Highgate Primary
Year 3 Maths Curriculum

WALT: We Are Learning To
WAP: We Are Practising

Number
Measurement
Geometry
Statistics

Autumn 2: Chocolate

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)**					
	• add and subtract numbers mentally • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • estimate the answer to a calculation and use inverse operations to check answers • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction WALT use columnar methods for harder 3-digit addition WALT use different methods to subtract 3-digit numbers WALT use columnar methods to subtract 3-digit numbers WALT use the inverse to check our answers WALT estimate before calculating	• Add 3-digit numbers – crossing 10 or 100 • Subtract 3-digit numbers – no exchange • Subtract 3-digit numbers - exchange • Check answers • Estimate answers to calculations	Place value grid, place value counters, column layout, bar model, part-whole model, base-10, empty numberline	**Making an estimate** Which of these number sentences have the answer that is between 50 and 60? 174 - 119 333 – 276 932 – 871 **Do it, then explain** Carry out a column calculation, then explain what you've done and how/why it works **Odd one out** Which of these calculations is the odd one out, and why? 473 + 374 734 + 437 347 + 743 Can you pick another odd one out, and explain your choice	Two-digit addition and subtraction Number facts: four times table
2	**Number** **Calculation: Multiplication and division (1)**					
	• write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods WAP multiplying by making equal groups WAP multiplication as repeated addition WAP using arrays	• Multiplication – equal groups • Multiplication using the x symbol *(WRM revision)* • Using arrays *(WRM revision)* • Two times table *(WRM revision)*	Coins, cubes, Numicon, arrays, Cuisenaire rods, number track, bar model	**NRICH Journeys in Numberland Missing numbers** 24 = x What could the missing numbers be? Have you found all of them? **Always, Sometimes, Never** Even numbers are in more times tables (have more factors) than odd numbers.	Calculating bonds to multiples of 100 Number facts: four times table division

	WAP the two times table WAP the five times table	• Five times table *(WRM revision)*			
3	• write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods WAP division as sharing WAP division as grouping WAP dividing by two WAP dividing by five WAP dividing by ten	• Make equal groups – sharing *(WRM revision)* • Make equal groups – grouping *(WRM revision)* • Divide by 2 *(WRM revision)* • Divide by 5 *(WRM revision)* • Divide by 10 *(WRM revision)*	Cubes, bar model, base-10, printed / empty numberline, coins, arrays	**Always, Sometime, Never** Dividing a whole number by 2 results in another whole number. Only numbers with a zero in the ones place can be divided by 10. **Missing number** 30 ÷_ = _ How many answers can you find?	Bonds to 1000 Number facts: 3 and 4 times tables and division
4	• recall and use multiplication and division facts for the 3 multiplication table WALT multiply by three WALT divide by three WALT use a numberline to divide by three WAL the three times table WALT reason about the three times table	• Multiply by 3 • Divide by 3 • The 3 times table	Cubes, bar model, counters, Numicon, arrays, empty numberline	**True or false?** There are no numbers in the three times table that are also in the two times table. **Pattern spotting** Start at 1 and multiply by 3. Then multiply your answer by 3. Then multiply this answer by 3. If you can, do it again. What do you notice about all your answers?	10 or 100 more or less Number facts: one-digit addition and subtraction
5	• recall and use multiplication and division facts for the 4 multiplication table WALT multiply by four WALT divide by four WALT use a numberline to divide by four WAL the four times table WALT reason about the four times table	• Multiply by 4 • Divide by 4 • The 4 times table	Cubes, arrays, counters, bar model, Numicon, empty numberline	**NRICH Music To My Ears** (change second rhythm to 4x table) **Making links** Cards come in packs of 4. How many packs do I need to buy to get 32 cards? **Prove It** What goes in the missing boxes? x ? ? 4 80 12 Prove it. **How close can you get?** × Using the digits 2, 3 and 4 in the calculation above how close can you get to 100? What is the largest product? What is the smallest product?	2, 5 and 10 times tables Number facts: multiples of 10 – adding, subtracting, 10 times table and division

6	• recall and use multiplication and division facts for the 8 multiplication table WALT make connections between multiplying by 2, 4 and 8 WALT divide by eight WALT use a numberline to divide by eight WAL the eight times table WAP the 2 and 4 times tables	• Multiply by 8 • Divide by 8 • The 8 times table • Consolidate the 2 and 4 times tables	Arrays, Numicon, bar model, empty numberline	**NRICH Follow the Numbers** **NRICH This Pied Piper of Hamlyn** **Making links** I Spy 56 spiders' legs. How many spiders do I Spy?	Times tables revision Number facts: 2 and 5 times tables and division
7	• solve problems, including missing number problems, involving multiplication and division WALT compare multiplication and division equations WALT use known multiplication facts to find new ones	• Comparing statements • Related calculations	Arrays, cubes, Cuisenaire rods, Numicon, place value counters	**NRICH Which Symbol?** **Use a fact** 20 x 3 = 60. Use this fact to work out 21 x 3 = 22 x 3 = 23 x 3 = 24 x 3 =	Times tables revision