

WALT: We Are Learning To

WAP: We Are Practising

Autumn 1: From Palaeontology to Archaeology

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 Three times table revision					
2	Number Place value to 1000					
	<ul style="list-style-type: none">• count from 0 in multiples of 100• identify, represent and estimate numbers using different representations• read and write numbers up to 1000 in numerals and in words• solve number problems and practical problems <p>WAP representing numbers to 100 in different ways WAP partitioning two-digit numbers in different ways WALT count in hundreds WALT represent numbers to 1000 using base-10 WALT represent numbers in different ways using base-10</p>	<ul style="list-style-type: none">• Represent numbers to 100 (WRM revision)• Tens and ones using addition (WRM revision)• Hundreds• Represent numbers to 1000	Bead string, base-10, empty number line, ten-frame, Numicon, part-whole model, number track, place value grid	Always, sometimes, never A number with a larger digit sum is greater than a number with a smaller digit sum Sorting Sort these numbers into 2 groups and explain your criteria: 10, 11, 100, 101, 110, 111 Now do it a different way. NRICH Coded Hundred Square	2, 5 and 10 times tables Number facts: adding and subtracting 1-digit numbers below 10	
3	<ul style="list-style-type: none">• recognise the place value of each digit in a three-digit number• find 10 or 100 more or less than a given number• solve number problems and practical problems <p>WALT use a place value grid to represent numbers to 1000 WALT use place value counters to represent numbers to 1000 WALT place numbers to 1000 on an empty numberline WALT find 1 or 10 more or less than any three-</p>	<ul style="list-style-type: none">• 100s, 10s and 1s (1)• 100s, 10s, and 1s (2)• Number line to 1000• Find 1, 10, 100 more or less	Place value grid, base-10, empty numberline Introduce Place value counters	What comes next? 936-10= 926 926 -10 = 916 916- 10= 906 Make up an example Create numbers where the digit sum is three. Eg 120, 300, 210 What is the largest/smallest number? Repeat for other digit sums. NRICH Which Scripts?	Counting in 10s and 100s Number facts: adding 1-digit numbers above 10	

	digit number WALT find 100 more or less than any three-digit number				
4	<ul style="list-style-type: none"> compare and order numbers up to 1000 count from 0 in multiples of 50 solve number problems and practical problems <p>WALT compare numbers represented by equipment WALT compare numbers on their own! WALT place numbers in order of size WALT count in 50s WAP place value in three-digit numbers</p>	<ul style="list-style-type: none"> Compare objects to 1000 Compare numbers to 1000 Order numbers Count in 50s 	Place value grid, base-10, place value counters, number track, part-whole model	<p>Convince me Which is greater – 99 or 111? Convince me that you're right! Spot the mistake: 50,100,115,200 What is wrong with this sequence of numbers? True or False? 205 is a multiple of 50. How do you know?</p>	<p>Counting in 10s and 100s</p> <p>Number facts: subtracting 1-digit numbers above 10</p>
5	Number Calculation: Addition and subtraction (1)				
	<ul style="list-style-type: none"> add and subtract numbers mentally, including a 3-digit number and ones add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>WALT add and subtract multiples of 100 WALT add and subtract ones WALT use place value equipment to add and subtract WALT use different methods to add 2- and 1-digit numbers WALT use a column method to add</p>	<ul style="list-style-type: none"> Add and subtract multiples of 100 Add and subtract ones (<i>WRM revision</i>) Add and subtract 3-digit and 1-digit numbers – not crossing 10 Add 2-digit and 1-digit numbers – crossing 10 (<i>WRM revision</i>) 	Base-10, bar model, bead string, number track, place value grid empty numberline, part-whole model, column layout	<p>NRICH Super Shapes (or following weeks) NRICH Make 37 / Play to 37 NRICH Build it Up (harder version)</p>	<p>Counting in 50s</p> <p>Number facts: adding and subtracting multiples of 10</p>
6	<ul style="list-style-type: none"> add and subtract numbers mentally, including a 3-digit number and 1s and a 3-digit number and 10s add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>WALT use different methods to add 3- and 1-digit</p>	<ul style="list-style-type: none"> Add 3-digit and 1-digit numbers – crossing 10 Subtract 1-digit from 2-digit numbers – crossing 10 (<i>WRM revision</i>) Subtract 1-digit from 3-digit numbers – crossing 10 	Base-10, empty / printed numberline, part-whole model, place value grid, column layout	<p>Hard and easy questions Which questions are easy / hard? 323 + 10 = 393 + 10 = 454 - 100 = 914 - 120 = 954 - 120 = Explain why you think the hard questions are hard? The answer is... 456. What's the question?</p>	<p>Counting in 10s and 100s</p> <p>Number facts: two times table and division facts</p>

	<p>numbers</p> <p>WALT use different methods to subtract 1-digit from 2-digit numbers</p> <p>WALT use a column method to subtract</p> <p>WALT use different methods to subtract 1-digit from 3-digit numbers</p> <p>WALT use place value equipment to add and subtract 2- and 3-digit numbers</p>	<ul style="list-style-type: none"> • Add and subtract 3-digit and 2-digit numbers – not crossing 100 		<p>What's the same, what's different...</p> <p>... between column addition and column subtraction?</p>	
7	<ul style="list-style-type: none"> • add and subtract numbers mentally, including a 3-digit number and 100s • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>WALT use different methods to add 2- and 3-digit numbers</p> <p>WALT use base-10 and numberlines to subtract 2-digit from 3-digit numbers</p> <p>WALT add and subtract 100s</p> <p>WALT spot addition and subtraction patterns</p> <p>WALT use column methods to add 2-digit numbers</p>	<ul style="list-style-type: none"> • Add 3-digit and 2-digit numbers – crossing 100 • Subtract a 2-digit from a 3-digit number – crossing 100 • Add and subtract 100s • Spotting the pattern – making it explicit • Add 2-digit numbers – crossing 10 (<i>WRM revision</i>) 	Bar model, base-10, place value grid, place value counters, column layout	<p>True or false?</p> <p>Are these number equations true or false?</p> <p>$597 + 7 = 614$</p> <p>$804 - 70 = 744$</p> <p>$768 + 140 = 908$</p> <p>Give your reasons.</p> <p>Always, sometimes, never (or following weeks)</p> <p>If you subtract a multiple of 10 from any number, the units digit of that number stays the same.</p> <p>Generalising</p> <p>$342 + 4 = 346$</p> <p>$342 + 40 = 386$</p> <p>$342 + 400 = 742$</p> <p>Can you turn this into a <u>general</u> rule?</p> <p>Does it have any exceptions?</p>	<p>10 or 100 more or less</p> <p>Number facts: three times table</p>
8	<ul style="list-style-type: none"> • add and subtract numbers mentally • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>WALT use different methods to subtract 2-digit numbers</p> <p>WALT use different methods to add and subtract 3- and 2-digit numbers</p> <p>WALT use columnar methods to add 3- and 2-digit numbers</p> <p>WALT use columnar methods to subtract 3- and 2-digit numbers</p> <p>WALT use columnar methods to add 3-digit numbers</p>	<ul style="list-style-type: none"> • Subtract 2-digit numbers – crossing 10 (<i>WRM revision</i>) • Add and subtract 3-digit and 2-digit numbers – no crossing • Add 3-digit and 2-digit numbers – crossing 10 or 100 • Subtract 2-digit from 3-digit numbers – crossing 10 or 100 • Add 3-digit numbers – no crossing 	Empty numberline. base-10, part-whole model, column layout, place value grid, bar model, place value counters	<p>Convince me</p> <p>$_ _ + _ _ + _ _ = 201$</p> <p>Each missing digit is either a 9 or a 1. Write in the missing digits. Is there only one way of doing this or lots of ways?</p> <p>Convince me</p> <p>Missing digits</p> <p>Completed column calculations with one or more missing digits</p> <p>Spot the mistake</p> <p>Completed column calculations with one or more mistakes. Explain why they are wrong.</p>	<p>Bonds to 100</p> <p>Number facts: three times table division</p>

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