop knowledge of the number bonds within 20. For example, given 8 + 7, thinking of 7 as 2 + 5 and adding the 2 to 8 to make 10 and then the 5 to total 15. Thinking of part whole relationships is helpful in linking addition and subtraction. For example, where the whole is 6, and 4 and 2 are parts. This means that 4 and 2 together form the whole, which is 6 and 6 subtract 4 leaves the 2 and 6 subtract 2 leaves the 4	**The Big Ideas** It is important for children to be familiar with a range of 2-D and 3-D shapes and not just recognise them in specific orientations, e.g. thinking that this is a triangle but this or this are not . It is preferable to introduce 3-D shapes before 2-D shapes, since 2-D shapes only exist in the real world as faces of 3-D shapes. An emphasis should be placed upon identifying and describing the properties of shapes. It is important that pupils develop the correct mathematical language to do so. The development of precise language to describe position and movement is important.

nrich nrich.maths.org	Biscuit decorations Shut the box Same length trains Grouping goodies	Domino sorting One big triangle Ladybirds in the garden Number lines Pairs of numbers Weighted numbers Butterfly flowers	Shaping it What's happening? Jig shapes Overlaps
Other links	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023

Maths Curriculum Map – Year 1 (Spring)

	Block 1 Week 1-3 6.1.25-25.1.24	Block 2 Week 4 – 6 27.1.25-14.2.25	Block 3 Week 7 – 8 24.2.25-7.3.25 Week 9 Consolidation week 10.3.25	Block 4 and 5 Week 10-11 17.3.25-28.3.25
White Rose Maths	**Place Value (Within 20)**	**Addition and Subtraction**	**Place Value (Within 50, m of 2, 5, 10)**	**Length and height Mass and volume**

NCETM Mastering Number	**Week 11 -** Focus on ordinality Compare number tracks and number lines	**Week 12 -** Focus on the composition of 7	**Week 13 -** Focus on the composition of 9	**Week 14 -** Recap odd and even numbers by looking at their 'shape'	**Week 15 -** Explore the concept of part-part-whole, seeing that numbers can be partitioned into parts	**Week 16 -** Continue to explore how numbers can be partitioned	**Week 17 -** Continue to explore systematic partitioning of numbers within 10	**Week 18 -** Practise applying knowledge of '1 more than' and '1 less than' a number in relation to odd/ even numbers	**Week 19 -** Explore the effect of adding or subtracting 2 to odd/ even numbers	**Week 20 -** Apply knowledge of composition of even numbers to subtract from 6, 8 and 10, for both the partitioning and reduction structures of subtraction	**Week 21 -** Apply knowledge of composition of odd numbers to subtract from 5, 7 and 9, for both the partitioning and reduction structures of subtraction

KIRFS	I can compare numbers to 10 using > < and =						I can recite the number names in order to 50 and beyond.				

Vocabulary	Sort, group, number track, digit, pattern, one more, one less, matched, fewer, greater than (>), less than (<), equal to (=), most, least, fewest, greatest, number line, order, tens (10s), ones (1s), more, smallest, number bond, fact family, compare, 100 square, number square, place value grid.	Group, plus, part-whole model, whole, part, number sentence, altogether, in total, add, count on, missing part, how many are left?, in total, taken away, subtract, subtraction, addition, count backwards, How many more?, How many fewer?, difference.	Sort, group, number track, digit, pattern, one more, one less, matched, fewer, greater than (>), less than (<), equal to (=), most, least, fewest, greatest, number line, order, tens (10s), ones (1s), more, smallest, number bond, fact family, compare, 100 square, number square, place value grid.	long, longer, longest short, shorter, shortest, tall, taller, tallest, length height, compare measure distance ruler centimetre. Measure, estimate.	heavier, heaviest lighter, lightest, full, empty, capacity, balance scales, weight, weigh, balanced, measure, estimate.

Declarative knowledge	• count to and across 100, forwards and backwards • Count, read and write numbers to 20 in numerals and words.	• Count in multiples of twos, fives and tens. • Begin to say what three times 5 is by counting in 5s • Count, read and write numbers to 50 in numerals • Count to 50 forwards and backwards, beginning with 0 or 1, or from any number. • Given any number to 50, identify one more or one less.	

Procedural knowledge	• add by putting the largest number first • represent and use number bonds and related subtraction facts within 20 • Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations	• Represent and use number bonds and related subtraction facts within 20. • Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • Add and subtract one- digit and two- digit	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.	Measurement: Length and Height Measure and begin to record lengths and heights. Compare, describe and solve practical problems for: lengths and heights (for example, long/short,	Measurement: Mass and Volume Measure and begin to record mass, capacity and volume.

including the number line, and use the language of: equal to, more than, less than (fewer), most, least	numbers to 20, including zero • Solve calculations that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems su 7= ☐ − 9.			longer/shorter, tall/short, double/half).	

Conditional knowledge (examples where a pupil will be expected to reason and apply efficient use of declarative and procedural knowledge)	**Spot the mistake:** 5,6,8,9 What is wrong with this sequence of numbers? **True or False?** I start at 2 and count in twos. I will say 9 **What comes next?** 10+1 = 11, 11+1= 12, 12+1 = 13 **Do, then explain** Look at the objects (in a collection). Are there more of one type than another? How can you find out?	**Problem questions** Solve one step problem questions that involve addition and subtraction, using concrete objects and pictorial representations. **Convince me** In my head I have two odd numbers with a difference of 2. What could they be? Convince me **Missing numbers** Fill in the missing numbers (using a range of practical resources to support) 12 + = 19 20 - = 3 **Fact families** Which four number sentences link these numbers? 12, 15, 3 **What else do you know?** If you know; 12 – 9 = 3 what other facts do you know? **Missing symbols** Write the missing symbols (+ - =) in these number sentences: 17 3 20 18 20 2 **Working backwards** Through practical games on number tracks and lines ask questions such as "where have you landed?" and	**Spot the mistake:** 5,6,8,9 What is wrong with this sequence of numbers? **True or False?** I start at 2 and count in twos. I will say 9 **What comes next?** 10+1 = 11, 11+1= 12, 12+1 = 13 **Do, then explain** Look at the objects (in a collection). Are there more of one type than another? How can you find out?	**Top tips** How do you know that this (object) is heavier / longer / taller than this one? Explain how you know **Application** (Can be practical) Which two pieces of string are the same length as this book? **Possibilities** Ella has two silver coins. How much money might she have? **Explain thinking** Ask pupils to reason and make statements about to the order of daily routines in school e.g. daily timetable e.g. we go to PE **after** we go to lunch. Is this true or false? What do we do before break time? etc.	**Problem questions** Compare, describe and solve practical problems for mass [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]. **Top tips** How do you know that this (object) is heavier / longer / taller than this one? Explain how you know **Application** (Can be practical) Which two pieces of string are the same length as this book? **Possibilities** Ella has two silver coins. How much money might she have? **Explain thinking** Ask pupils to reason and make statements about to the order of daily routines in school e.g. daily timetable e.g. we go to PE **after** we

		"what numbers would you need to throw to land on other given numbers?"			go to lunch. Is this true or false? What do we do before break time?
		What do you notice? 11 – 1 = 10 11 – 10 = 1 Can you make up some other number sentences like this involving 3 different numbers? **Continue the pattern** 10 + 8 = 18 11 + 7 = 18 Can you make up a similar pattern for the number 17? How would this pattern look if it included subtraction? **Missing numbers** 9 + = 10 10 - = 9 What number goes in the missing box? **Making an estimate** Pick (from a selection of number sentences) the ones where the answer is 8 or 9. **Is it true that?** Is it true that 3+4 = 4 + 3? **Conceptual understanding** Understand the concept of equality for the = sign [2 = 1 + 1 / 2 + 3 = 4 + 1]			
Learning End Points (White Rose)	Count forwards and backwards and write numbers to 20 in numerals and words. Numbers from 11 to 20. Tens and ones. Count one more and one less. Compare groups of objects. Compare numbers. Order groups of objects Order numbers.	Subtraction – Crossing 10 (1). Subtraction – Crossing 10 (2). Related Facts. Add by counting on. Find and make number bonds. Add by making 10. Subtraction – Not crossing 10. Compare Number Sentences.	Numbers to 50. Tens and ones. Represent numbers to 50. One more one less. Compare objects within 50. Compare numbers within 50. Order numbers within 50. Count in 2s. Count in 5s.	Compare lengths and heights. Measure length (1). Measure length (2).	Introduce weight and mass. Measure mass. Compare mass. Introduce capacity. Measure capacity. Compare capacity.

	The Big Ideas	The Big Ideas	The Big Ideas	The Big Ideas	The Big Ideas
NCETM	The position a digit is placed in a number determines its value.

The language used to name numbers does not always expose the place value, for example the word 'twelve' does not make it transparent that the value of this number is ten and two. It is important that children develop secure understanding of the value of each digit.

Place value is based on unitising: treating a group of things as one 'unit'. In mathematics, units can be any size, for example units of 1, 2, 5 and 10 are used in money. In place value units of 1, 10 and 100 are used

. | Relating numbers to 5 and 10 helps develop knowledge of the number bonds within 20. For example, given 8 + 7, thinking of 7 as 2 + 5 and adding the 2 to 8 to make 10 and then the 5 to total 15.

Thinking of part whole relationships is helpful in linking addition and subtraction. For example, where the whole is 6, and 4 and 2 are parts. This means that 4 and 2 together form the whole, which is 6 and 6 subtract 4 leaves the 2 and 6 subtract 2 leaves the 4. | The position a digit is placed in a number determines its value.
The language used to name numbers does not always expose the place value, for example the word 'twelve' does not make it transparent that the value of this number is ten and two. It is important that children develop secure understanding of the value of each digit.

Place value is based on unitising: treating a group of things as one 'unit'. In mathematics, units can be any size, for example units of 1, 2, 5 and 10 are used in money. In place value units of 1, 10 and 100 are used. | Measurement is about comparison, for example measuring to find out which rope is the longest.

Measurement is about equivalence, for example how many cubes are equivalent to the length of the table or the mass of the teddy?

Standard units can initially be introduced through using a unit that is greater than the things being compared, for example comparing the capacity of a cup and a carton by filling each and pouring into matching bottles to compare the two.

Measuring is a practical activity and the activities below should be conducted in practical contexts, using real materials. | Measurement is about comparison, for example measuring to find out which rope is the longest.

Measurement is about equivalence, for example how many cubes are equivalent to the length of the table or the mass of the teddy?

Standard units can initially be introduced through using a unit that is greater than the things being compared, for example comparing the capacity of a cup and a carton by filling each and pouring into matching bottles to compare the two.

Measuring is a practical activity and the activities below should be conducted in practical contexts, using real materials. |
| nrich | Biscuit decorations

Shut the box

Same length trains

Grouping goodies | 2, 4, 6, 8

How do you see it?

What could it be? | | Wallpaper

Sizing them up

The animals' sports day

Different sizes | |
| Other links | Teaching for Mastery Year 1

I See Reasoning KS1

Calculation Policy 2023 | Teaching for Mastery Year 1

I See Reasoning KS1

Calculation Policy 2023 | | Teaching for Mastery Year 1

I See Reasoning KS1

Calculation Policy 2023 | |

	Vocabulary List 2023	Vocabulary List 2023		Vocabulary List 2023

Maths Curriculum Map – Year 1 (Summer)

White Rose Maths	Block 1 Week 1-3 14.4.25-2.5.25			Block 2 Week 4 – 5 (5.5.25-16.5.25) Week 6 – consolidation 19.5.25			Block 3 Week 7 2.6.25	Block 4 Week 8 – 9 9.6.25-20.6.25		Block 5 Week 10 23.6.25	Block 6 Week 11 – 12 30.6.25-11.7.25	Wk 13 14.7.25
	Multiplication (m 2, 5, 10)			Fractions			Position and Direction	Place Value (within 100)		Money	Time	Consolidation
Mastering Number NCET	Week 22 - Focus on the composition of 11 to 15 as '10 and a bit'	Week 23 - Focus on the position of the numbers 11 to 15 on the number line	Week 24 - Read, write and interpret expressions and equations with the + and = symbols to represent combining two sets	Week 25 - Read, write and interpret expressions and equations with the + and = symbols to represent an increase in a set	Week 26 - Practise recalling the composition of the numbers 6, 7, 8 and 9	Week 27 - Focus on the composition of 11 to 19 as '10 and a bit	Week 28 - Read, write and interpret expressions and equations with the - and = symbols to represent the partitioning of a 'whole'	Week 29 - Read, write and interpret expressions and equations with the - and = symbols to represent the partitioning of a 'whole'	Week 30 - Practise applying knowledge of composition when adding or subtracting	Week 31 - Practise applying knowledge of composition when adding or subtracting	Weeks 32-34 Consolidation	
KIRFS	Count in 2s to 20. Count in 10s to 100. Count in 5s to 50.							I can recite the number names in order to 100 and beyond. I can count, read and write numbers to 100 in numerals.				
Vocabulary	Equal groups, array, row, column, double, twice, share.			Half, halves, quarter.			Turn, half turn, quarter turn, three-quarter turn, whole turn, position, left right forwards backwards, above, below, top, middle, bottom, up, down, in between.	Sort, group, number track, digit, pattern, one more, one less, matched, fewer, greater than (>), less than (<), equal to (=), most, least, fewest, greatest, number line, order, tens (10s), ones (1s), more, smallest, number bond, fact family, compare, 100 square, number square, place value grid.		Pound, pence, coin, note, pence (p).	Before, after, yesterday, today tomorrow, day, week, slower, faster, month, year. calendar date, minute hand, hour hand, o'clock, half past, second, minute, hour.	

Declarative knowledge	• Know double numbers to 10 eg double 8 is 16 • know half of even numbers up to 10 eg half of 8 is 4 • Count in multiples of twos, fives and tens.			• Count, read and write numbers to 100 in numerals. • Given a number, identify one more and one less. • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Recall the names of coins – 1p, 2p, 5p, 10p, 20p 50p £1 £2 • Recall the names of notes - £5, £10, £20, £50 • Name the symbols > < =		
Procedural knowledge	·Solve one step calculations involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	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. ·	Describe position, direction and movement, including whole, half, quarter and three-quarter turns	·Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least.	Recognise and know the value of different denominations of coins and notes.	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. Measure and begin to record time (hours, minutes, seconds).	

Conditional knowledge	**Problem questions** Solve one step calculations involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. **Making links** If one teddy has two apples, how many apples will three teddies have? Here are 10 lego people If 2 people fit into the train carriage, how many carriages do we need? Practical If we put two pencils in each pencil pot how many pencils will we need? **Spot the mistake** Use a puppet to count but make some deliberate mistakes. e.g. 2 4 5 6 10 9 8 6 See if the pupils can spot the deliberate mistake and correct the puppet	**Problem questions** ·Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) ·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]. **What do you notice?** Choose a number of counters. Place them onto 2 plates so that there is the same number on each half. When can you do this and when can't you? What do you notice? **True or false?** Sharing 8 apples between 4 children means each child has 1 apple.	**What's the same, what's different?** Find a rectangle and a triangle in this set of shapes. Tell me one thing that's the same about them. Tell me one thing that is different about them. **Visualising** Put some shapes in a bag. Find me a shape that has more than three edges. **True or false?** All 2-D shapes have at least 4 sides **Other possibilities** Can you find shapes that can go with the set with this label? "Have straight sides"	**Spot the mistake:** 5,6,8,9 What is wrong with this sequence of numbers? **True or False?** I start at 2 and count in twos. I will say 9 **What comes next?** 10+1 = 11, 11+1= 12, 12+1 = 13 **Do, then explain** Look at the objects (in a collection). Are there more of one type than another? How can you find out?	**Top tips** How do you know that this (object) is heavier / longer / taller than this one? Explain how you know **Application** (Can be practical) Which two pieces of string are the same length as this book? **Possibilities** Ella has two silver coins. How much money might she have? **Explain thinking** Ask pupils to reason and make statements about to the order of daily routines in school e.g. daily timetable e.g. we go to PE **after** we go to lunch. Is this true or false? What do we do before break time? etc.	**Problem questions** ·Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]. **Top tips** How do you know that this (object) is heavier / longer / taller than this one? Explain how you know? **Application** (Can be practical) Which two pieces of string are the same length as this book? **Possibilities** Ella has two silver coins. How much money might she have? **Explain thinking** Ask pupils to reason and make statements about to the order of daily routines in school e.g. daily timetable e.g. we go to PE **after** we go to lunch. Is this true or false? What do we do before break time? etc.	
Learning End Points (White Rose)	·Count in 10s. ·Make equal groups. ·Add equal groups. ·Make arrays. ·Make doubles. ·Make equal groups – ·grouping. ·Make equal groups – ·sharing.	·Halving shapes or objects. ·Halving a quantity. ·Find a quarter of a shape or object. ·Find a quarter of a quantity.	·Describe turns. ·Describe Position (1). ·Describe Position (2).	·Counting to 100. ·Partitioning numbers. ·Comparing numbers (1). ·Comparing numbers (2). ·Ordering numbers. ·One more, one less	·Recognising coins. ·Recognising notes. ·Counting in coins.	·Before and after. ·Dates. ·Time to the hour. ·Time to the half hour. ·Writing time. ·Comparing time.	

	The Big Ideas	The Big Ideas	The Big Ideas	The Big Ideas	The Big Ideas
NCETM	Counting in steps of equal sizes is based on the big idea of 'unitising'; treating a group of, say, five objects as one unit of five. Working with arrays helps pupils to become aware of the commutative property of multiplication, that 2 × 5 is equivalent to 5 × 2.	Fractions express a relationship between a whole and equal parts of the whole. Ensure children express this relationship when talking about fractions. For example, 'If the circle (where the circle is divided into four equal parts with one part shaded) is the whole, one part is one quarter of the whole circle.' Halving involves partitioning an object, shape or quantity into two equal parts. The two parts need to be equivalent in, for example, area, mass or quantity	It is important for children to be familiar with a range of 2-D and 3-D shapes and not just recognise them in specific orientations, e.g. thinking that this is a triangle but this or this are not . It is preferable to introduce 3-D shapes before 2-D shapes, since 2-D shapes only exist in the real world as faces of 3-D shapes. An emphasis should be placed upon identifying and describing the properties of shapes. It is important that pupils develop the correct mathematical language to do so. The development of precise language to describe position and movement is important.	The position a digit is placed in a number determines its value. The language used to name numbers does not always expose the place value, for example the word 'twelve' does not make it transparent that the value of this number is ten and two. It is important that children develop secure understanding of the value of each digit. Place value is based on unitising: treating a group of things as one 'unit'. In mathematics, units can be any size, for example units of 1, 2, 5 and 10 are used in money. In place value units of 1, 10 and 100 are used	Measurement is about comparison, for example measuring to find out which rope is the longest. Measurement is about equivalence, for example how many cubes are equivalent to the length of the table or the mass of the teddy? Standard units can initially be introduced through using a unit that is greater than the things being compared, for example comparing the capacity of a cup and a carton by filling each and pouring into matching bottles to compare the two. Measuring is a practical activity and the activities below should be conducted in practical contexts, using real materials.
nrich	Share Bears Lots of biscuits Doubling fives	Halving Happy halving	Tangram tangle Olympic rings 2 rings Turning	Making sticks Robot monster Dotty six All change	The games' medals Times of the day Snap
Other links	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	Teaching for Mastery Year 1 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023