Highgate Primary
Year 6 Maths Curriculum

WALT: We Are Learning To
WAP: We Are Practising

Number
Measurement
Geometry
Statistics
Algebra
Ratio and Proportion

Autumn 2: Our Island History

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**					
	• use common factors to simplify fractions • use common multiples to express fractions in the same denomination		• Equivalent fractions • Simplify fractions • Fractions on a number line	Fraction wall, number line	**Which is larger**… 1 / 3 or 2 / 5? Explain how you know. **Odd one out.** Which is the odd one out in each of these collections of 4 fractions ¾ 9/12 26/36 18/24 4/20 1/5 6/25 6/30 Why? **Always, sometimes, never** true that: 20ths can be simplified to 8ths Halves can't be simplified Tenths can be simplified to fifths Fifteenths can be simplified to quarters? Use examples to prove your answers.	MyMiniMaths
2	• compare and order fractions, including fractions >1 • add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions		• Compare and order denominator • Compare and order numerator • Add and subtract fractions	Cuisenaire rods	**Ordering** Sam put these fractions in order starting with the smallest. Are they in the correct order? Thirty-three fifths Twenty-three thirds Forty-five sevenths How do you know? **Another and another** Write down two fractions which have a difference of 1/2… and another, … and another, … Write down 2 fractions with a total of 3 4/5. … and another, … and another, …	MyMiniMaths

				Odd one out 1/3 + 1/8 ½ + ¾ 3/5 + 3/10 ¾ + 5/12 Explain your answer.	
3	• multiply simple pairs of proper fractions, writing the answer in its simplest form • divide proper fractions by whole number	• Multiply fractions by integers • Multiply fractions by fractions • Divide fractions by integers	-	**Continue the pattern** 1/3 ÷ 2 = 1/6 1/6 ÷ 2 = 1/12 1/12 ÷ 2 = 1/24 What do you notice? ½ x ½ = ¼ x ½ = 1/8 x ½ = What do you notice? **Explaining** Write a step-by-step guide to multiplying two fractions. Can you write one that covers all possible types of fractions? Now do the same for dividing <u>any</u> fraction by a whole number. Make sure it covers all possibilities.	MyMiniMaths
4	• add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions • multiply simple pairs of proper fractions, writing the answer in its simplest form • divide proper fractions by whole number WALT calculate a fraction of an amount	• Four rules with fractions • Fraction of an amount	Bar model	**What do you notice**? 8/5 of 25 = 40 5/4 of 16 = 20 7/6 of 36 - 42 Can you write similar statements? **The answer is…** 1/8, what is the question (involving fractions / operations)? **Working backwards** I think of a number. When I divide it by ¾, the answer is 12. What was my number? I think of a number. When I multiply it by 4/5, the answer is 20. What was my number?	MyMiniMaths
5	**Geometry** **Position and Direction**				
	• describe positions on the full coordinate grid (all four quadrants)	• First quadrant • Four quadrants	Geoboard	**Working backwards**	MyMiniMaths

	• draw and translate simple shapes on the coordinate plane, and reflect them in the axes	• Translations • Reflections		Two triangles have the following co-ordinates: Triangle A: (3, 5) (7, 5) (4, 7) Triangle B: (3, 1) (7, 1) (4, 3) Describe the translation of triangle A to B and then from B to A. **NRICH Ten Hidden Squares** **NRICH Treasure Hunt**	
6	**Number** **Decimals**				
	• identify the value of each digit in numbers given to three decimal places • multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • multiply one-digit numbers with up to two decimal places by whole numbers	• Three Decimal Places • Multiply 10, 100, 1000 • Divide 10, 100, 1000 • Multiply decimals by integers	Base 10, Gattegno chart, place value counters	**Working backwards** What needs to be added to 6.543 to give 7? What needs to be added to 3.582 to give 5? One thousandth of my money is 31p. How much do I have? **What do you notice?** Circle the two decimals which are closest in value to each other. 0.9 0.09 0.99 0.1 0.01 What do you notice? **Undoing** I multiply a number with three decimal places by a multiple of 10. The answer is approximately 3.21. What was my number? What did I multiply by? When I divide a number by 1000 the resulting number has the digit 6 in the units and tenths and the other digits are 3 and 2 in the tens and hundreds columns. What could my number have been?	MyMiniMaths
7	• use written division in cases where the answer has up to two decimal places • solve problems, which require answers to be rounded to specified degrees of accuracy	• Divide decimals by integer • Division to solve problems • Decimals as fractions • Fractions to decimals	Number line, fraction wall	**Prove it** What goes in the missing box? 18__4 ÷ 12 = 157 38__5 ÷ 18 = 212.5 33__2 ÷ 8 = 421.5 38 x __.7 = 178.6 Prove it	MyMiniMaths