Highgate Primary
Year 4 Maths Curriculum

WALT: We Are Learning To
WAP: We Are Practising

Number
Measurement
Geometry
Statistics

Autumn 2: Sound and Vision

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** **Length and perimeter**					
	• convert between different units of measure WAP converting between m and cm WAP converting between cm and mm WALT use kilometres as a unit of length WALT add lengths WALT subtract lengths		• Equivalent lengths – m and cm • Equivalent lengths – cm and mm • Kilometres • Add lengths • Subtract lengths	Ruler, scale, part-whole mode, bar model, column layout, empty numberline	**The answer is ….** 225 metres What is the question? **Prove it** 120 mm < 12.5 cm 1500 cm < 1 km **Practical** Use pieces of A4 paper to measure a much greater length (e.g. height or width of a room.)	Bonds to 100 and 1000 Number facts: revise 2, 5 and 10 times tables and division
2	• measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres WALT understand and measure perimeter WALT find the perimeter of shapes on a 1 cm grid WALT calculate the perimeter of a rectangle WALT calculate the perimeter of a rectilinear shape WALT reason about perimeter		• Measure perimeter • Perimeter on a grid • Perimeter of a rectangle • Perimeter of rectilinear shapes	Ruler	**Testing conditions** If the width of a rectangle is 3 metres less than the length and the perimeter is between 20 and 30 metres, what could the dimensions of the rectangle be? Convince me. **Always, Sometimes, Never** I calculate the perimeter of a rectangle. If I double the length of one pair of opposite sides, I've doubled the perimeter. **Working backwards** Rectangles (inc. squares) and/or other rectilinear figures with perimeter given but not all side lengths. What are the missing lengths?	Mental addition and subtraction Number facts: revise 4 and 8 times tables and division
3	**Number** **Calculation: Multiplication and division (1)**					
	• use place value, known and derived facts to		• Multiply by 10	Place value counters,	**Working backwards**	Using additive facts for

	multiply and divide mentally. • solve problems involving multiplying and adding, including integer scaling problems WALT multiply by 10 WALT multiply by 100 WALT divide by 10 WALT divide by 100 WALT use a place value chart to multiply and divide by 10 and 100	• Multiply by 100 • Divide by 10 • Divide by 100	base-10, part-whole model, bar model, coins, place value chart	I've made the number 200 by multiplying or dividing by 10 or 100. What number(s) could I have started with? **NRICH Let Us Divide!** **NRICH Multiply Multiples 1 (and 2 and 3)**	perimeter / converting between units of measure Number facts: revise 3 and 6 times table and division
4	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1 WALT understand multiplying by 1 and by 0 WALT divide a number by 1 and by itself WAP multiplying by 3 WAP dividing by 3 WAP the three times table	• Multiply by 1 and 0 • Divide by 1 and itself • Multiply and divide by 3 • The 3 times table	Numicon, counters, bar model, cubes, array	**Always, Sometimes, Never** Multiples of 3 are odd. Answer, then explain why this happens. **Prove It** Can you divide by 0? What happens if you try? Prove it! **NRICH Four Go**	Multiplying and dividing by 10 and 100 Number facts: revise 9 times table and division
5	• recall multiplication and division facts for multiplication tables up to 12 × 12 WALT make links between the 3 and 6 times tables (not WRM) WALT multiply and divide by 6 WAP the 6 times table and division facts WALT make links between the 3 and 9 times tables (not WRM) WALT multiply and divide by 9	• Multiply and divide by 6 • The 6 times table and division facts • Multiply and divide by 9	Cuisenaire rods, cubes, bar model, array	**Always, sometimes, never?** Is it always, sometimes or never true that an even number that is divisible by 3 is also divisible by 6? **NRICH Times Tables Shifts** **NRICH Table Patterns Go Wild!** **NRICH Satisfying Four Statements**	Time telling Number facts: revise 7 times table and division
6	• recall multiplication and division facts for multiplication tables up to 12 × 12. WAP the 9 times table and division facts WALT multiply by 7 WALT multiply and divide by 7 WAL the 7 times table WAL 7 times table division facts	• The 9 times table and division facts • Multiply and divide by 7 • The 7 times table and division facts	Counting stick, Numicon, Cuisenaire rods, bar model	**Use a fact** 63 ÷ 9 = 7 Use this fact to work out 126 ÷ 9 = 252 ÷ 7 = **NRICH Zios and Zepts** **NRICH Multiples Grid** **NRICH Multiplication Square Jigsaw**	Number bonds to 100 Number facts: revise 2, 3, 4, 5 and 10 times tables and division
7	**Warm-down week**				

	Consolidation of material covered earlier in the term