Maths Curriculum Map

Year 2 (Autumn)

White Rose Maths	Block 1 Week 1-4 16.9.24 – 11.10.24				Block 2 Week 5 – 9 14.10.24 – 22.11.24						Block 3 Week 10 – 12 25.11.24-13.12.24			Week 13 Consolidation 16.12.24
	Place Value				**Addition and Subtraction**						**Shape**			
NCETM Mastering Number			Week 0 – Using the rekenreks	Week 1 Focus on the composition of 6, 7, 8 and 9 as '5 and a bit'	Week 2 Focus on the composition of 6, 7, 8 and 9 as '5 and a bit'	Week 3 Focus on odd / even parts when even numbers are composed of 2 parts, including when 2 parts are equal (doubles)	Week 4 Focus on the composition of 6	Week 5 Focus on the composition of 8	Week 6 Focus on the composition of 10	Week 7 Focus on the composition of odd numbers including being made of 2s and 1 more, or 1 odd part and 1 even part	Week 8 Focus on the composition of 7	Week 9 Focus on the composition of 9	Week 10 Focus on the composition of the numbers 11 to 19 as '10 and a bit'
KIRFS	I can recite the number names in order to 100. I can identify the value of any digit in a two digit number.				I know number bonds to 20.									
Vocabulary	Digit, tens, ones, place value grid, partition, more, fewer, fewest, greatest, smallest, partition.				fact family, number sentence, number bond, 10 more, 10 less, total, tens ones, subtract, difference, bar model, represent, how many are left?, in total, taken away, subtract, count backwards, How many more?, How many fewer?, difference.						Quadrilateral, polygon, pentagon, hexagon, vertex, vertices, line of symmetry, symmetrical, octagon, edge, prism.			
Declarative knowledge	• number bonds up to 12 (10+2=12) and pairs with a total of 20 (9+9=18) • add and subtract numbers mentally, including: a two-digit number up to 20 and ones which does not include bridging 10. • Read and write numbers to at least 100 in numerals and in words. • Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward. • Recognise the place value of each digit in a two digit number (tens, ones)				• add and subtract 10 and small multiples of 10 from any given number • use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100						•			

Procedural knowledge	•Identify, represent and estimate numbers using different representations including the number line. •Compare and order numbers from 0 up to 100; use <, > and = signs.	•partitioning a number in different ways to support addition and subtraction [taken from Place Value] •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 ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. •Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	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 regular and irregular 2-D and 3-D shapes and everyday objects.
Conditional knowledge (examples where a pupil will be expected to reason and apply efficient use of declarative and procedural knowledge)	**Problem questions** Use place value and number facts to solve problems. **Spot the mistake:** 45,40,35,25 What is wrong with this sequence of numbers? **True or False?** I start at 3 and count in threes. I will say 13? **What comes next?** 41+5=46, 46+5=51, 51+5=56 **Do, then explain** 37 13 73 33 3 If you wrote these numbers in order starting with the smallest, which number would be third? Explain how you ordered the numbers. **Do, then explain** Show the value of the digit 2 in these numbers? 32 27 92 Explain how you know. **Make up an example** Create numbers where the units digit is one less than the tens digit. What is the largest/smallest number?	**Problem questions** •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. •Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. **Convince me** What digits could go in the boxes? Try to find all of the possible answers. How do you know you have got them all? Convince me 7 - 2 = 46 **Fact families** Which four number sentences link these numbers? 100, 67, 33 **What else do you know?** If you know; 87 = 100 – 13 what other facts do you know? **Missing symbols** Write the missing symbols (+ - =) in these number sentences: 80 20 100 100 70 30 87 13 100 **True or false?** Are these number sentences true or false? Give your reasons. 73 + 40 = 113 98 – 18 = 70 46 + 77 = 123 92 – 67 = 35 **Hard and easy questions** Which questions are easy / hard? Explain why you think the hard questions are hard? 23 + 10 = 93 + 10 =	**What's the same, what's different?** Pick up and look at these 3-D shapes. Do they all have straight edges and flat faces? What is the same and what is different about these shapes? **Visualising** In your head picture a rectangle that is twice as long as it is wide. What could its measurements be? **Always, sometimes, never** Is it always, sometimes or nerver true that when you fold a square in half you get a rectangle? **Other possibilities** Can you find shapes that can go with the set with this label? "Have straight sides and all sides are the same length"	

		54 + 9 = 54 + 1 = Other possibilities + + = 14 What single digit numbers could go in the boxes? How many different ways can you do this? Continue the pattern 90 = 100 − 10 80 = 100 − 20 Can you make up a similar pattern starting with the numbers 74, 26 and 100? Missing numbers What number goes in the missing box? 91 + = 100 100 - = 89		
Learning End Points (White Rose)	Count objects to 100 and read and write numbers in numerals and words. Represent numbers to 100. Tens and ones with a part whole model. Tens and ones using addition. Use a place value chart. Compare objects. Compare numbers. Order objects and numbers. Count in 2s, 5s and 10s.	Fact families –Addition and subtraction bonds to 20. Check calculations. Compare number sentences. Related facts. Bonds to 100 (tens). Add and subtract 1s. more and 10 less Add and subtract 10s. Add a 2-digit and 1-digit number –crossing ten. Subtract a 1-digit number from a 2-digit number –crossing 10. Add two 2-digit numbers –not crossing ten –add ones and add tens. Add two 2-digit numbers –crossing ten –add ones and add tens. Subtract a 2-digit number from a 2-digit number –not crossing ten. Subtract a 2-digit number from a 2-digit number –crossing ten – subtract ones and tens. Bonds to 100 (tens and ones). Add three 1-digit numbers.	Recognise 2D and 3D shapes. Count sides on 2D shapes. Count vertices on 2D shapes. Draw 2D shapes. Lines of symmetry. Sort 2D shapes. Make patterns with 2D shapes. Count faces on 3D shapes. Count edges on 3D shapes. Count vertices on 3D shapes. Sort 3D shapes. Make patterns with 3D shapes.	
NCETM NATIONAL CENTRE FOR EXCELLENCE IN THE TEACHING OF MATHEMATICS	**The Big Ideas** The position (place) of a digit in a number determines its value. Hence the term place value	**The Big Ideas** Understanding that addition of two or more numbers can be done in any order is important to support children's fluency. When adding two numbers it can be more efficient to put the larger number first. For example, given 3 + 8 it is easier to calculate 8 + 3. When adding three or more numbers it is helpful to look for pairs of numbers that are easy to add. For example, given 5 + 8 + 2 it is easier to add 8 + 2 first than to begin with 5 + 8. Understanding the importance of the equals sign meaning 'equivalent to' (i.e. that 6 + 4 = 10, 10 = 6 + 4 and 5 + 5 = 6 + 4 are all valid uses of the equals sign) is crucial for later work in algebra. Empty box	**The Big Ideas** It is not uncommon for pupils to say that this is a square and this is not , or that something like this is a triangle. It is important for pupils to know what the properties are that make up certain shapes, and for them not to just learn the names of typical proto looking shapes. It is helpful to think about non examples of shapes. For example,	

		problems can support the development of this key idea. Correct use of the equals sign should be reinforced at all times. Altering where the equals sign is placed develops fluency and flexibility.	why this is not a triangle: Recognising pattern and generalising structures and relationships are key elements for laying the foundations for later work in algebra.	
nrich nrich.maths.org	Five steps to 50 Buzzy Bee	Strike it out 4 Dom Number round up	Inside triangles Square it Poly plug rectangles Let's investigate triangles Complete the square Exploded squares Colouring triangles Chain of triangles Shapely lines Data shapes Matching triangles	
Other links	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	

Maths Curriculum Map – Year 2 (Spring)

	Block 1 Week 1-2	Block 2 Week 3 - 7	Block 3 Week 8 - 9	Block 4 Week 10 - 11
White Rose Maths	**Money**	**Multiplication and Division**	**Length and Height**	**Mass and Capacity**

Mastering Number

Week 11 Compare numbers within 20	Week 12 Focus on doubling numbers to 10, using the '5 and a bit' structure to double 6, 7, 8 and 9	Week 13 Focus on the composition of 20	Week 14 Apply knowledge of facts within 10 to addition and subtraction within 20 WITHIN the 10s boundary	Week 15 Use knowledge of doubles to calculate near doubles	Week 16 Develop understanding of near doubles	Week 17 Add 3 numbers using known facts	Week 18 Add 2 numbers by 'bridging through 10'	Week 19 Consolidate understanding of adding 2 numbers by 'bridging through 10'	Week 20 Subtract by 'bridging through 10'	Week 21 Consolidate understanding of subtracting by 'bridging through 10'

KIRFs

I know the multiplication and division facts for the 2 times table.

I know the multiplication and division facts for the 5 times table.

I know the multiplication and division facts for the 10 times table.

Vocabulary

pound (£), pence (p), coin, note, change.

equal groups, multiplication (×), times-table, times, divide (÷), division, share, group, odd, even.

long, longer, longest short, shorter, shortest, tall, taller, tallest, length height, compare measure distance ruler centimetre. Measure, estimate.

Mass, heavier than, lighter than, gram (g), hundreds, kilogram (kg), volume, millilitre (ml), litre (l), temperature, degrees Celsius (°C), thermometer.

Declarative knowledge

- count in steps of 2 and 5 starting from zero; count in steps of 10 from any number forwards and backwards
- Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.
- begin to count in 3s
- Recall the names of coins – 1p, 2p, 5p, 10p, 20p 50p £1 £2
- Recall the names of notes - £5, £10, £20, £50
- Name the symbol for £ and p

- Name the symbols for m/cm, kg/g, °C, ml,l
- count in steps of 2 and 5 starting from zero; count in steps of 10 from any number forwards and backwards

Procedural knowledge

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.

Apply multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.
•Calculate mathematical statements for multiplication and division

•Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

•Calculate mathematical statements for multiplication and

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

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

	within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. •Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	measuring vessels. •Compare and order lengths, mass, volume/capacity and record the results using >, < and =.	vessels. Compare and order lengths, mass, volume/capacity and record the results using >, < and =.

Conditional knowledge
(examples where a pupil will be expected to reason and apply efficient use of declarative and procedural knowledge)

Column 1	Column 2	Column 3	Column 4
Problem questions Solve simple calculations in a practical context involving addition and subtraction of money of the same unit, including giving change. **Top tips** Put these measurements in order starting with the smallest. 75 grammes 85 grammes 100 grammes Explain your thinking **Position the symbols** Place the correct symbol between the measurements > or < 36cm 63cm 130ml 103ml Explain your thinking **Application** (Practical) Draw two lines whose lengths differ by 4cm. **Possibilities** How many different ways can you make 63p using only 2 and 1p coins? **Undoing** The film finishes two hours after it starts. It finishes at 4.30. What time did it start? Draw the clock at the start and the finish of the film.	**Problem questions** •Solve calculations involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. **Making links** Write the multiplication number sentences to describe this array What do you notice? Write the division sentences. **Prove It** Which four number sentences link these numbers? 3, 5, 15? Prove it. **Missing numbers** 10 = 5 x What number could be written in the box? **Making links** I have 30p in my pocket in 5p coins. How many coins do I have? **True or false?** When you count up in tens starting at 5 there will always be 5 units. **Use the inverse** Use the inverse to check if the following calculations are correct:	**Problem questions** Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. **Making links** Write the multiplication number sentences to describe this array What do you notice? Write the division sentences. **Prove It** Which four number sentences link these numbers? 3, 5, 15? Prove it. **Missing numbers** 10 = 5 x What number could be written in the box? **Making links** I have 30p in my pocket in 5p coins. How many coins do I have? **True or false?** When you count up in tens starting at 5 there will always be 5 units. **Use the inverse** Use the inverse to check if the following calculations are correct: $12 \div 3 = 4$ $3 \times 5 = 14$	**Top tips** Put these measurements in order starting with the smallest. 75 grammes 85 grammes 100 grammes Explain your thinking **Position the symbols** Place the correct symbol between the measurements > or < 36cm 63cm 130ml 103ml Explain your thinking **Application** (Practical) Draw two lines whose lengths differ by 4cm. **Possibilities** How many different ways can you make 63p using only 20p, 10p and 1p coins? **Undoing** The film finishes two hours after it starts. It finishes at 4.30. What time did it start? Draw the clock at the start and the finish of the film. **Explain thinking** The time is 3:15pm. Kate says that in two hours she will be at her football game which starts at 4:15. Is Kate right? Explain why. **Working backwards** Draw hands on the clock faces to show when break started and when it finished 15 minutes later at 10:35. **The answer is** …. 3 hours What is the question? **What do you notice?** What do you notice? 1 hour = 60 minutes

	Explain thinking The time is 3:15pm. Kate says that in two hours she will be at her football game which starts at 4:15. Is Kate right? Explain why. **Working backwards** Draw hands on the clock faces to show when break started and when it finished 15 minutes later at 10:35. **The answer is ….** 3 hours What is the question? **What do you notice?** What do you notice? 1 hour = 60 minutes ½ hour = 30 minutes ¼ hour = 15 minutes Write down some more time facts like these	12 ÷ 3 = 4 3 x 5 = 14		½ hour = 30 minutes ¼ hour = 15 minutes Write down some more time facts like these	
Learning End Points (White Rose)	Count money –pence. Count money –pounds (notes and coins). Count money –notes and coins. Select money. Make the same amount. Compare money. Find the total. Find the difference. Find change. Two-step problems.	**Multiplication:** Recognise equal groups. Make equal groups. Add equal groups. Multiplication sentences using the x symbol. Multiplication sentences from pictures. Use arrays. 2 times-table 5 times-table. 10 times-table.	**Division:** Make equal groups –sharing. Make equal groups –grouping. Divide by 2.Odd and even numbers. Divide by 5. Divide by 10	Measure length (cm). Measure length (m). Compare lengths. Order lengths. Four operations with lengths.	Compare mass. Measure mass in grams. Measure mass in kilograms. Compare capacity. Millilitres. Litres. Temperature.
NCETM NATIONAL CENTRE for EXCELLENCE in the TEACHING of MATHEMATICS	**The Big Ideas** We need standard units of measure in order to compare things more accurately and consistently.	**The Big Ideas** It is important that pupils both commit multiplication facts to memory and also develop an understanding of conceptual relationships. This will aid them in using known facts to work out unknown facts and in solving problems.	**The Big Ideas** It is important that pupils both commit multiplication facts to memory and also develop an understanding of conceptual relationships. This will aid them in using known facts to work out unknown facts and in solving problems. Pupils should look for and recognise patterns within tables and	**The Big Ideas** We need standard units of measure in order to compare things more accurately and consistently.	

		Pupils should look for and recognise patterns within tables and connections between them (e.g. 5× is half of 10×). Pupils should recognise multiplication and division as inverse operations and use this knowledge to solve problems. They should also recognise division as both grouping and sharing. The recognition of pattern in multiplication helps pupils commit facts to memory, for example doubling twice is the same as multiplying by four, or halving a multiple of ten gives you the related multiple of five.	connections between them (e.g. 5× is half of 10×). Pupils should recognise multiplication and division as inverse operations and use this knowledge to solve problems. They should also recognise division as both grouping and sharing. The recognition of pattern in multiplication helps pupils commit facts to memory, for example doubling twice is the same as multiplying by four, or halving a multiple of ten gives you the related multiple of five.		
nrich nrich.maths.org	Money bags Five coins The puzzling sweet shop	I'm eight Which symbol? Ordering cards	Double or halve? Clapping times How odd More numbers in the ring A ring a ring of numbers Even and odd Two numbers under the microscope Odd times even	Little man	Discuss and choose Compare the cups Order, order!
Other links	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023

Maths Curriculum Map – Year 2 (Summer)

One of the weeks in June/July is reserved for transition to SJS. This week will slot into the overview below. There are 13 weeks in the summer term. Only 12 are planned for.

White Rose Maths	Block 1 Week 1 – 2 14.4.25-25.4.25		Block 2 Week 3 - 5 28.4.25-16.5.25			Block 2 Week 6 – 7 19.5.25-6.6.25		Block 3 Week 8 – 9 9.6.25-20.6.25		Block 4 Week 10 – 12 23.6.25-11.7.25	
	Statistics		**Fractions**			**Position and Direction**		**Problem Solving and Efficient Methods**		**Time**	
NCETM **Mastering Number**	**Week 22** Connect the order of multiples of 10 to the order of numbers within 10	**Week 23** Connect missing addend problems to subtraction problems	**Week 24** Subtract across the 10 boundary, by subtracting FROM 10 rather than bridging THROUGH 10	**Week 25** Practise subtracting within 20, selecting from a range of strategies	**Week 26** Focus on the composition of 20	**Week 27** Use knowledge of composition to reason about expressions and equations and use the equals and inequality symbols in expressions and equations	**Week 28** Consolidate doubles and near doubles	**Week 29** Consolidate understanding and develop fluency in transforming addition calculations involving two adjacent odd or two adjacent even numbers into a double	**Week 30** Develop fluency in bonds within 10 and apply this to calculations within and across the 10-boundary using a range of optional activities	**Week 31** A range of 6 sessions providing optional activities to provide practice and opportunities for assessment	
KIRFs	I know doubles and halves of numbers to 20. I know near doubles to 10.						I can tell the time to the nearest hour. I can tell the time to the nearest half hour. I can tell the time to the nearest quarter hour.				
Vocabulary	Whole, equal, equal parts, ½, fraction, denominator, fraction bar, numerator, ¼, ¾, third 1/3, unit fraction, non-unit fraction, equivalent.		o'clock, half past, quarter past, quarter to, minute hand, hour hand, duration.			Pictogram, key, bar chart, scale, table, row, column, vertical axis, horizontal axis.		Clockwise, anticlockwise, forwards, backwards, left, right, middle, turn, half turn, quarter turn, three-quarter turn.		Whole, equal, equal parts, ½, fraction, denominator, fraction bar, numerator, ¼, ¾, third 1/3, unit fraction, non-unit fraction, equivalent.	
Declarative knowledge	• double and halve numbers to 20 • begin to double multiples of 5, to 100 • Know that one quarter is one of 4 equal parts • Know that one half is one of 2 equal parts					• Know that when the minute hand points at 12 we say o'clock • Know that when the minute hand points at 3 we say quarter past • Know that when the minute hand points at 6 we say half past • Know that when the minute hand points at 9 we say quarter to • Begin to double two-digit numbers less than 50 with ones digits of 1, 2, 3, 4 or 5					
Procedural knowledge	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.		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, 12 of 6 = 3 and recognise the equivalence of 24 and 12.			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).		Show that multiplication of two numbers can be done in any way (commutative) and division of one number can by another cannot relate division to grouping [how many groups of 5 in 15?]		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.	

			Order and arrange combinations of mathematical objects in patterns and sequences.		

Conditional knowledge
(examples where a pupil will be expected to reason and apply efficient use of declarative and procedural knowledge)

Problem questions

•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 totaling and comparing categorical data.

True or false?
(Looking at a simple pictogram) "More people travel to
work in a car than on a bicycle".
Is this true or false?

Convince me.
Make up you own 'true/false' statement about the pictogram

What's the same, what's different?
Pupils identify similarities and differences between different representations and explain them to
each other

Create questions
Pupils ask (and answer) questions about different statistical representations using key vocabulary relevant to the objectives.

What do you notice?
¼ of 4 = 1
¼ of 8 = 2
¼ of 12 = 3
Continue the pattern What do you notice?

True or false?
Half of 20cm = 5cm ¾ of 12cm = 9cm

Ordering
Put these fractions in the correct order, starting with the smallest. ½ ¼ 1/3

Spot the mistake… and correct it
7, 7 ½ , 8, 9, 10 8 ½, 8, 7, 6 ½,

What comes next?
5 ½, 6 ½ , 7 ½ , …., ….
9 ½, 9, 8 ½, ……, …..

Odd one out. Which is the odd one out in this trio: ½ 2/4 ¼ Why?

What do you notice?
Find ½ of 8, Find 2/4 of 8. What do you notice

What's the same, what's different? Pick up and look at these 3-D shapes. Do they all have straight edges and flat faces?
What is the same and what is different about these shapes?

Visualising
In your head picture a rectangle that is twice as long as it is wide. What could its measurements be?

Always, sometimes, never
Is it always, sometimes or never true that when you fold a square in half you get a rectangle.

Other possibilities
Can you find shapes that can go with the set with this label?
"Have straight sides and all sides are the same length"

Spot the mistake:
45,40,35,25 What is wrong with this sequence of numbers?

True or False? I start at 3 and count in threes. I will say 13?

What comes next?
41+5=46, 46+5=51, 51+5=56

Do, then explain
37 13 73 33 3
If you wrote these numbers in order starting with the smallest, which number would be third?
Explain how you ordered the numbers.

Do, then explain
Show the value of the digit 2 in these numbers? 32 27 92
Explain how you know.

Make up an example
Create numbers where the units digit is one less than the tens digit. What is the largest/smallest number?

Problem solving
Compare and sequence intervals of time and apply this to problem questions.

Top tips
Put these measurements in order starting with the smallest. 75 grammes 85 grammes
100 grammes Explain your thinking

Position the symbols
Place the correct symbol between the measurements > or <

36cm   63cm
130ml   103ml

Explain your thinking

Application (Practical) Draw two lines whose lengths differ by 4cm.

Possibilities How many different ways can you make 63p using only 20p, 10p and 1p coins?

Undoing The film finishes two hours after it starts. It finishes at 4.30. What time did it start? Draw the clock at the start and the finish of the film.

Explain thinking
The time is 3:15pm.
Kate says that in two hours she will be at her football game which starts at 4:15. Is Kate right? Explain why.

Working backwards
Draw hands on the clock faces to

					show when break started and when it finished 15 minutes later at 10:35. **The answer is** …. 3 hours What is the question? **What do you notice?** What do you notice? 1 hour = 60 minutes ½ hour = 30 minutes ¼ hour = 15 minutes Write down some more time facts like these
Learning End Points (White Rose)	Make tally charts. Draw pictograms (1-1). Interpret pictograms (1-1). Draw pictograms (2, 5 and 10). Interpret pictograms (2, 5 and 10). Block diagrams.	Make equal parts. Recognise half. Find half. Recognise quarter. Find a quarter. Recognise a third. Find a third. Unit fractions. Non unit fractions. Equivalence of ½ and ²/₄. Find three quarters. Count in fractions.	Describing movement. Describing turns. Describing movement and turns. Making patterns with shapes.		O'clock and half past. Quarter past and quarter to. Telling time to 5 minutes. Minutes in an hour, hours in a day. Find durations of time. Compare durations of time.
NCETM NATIONAL CENTRE FOR EXCELLENCE IN THE TEACHING OF MATHEMATICS	**The Big Ideas** Data need to be collected with a question or purpose in mind. Tally charts are used to collect data over t (cars passing the school, birds on the bird t	**The Big Ideas** Fractions involve a relationship between a whole and parts of a whole. Ensure children express this relationship when talking about fractions. For example, 'If the bag of 12 sweets is the whole, then 4 sweets are one third of the whole.' Partitioning or 'fair share' problems when each share is less than one gives rise to fractions. Measuring where the unit is longer than the item being measured gives rise to fractions.	**The Big Ideas** It is not uncommon for pupils to say that this is a square and this is not , or that something like this is not a triangle . It is important for pupils to know what the properties are that make up certain shapes, and for them not to just learn the names of typical proto looking shapes. It is helpful to think about non examples of shapes. For example, why this is not a triangle:	**The Big Ideas** solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of a teacher Find half of and double a number or quantity: 16 children went to the park at the weekend. Half that number went swimming. How many children went swimming? I think of a number and halve it. I end up with 9, what was my original number?	**The Big Ideas** We need standard units of measure in order to compare things more accurately and consistently.

			Recognising pattern and generalising structures and relationships are key elements for laying the foundations for later work in algebra.		
nrich	Ladybird count Carroll diagrams What shape and colour? Plants If the world were a village Sticky data Beads and bags Button up Sort the street Mixed up socks The hair colour game		Three ball lined Hundred square Break it up! School fair necklaces Domino patterns Repeating patterns Caterpillars A city of towers Triple cubes Poly plug pattern	Round the two dice Largest even Light the lights I like… In the playground	Stop the clock What is the time? Matching time
Other links	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023	NCETM Teaching for Mastery Year 2 I See Reasoning KS1 Calculation Policy 2023 Vocabulary List 2023