Highgate Primary Maths Curriculum 2024

Number
Measurement
Geometry
Statistics
Algebra
Ratio and Proportion

Year 2

Autumn 1: The Animal Kingdom

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Warm-Up Week** **Counting forwards and backwards to/from 100**					
2	**Number** **Place value to 100**					
	• recognise the place value of each digit in a two-digit number • identify, represent and estimate numbers using different representations WALT count, read and write numbers to 20 WALT count to 100 by making 10s WALT recognise 10s and 1s WALT use a place value chart WALT partition numbers into 10s and 1s	• Numbers to 20 • Counting objects to 100 by making 10s • Recognise 10s and 1s • Use a place value chart • Partition numbers to 100	Number track, ten frame, counters, cubes, Rekenrek, base-10, part-whole model **Introduce** Place value chart *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting,* *> as 'greater than',* *< as 'less than', partition, place holder, place value*	**Odd one out** Which is the odd one out - 44 54 55? Explain your answer, then find a different odd one out **NRICH 100 Square Jigsaw** *(a lot of prep!)* **NRICH That Number Square!**	Mastering Number
3	• recognise the place value of each digit in a two-digit number • identify, represent and estimate numbers using different representations, including the number line • read and write numbers to at least 100 in words WALT read and write numbers in words WALT partition numbers in different ways WALT write numbers in an expanded form WALT find and mark 10s numbers on a number line	• Write numbers to 100 in words • Flexibly partition numbers to 100 • Write numbers to 100 in expanded form • 10s on the number line to 100 • 10s and 1s on the number line to 100	Part-whole model, ten frame, counters, base-10, Rekenrek, partly-empty number line *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting,* *> as 'greater than',* *< as 'less than', partition, place holder, place value*	**Make up an example** Create numbers where the units digit is one less than the tens digit. What is the largest/smallest number? **NRICH 6 Beads** **NRICH Two-digit Targets** **NRICH Snail One Hundred**	Mastering Number

	WALT find and mark any number on a number line				
4	• identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • use place value and number facts to solve problems WALT estimate where a number is on a number line WALT compare groups of objects WALT compare numbers WAP using the < and > signs to compare numbers WALT put groups of objects and numbers in order	• Estimate numbers on a number line • Compare objects • Compare numbers • Order objects and numbers	Partly-empty and printed number lines, ten frame, base-10, counters *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting, > as 'greater than', < as 'less than', partition, place holder, place value, estimate*	**Convince me** What is the largest difference you can find between two 2-digit numbers that use the same digits? The smallest? Convince me…	Mastering Number
5	• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward • compare and order numbers from 0 up to 100; use <, > and = signs WAP counting in 2s and 10s WAP counting in 5s WALT count in 10s from any number WALT count in 3s WAP counting in 3s	• Count in 2s, 5s and 10s • Count in 3s	Ten frame, counters, Rekenrek, base-10, number track, printed number lines *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting, > as 'greater than', < as 'less than', partition, place holder, place value, estimate*	**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. **NRICH 5 Steps to 50** **NRICH Domino Sequences** **NRICH Domino Number Patterns** **NRICH Light the Lights**	Mastering Number
6	**Number** **Calculation: Addition and subtraction (1)**				
	• solve problems with addition and subtraction • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 WAP number bonds to 10 WALT use fact families to help find addition and subtraction bonds WAP addition and subtraction bonds to 20 WALT use known facts to find related ones WALT use related facts to find bonds to 100	• Bonds to 10 • Fact families – addition and subtraction bonds within 20 • Related facts • Bonds to 100 (10s)	Ten frame, cubes, counters, Rekenrek, base-10, 100 square *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting, > as 'greater than',*	**Continue the pattern** 90 = 100 – 10 80 = 100 – 20 Can you make up a similar pattern starting with the numbers 74, 26 and 100? **What's the same, what's different** (fact families)	Mastering Number

			< as 'less than', partition, place holder, place value, estimate		
7	• solve problems with addition and subtraction • add a 2-digit number and ones • add three 1-digit numbers WALT add and subtract ones WALT add by using bonds to 10 WALT add three 1-digit numbers WALT add to make the next 10s numbers WALT add by bridging through 10	• Add and subtract 1s • Add by making 10 • Add three 1-digit number • Add to the next 10 • Add across a 10	Ten frame, counters, Rekenrek, part-whole model, partly-empty and printed number lines, base-10 *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting,* *> as 'greater than',* *< as 'less than', partition, place holder, place value, estimate, commutative*	**Other possibilities** ___ + ___ + ____ = 14 What single digit numbers could go in the boxes? How many different ways can you do this? **NRICH Strike It Out** **NRICH What Was In the Box**	Mastering Number
8	• solve problems with addition and subtraction • subtract ones from a 2-digit number • add and subtract a 2-digit number and tens WALT subtract by bridging through 10 WALT subtract from a 10s number WALT subtract a 1-digit from a 2-digit number WALT find ten more or ten less than a 2-digit number WALT add and subtract 10s numbers	• Subtract across 10 • Subtract from a 10 • Subtract a 1-digit number from a 2-digit number (across a 10) • 10 more, 10 less • Add and subtract 10s	Base-10, ten-frame, counters, Rekenrek, printed number line, part-whole model, 100 square, number track *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting,* *> as 'greater than',* *< as 'less than', partition, place holder, place value, estimate, commutative*	**Another and another** 63 – 8 = 55 Bridging through 60, which number would we partition? Can you find some other calculations where this is also true? **What else do you know?** If you know this: 87 = 95 – 8 what other facts do you know?	Mastering Number

Autumn 2: The Great Fire of London

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Number** **Calculation: Addition and subtraction (2)**					
	• solve problems with addition and subtraction • add and subtract two 2-digit numbers WALT add 2-digit numbers, not crossing a 10s number WALT add 2-digit numbers, crossing a 10 WALT subtract 2-digit numbers, not crossing a 10s number WALT subtract 2-digit numbers, crossing a 10		• Add two 2-digit numbers (not across a 10) • Add two 2-digit numbers (across a 10) • Subtract two 2-digit numbers (not across a 10) • Subtract two 2-digit numbers (across a 10)	Base-10, bar model, part-whole model *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting, > as 'greater than', < as 'less than', partition, place holder, place value, estimate, commutative*	**Convince me** What digits could go in the boxes? 7__ - 2__ = 46 Try to find all of the possible answers. How do you know you have got them all? **NRICH Dicey Addition** **NRICH Arranging Additions and Sorting Subtractions**	Mastering Number
2	• solve problems with addition and subtraction • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems WAP adding and subtracting 2-digit numbers WALT use < and > to compare number sentences WALT understand commutativity WALT use the inverse to solve missing number problems		• Mixed addition and subtraction • Compare number sentences • Missing number problems	Base-10, part-whole model **Introduce** Empty number line *Digit, numeral, twenty-one, twenty-two (and so on up to), ninety-nine, one hundred, place value, step counting, > as 'greater than', < as 'less than', partition, place holder, place value, estimate, commutative*	**Making an estimate** Which of these number sentences have the answer that is between 50 and 60? 74 - 13 55 + 17 87 – 34 **Explain it** Is addition commutative? Subtraction? How do you know? **What's the same, what's different** between different magic squares **NRICH Doing and Undoing** **NRICH Number Round Up** **NRICH Jumping Squares** **NRICH Birthday Cakes**	Mastering Number
3	**Geometry**					

	Properties of shape				
	• *identify and describe the properties of 2-D shapes, including the number of sides* • *identify and describe the properties of 3-D shapes* WALT recognise, find and name common 2-D shapes WALT recognise, find and name common 3-D shapes WALT count sides on 2-D shapes WALT count vertices on 2-D shapes WALT make and draw different 2-D shapes	• Recognise 2-D and 3-D shapes • Count sides on 2-D shapes • Count vertices on 2-D shapes • Draw 2-D shapes	Shapes on geoboards and dotty paper *Vertices, edges, Faces* Not statutory, but desirable: *quadrilateral, polygon, prism, cone, vertical, horizontal*	**Always, sometimes, never** Is it always, sometimes or never true that when you fold a square in half you get a rectangle? **NRICH Let's Investigate Triangles** (online or adapt for geoboards) **NRICH Complete the Square** **NRICH Shapely Lines** **NRICH Chain of Changes**	Mastering Number
4	• *identify and describe the properties of 2-D shapes, including line symmetry in a vertical line* • *compare and sort common 2-D shapes and everyday objects* WALT understand lines of symmetry WALT identify lines of symmetry in 2-D shapes WALT use lines of symmetry to complete shapes WALT sort 2-D shapes according to their properties	• Lines of symmetry on shapes • Use lines of symmetry to complete 2-D shapes • Sort 2-D shapes	Venn diagrams *Vertices, edges, Faces, symmetry* Not statutory, but desirable: *quadrilateral, polygon, prism, cone, vertical, horizontal*	**NRICH Colouring Triangles** **NRICH Triangle or No Triangle?** **NRICH Matching Triangles** **NRICH Repeating Patterns** **NRICH Circles, Circles**	Mastering Number
5	• 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 3-D shapes and everyday objects WALT identify and count the faces on 3-D shapes WALT identify and count the vertices on 3-D shapes WALT identify and count the edges on 3-D shapes WALT sort 3-D shapes according to their properties WALT make repeating patterns with 2- and 3-D shapes	• Count faces on 3-D shapes • Count vertices on 3-D shapes • Count edges on 3-D shapes • Sort 3-D shapes • Make patterns with 2- and 3-D shapes	Venn diagrams *Vertices, edges, faces, symmetry* Not statutory, but desirable: *quadrilateral, polygon, prism, cone, vertical, horizontal*	 **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? **NRICH Skeleton Shapes** **NRICH Shadow Play** **NRICH Triangle or No Triangle?** Adapt for 3-D shapes (e.g. which statements could you change and this would still be a [cube]?) **NRICH Cubes Cut into Four Pieces**	Mastering Number

6 and 7	**Warm-Down Weeks** **Consolidation of previous learning**				Fact families Number facts: bonds to 10 / 20 and matching – facts

Spring 1: On the Move

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Measurement** **Money**					
	• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change WALT recognise coins and notes WALT count pence WALT count money WALT select money to make an amount WALT make an amount in different ways	• Count money - pence • Count money - pounds – notes and coins • Count money - pounds and pence • Choose notes and coins • Make the same amount	Coins and notes, bar model, part-whole model, base-10 *Price, cost, amount, change*	**Possibilities** How many different ways can you make 63p using only 20p, 10p and 1p coins? **The answer is…** 55p; what's the question? **NRICH Five Coins**	Mastering Number
2	• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change WALT compare amounts of money WALT add amounts of money WALT find the difference between amounts of money WALT calculate change WALT solve two-step money problems	• Compare amounts of money • Calculate with money • Make a pound • Find change • Two-step problems	Coins and notes, bar model, empty numberline, column layout *Price, cost, amount, change*	**Working backwards** I bought a pencil for 40p and a rubber for 25p. I have £1.35 left. How much money did I have to start with? **Making links** I have 30p in my pocket in 5p coins. How many coins do I have? **NRICH The Puzzling Sweet Shop** **NRICH Fruity Pairs**	Mastering Number
3	**Number** **Calculation: Multiplication and division (1)**					
	• calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (x) and equals (=) signs • solve problems involving multiplication, using materials, repeated addition, mental methods, and multiplication facts, including problems in contexts.	• Recognise equal groups • Make equal groups • Add equal groups	Cubes, coins, base-10, Numicon *multiple(s), dividend, division, quotient, calculate, multiplication, division,*	**True or False** All numbers can be divided into equal groups. Explain your answer. **Spot the Mistake** 2 x 4 = 2 + 2 + 2 + 2 5 x 3 = 5 + 5 + 5 10 x 5 = 5 + 5 + 5 + 5 + 5	Mastering Number

	WALT tell if a group is equal or unequal WALT make equal groups WALT add equal groups WALT add equal groups using a numberline WALT write multiplication equations	• Introduce the multiplication symbol	*dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**NRICH Lots of Lollies**	
4	• calculate mathematical statements for multiplication [.] and write them using the × and = signs WALT turn pictures into multiplication equations WALT make arrays WALT show equations as arrays WALT reason about arrays WALT double numbers	• Multiplication sentences from pictures • Use arrays • Make equal groups – grouping • Make equal groups – sharing	Counters, arrays, ten frames, Numicon, cubes **Introduce** Circles for grouping *multiple(s), dividend, division, quotient, calculate, multiplication, division, dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**Find all the Possibilities** How many different arrays can you make with 12 counters? 20 counters? Which number of counters under 30 has the greatest number of different arrays? **NRICH Doing and Undoing** **NRICH Magic Plant** **NRICH The Amazing Splitting Plant**	Mastering Number
5	• recall and use multiplication facts for the 2 and 5 multiplication tables • calculate mathematical statements for multiplication [.] and write them using the × and = signs • show that multiplication of two numbers can be done in any order (commutative) • solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. WAL the two times table WALT show the two times table on a numberline WAL the five times table WALT show the five times table on a numberline WALT multiplication obeys the commutative law	• Two times table • Divide by 2 • Doubling and halving • Odd and even numbers	Number tracks, coins, Numicon, hands, printed or empty numberlines, bar model *multiple(s), dividend, division, quotient, calculate, multiplication, division, dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**NRICH Double or Halve?** **NRICH Pairs of Legs**	Mastering Number
6	• recall and use multiplication facts for the 10 multiplication table • calculate mathematical statements for multiplication [.] and write them using the × and = signs	• The 10 times-table • Divide by 10 • Five times table • Divide by 5	Base-10 *multiple(s), dividend, division, quotient, calculate, multiplication, division,*	**Making Links / Prove It** Use a numberline to show that 5 x 4 = 4 x 5 **NRICH Number Detective (**ext. Which clues are not needed to find the answer?) **Missing Number** 10 = 5 x ___ What number could be written in the box?	Mastering Number

	• solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. WAL the ten times table WALT show the ten times table on a numberline	• The 5 and 10 times-tables	*dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**True or false?** When you count up in tens starting at 5 there will always be 5 units. **NRICH Clapping Times** **NRICH Tables Teaser**	

Spring 2: The Circus

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
	Number **Calculation: Multiplication and division (1)**					
1	• recall and use multiplication facts for the 2 and 5 multiplication tables • calculate mathematical statements for multiplication [.] and write them using the × and = signs • show that multiplication of two numbers can be done in any order (commutative) • solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. WAL the two times table WALT show the two times table on a numberline WALT multiplication obeys the commutative law		• Two times table • Divide by 2 • Doubling and halving	Number tracks, coins, Numicon, hands, printed or empty numberlines, bar model, , base 10 *multiple(s), dividend, division, quotient, calculate, multiplication, division, dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**NRICH Double or Halve?** **NRICH Pairs of Legs**	Mastering Number
2	• recall and use multiplication facts for the 10 multiplication table • calculate mathematical statements for multiplication [.] and write them using the × and = signs • solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. WAL the ten times table WALT show the ten times table on a numberline		• Odd and even numbers • The 10 times-table • Divide by 10	Number tracks, coins, Numicon, hands, printed or empty numberlines, bar model, , base 10 *multiple(s), dividend, division, quotient, calculate, multiplication, division, dividend, array, commutative, inverse* *Not statutory but desirable:*	**True or false?** When you count up in tens starting at 5 there will always be 5 units.	Mastering Number

			multiplicand, multiplier, product		
3	• recall and use multiplication facts for the 10 multiplication table • calculate mathematical statements for multiplication [.] and write them using the × and = signs • solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. • WAL the five times table • WALT divide by 5 • WAL the 5 and 10 times tables	• Five times table • Divide by 5 • The 5 and 10 times-tables	Number tracks, coins, Numicon, hands, printed or empty numberlines, bar model, base 10 *multiple(s), dividend, division, quotient, calculate, multiplication, division, dividend, array, commutative, inverse* *Not statutory but desirable: multiplicand, multiplier, product*	**Making Links / Prove It** Use a numberline to show that 5 x 4 = 4 x 5 **Missing Number** 10 = 5 x ___ What number could be written in the box? **NRICH Number Detective** (ext. Which clues are not needed to find the answer?) **NRICH Tables Teaser** **NRICH Clapping Times**	Mastering Number
4	**Measurement** **Length and height (1)**				
	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm using rulers • compare and order lengths and record the results using >, < and = WAP using the language of length and measure using non-standard units WALT use a ruler to measure in standard units WALT compare lengths and put them in order of size WALT calculate with length and height	• Measure in cm • Measure in m • Compare lengths and heights • Order lengths and heights • Four operations with lengths and heights	Cubes, ruler, Cuisenaire rods, bar model *Height, width, metre, centimeter, millimetre*	**Application (practical)** Draw two lines whose lengths differ by 4cm. **Top tips** Put these measurements in order starting with the smallest. 3 m 100 cm 10 cm 1 m Explain your thinking **NRICH Little Man**	Mastering Number
5	**Measurement** **Mass, capacity and temperature (1)**				
	• choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels	• Compare mass • Measure mass in grams • Measure mass in kilograms • Four operations with mass	Cubes, scales (on weighing scales, measuring jugs or cylinders, thermometers)	**Top tips** Put these measurements in order starting with the smallest. 750 grams ½ kilogram 1 kilogram Explain your thinking	Mastering Number

	• compare and order mass, volume/capacity and record the results using >, < and = WALT measure mass using standard and non-standard units WALT measure mass by reading scales WALT measure capacity and volume using standard and non-standard units WALT calculate with mass and volume	• Compare volume and capacity	*Grams, kilograms, litre, millilitre*	**NRICH Order, Order!**	
6	• 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 = WALT measure in millilitres WALT measure in litres WALT use the four operations with volume and capacity WALT read a thermometer	• Measure in millilitres • Measure in litres • Four operations with volume and capacity • Temperature	Cubes, scales (on weighing scales, measuring jugs or cylinders, rulers, metre sticks, thermometers) *litre, millilitre*	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.	Mastering Number

Summer 1: Growing Up

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Number** **Fractions**					
	• recognise, find, name and write fractions ¼ and ½ of a length, shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 WALT split a whole into equal parts WALT recognise one half of a shape or group of objects WALT find half of a group or a number WALT recognise one quarter of a shape or group of objects WALT find a quarter of a group or a number		• Introduction to parts and whole • Equal and unequal parts • Recognise a half • Find a half • Recognise a quarter	Blank grid, 10-frame, cubes, counters, counting objects, bar model *Third, thirds, sharing, grouping, two quarters, equivalent,* *Not statutory but desired – one and a quarter etc, half as much, twice as much, numerator, denominator, fraction bar/ vinculum*	**Odd one out** ½ of 8, ¼ of 12, ¼ of 16 **Always, sometimes, never** A half is larger than a quarter **True or false?** Half of 20cm = 5cm Half of 5cm = 10cm **What do you notice?** Find ½ of 8. Find 2/4 of 8	Mastering Number
2	• recognise, find, name and write fraction 1/3 of a length, shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 WALT recognise one third of a shape or group of objects WALT find a third of a group or a number WALT identify unit fractions WALT use the numerator to write non-unit fractions WAL about the relationship between unit and non-unit fractions		• Find a quarter • Recognise a third • Find a third • Find the whole	Cubes, counting objects, bar model, blank grid *Third, thirds, sharing, grouping, two quarters, equivalent,* *Not statutory but desired – one and a quarter etc, half as much, twice as much, numerator, denominator, fraction bar/ vinculum*	**What do you notice?** ¼ of 4 = 1 ¼ of 8 = 2 ¼ of 12 = 3 Continue the pattern What do you notice?	Mastering Number
3	• recognise, find, name and write fraction ¾ of a length, shape, set of objects or quantity • recognise the equivalence of 2/4 and ½ WALT understand equivalence WAL the equivalence of one half and two quarters		• Unit fractions • Non-unit fractions • Recognise three quarters • Find three quarters	Counters, Cuisenaire rods, Numicon, cubes, bar model, printed numberline, counting stick	**Ordering** Put these fractions in the correct order, starting with the smallest. ½ ¼ 1/3 How do you know? **Do, then explain**	Mastering Number

	WALT identify three quarters of a shape WALT find three quarters of a group or a number WALT use fractions as counting numbers	• Count in fractions up to a whole	*Third, thirds, sharing, grouping, two quarters, equivalent,* *Not statutory but desired – one and a quarter etc, half as much, twice as much, numerator, denominator, fraction bar/ vinculum*	On this shape, colour in a unit fraction, then colour in a non-unit fraction. Explain the difference between a unit and non-unit fraction. **True or false?** ¾ of 15 cm = 12 cm ¾ of 12cm = 9cm **Spot the mistake** 7, 7 ½ , 8, 9, 10 8 ½, 8, 7, 6 ½, … and correct it **What comes next?** 5 ½, 6 ½ , 7 ½ , …., …. 9 ½, 9, 8 ½, ……, …..	
4	**Measurement** **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 WAP telling the time to the hour and the half-hour WAP showing o'clock and half past times WALT reading clocks that show quarter past and quarter to WALT read clocks that show the time in minutes past the hour WALT read clocks that show the time in minutes to the hour	• O'clock and half past • Quarter past and quarter to • Telling time to the hour • Tell the time to 5 minutes	Clocks *Analogue, five, ten, ¼ past/to, clockwise, anticlockwise*	**Always, sometimes, never** When the hand is pointing at the 6, it's half past **Do, then explain** Show 20 to 3 on a clock face. How did you know where the hands should be pointing? **What comes next?** 10 past 6, 20 past 6, half past 6… 25 to 8, quarter to 8, 5 to 8 **NRICH What is the Time?**	Mastering Number
5	• compare and sequence intervals of time • know the number of hours in a day WAP choosing and measuring with units of time WAL about a.m. and p.m. times WALT use times to calculate duration WALT compare durations	• Minutes in an hour • Hours in a day	Bar model, clocks *Analogue, five, ten, ¼ past/to, clockwise, anticlockwise*	**Working backwards** Break lasts 15 minutes and finishes at […] Draw hands on the clock face to show when it started. **The answer is ….** 3 hours. What is the question? **What do you notice?** 1 hour = 60 minutes ½ hour = 30 minutes ¼ hour = 15 minutes Write down some more time facts like these **NRICH Matching Time** **NRICH Stop the Clock** (online)	Mastering Number

6	**Statistics**				
	• interpret and construct simple pictograms, tally charts and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. WALT collect data using a tally chart WALT read a pictogram WALT use a pictogram to display data WALT interpret a pictogram	• Make tally charts • Tables • Block diagrams • Draw pictograms (1-1) • Interpret pictograms (1-1)	Pictogram, tally chart, block diagram, table, data, category(ies)	**Spot the mistake** Ask a questions that <u>can't</u> be answered from the pictogram. **What's the same, what's different?** Tally charts vs. pictograms **NRICH Sort the Street**	Mastering Number
	• interpret and construct simple pictograms, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totalling and comparing categorical data WALT display data using different scales WALT read pictograms using different scales WALT interpret a block diagram WALT draw a block diagram WALT use a block diagram to answer questions about data	• Draw pictograms (2, 5 and 10) • Interpret pictograms (2, 5 and 10) • Block diagrams	Cubes Pictogram, tally chart, block diagram, table, data, category(ies)	**What's the same, what's different?** Pictograms with different scales, pictograms vs. block diagrams **Convince me…** …that a pictogram is better than a block diagram (or vice versa) **NRICH Ladybird Count** **NRICH Sticky Data**	Mastering Number

Summer 2: Beside the Seaside

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Geometry** **Position and direction (2)**					
	• use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise) WALT give and receive directions WALT use a map with directions WALT use our knowledge of turns to programme an object		• Describe movement and turns	***NB*** *Time may also be used this week to go over any gaps still remaining in end-of-Key Stage criteria)* *Straight, curved, rotate, rotation, angle* *Not statutory but desired: right angle*	**Working backwards** If I face forwards and turn three quarter turns clockwise then a quarter turn anti-clockwise describe my finishing position? If I turn a half-turn clockwise, then a three-quarter turn anti-clockwise and end up facing backwards, describe my starting position. **Odd one out** A quarter turn anti-clockwise and half turn clockwise A half turn clockwise and a quarter-turn clockwise A whole turn and a quarter turn clockwise A half turn anti-clockwise and a quarter turn anti-clockwise Explain your answer.	Mastering Number
2	Spend time revisiting areas that are a class weakness in the build-up to optional SATs paper. When finished remaining units, focus in on number and fractions and areas that as a class they found more challenging on their optional SATs papers in prep for next year.					
			•			
3						
4						
			•			
5, 6 and 7	Condolidation					