



WALT: We Are Learning To  
WAP: We Are Practising

## Autumn 1: Masks and Minotaurs

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	<b>Warm-Up Week</b> <b>Times table revision</b>					
2	<b>Number</b> <b>Place value to 10 000</b>					
	<ul style="list-style-type: none"><li>• identify, represent and estimate numbers using different representations</li><li>• identify, represent and estimate numbers using different representations</li><li>• round any number to the nearest 10 or 100</li><li>• solve number and practical problems</li></ul> <p>WALT use base-10 to represent numbers to 1000 WALT use base-10 to partition 3-digit numbers WALT position 3-digit numbers on an empty numberline WALT round to the nearest 10 WALT round to the nearest 100</p>	<ul style="list-style-type: none"><li>• Represent numbers to 1000</li><li>• 100s, 10s and 1s</li><li>• Numberline to 1000</li><li>• Round to the nearest 10</li><li>• Round to the nearest 100</li></ul>	Base-10, place value grid, empty numberline, place value counters, arrow cards	<b>Possible answers</b> A number rounded to the nearest ten is 540. What is the smallest possible number it could be? What about a number that rounded to the nearest 100 is 600? <b>NRICH Representing Numbers</b> (or following week) <b>NRICH Reasoned Rounding</b>	Counting in 10s and 100s  Number facts: eight times table and division	
3	<ul style="list-style-type: none"><li>• count in multiples of 1000</li><li>• recognise the place value of each digit in a four-digit number</li><li>• identify, represent and estimate numbers using different representations</li><li>• solve number and practical problems</li></ul> <p>WALT count in thousands WALT partition 4-digit numbers WALT partition 4-digit numbers in different ways WALT position 4-digit numbers on an empty numberline WALT find 1, 10 or 100 more or less than any number</p>	<ul style="list-style-type: none"><li>• Count in thousands</li><li>• 1000s, 100s, 10s, 1s</li><li>• Partitioning</li><li>• Numberline to 10000</li><li>• 1, 10 or 100 more or less</li></ul>	Base-10, place value counters, part-whole model, empty numberline	<b>Do, then explain</b> Show the value of the digit 4 in these numbers? 3041    4321    5497 Explain how you know. <b>Make up an example</b> Create four digit numbers where the digit sum is 4 and the tens digit is 1. What is the largest / smallest number you can make? <b>NRICH The Deca Tree</b>	Finding 10, 100 or 1000 more or less  Number facts: six times table	

4	<ul style="list-style-type: none"> <li>find 1000 more or less than a given number</li> <li>recognise the place value of each digit in a four-digit number</li> <li>order and compare numbers beyond 1000</li> <li>round any number to the nearest 1000</li> <li>solve number and practical problems</li> </ul> <p>WALT find 1000 more or less than any number WALT compare numbers up to 10000 WALT order numbers up to 1000 WALT round numbers to the nearest 1000 WAP partitioning 4-digit numbers</p>	<ul style="list-style-type: none"> <li>1000 more or less</li> <li>Compare numbers</li> <li>Order numbers</li> <li>Round to the nearest 1000</li> </ul>	Base-10, place value counters, place value grid, empty numberline	<p><b>What do you notice?</b> Round 1963 to the nearest 100. Round it to the nearest 1000. What do you notice? Can you suggest other numbers like this?</p> <p><b>What comes next?</b> 6706 + 1000 = 7706 7706 + 1000 = 8706 8706 + 1000 = 9706</p> <p><b>NRICH What Distance?</b> <b>NRICH Ordering Journeys</b> <b>NRICH The Thousands Game</b> <b>NRICH Four-digit Targets</b> <b>NRICH Nice or Nasty</b></p>	<p>Revision of 2, 5 and 10 times tables</p> <p>Number facts: six times table division</p>
5	<ul style="list-style-type: none"> <li>count in multiples of 25</li> <li>count backwards through zero to include negative numbers</li> <li>solve number and practical problems</li> <li>read Roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value</li> </ul> <p>WALT count in 25s WALT count backwards through zero WALT the Roman numerals L and C WALT represent numbers to 100 with Roman numerals WALT calculate with Roman numerals</p>	<ul style="list-style-type: none"> <li>Count in 25s</li> <li>Negative numbers</li> <li>Roman numerals to 100</li> </ul>	Number tracks, empty numberlines, thermometers	<p><b>Spot the mistake:</b> 950, 975, 1000, 1250 What is wrong with this sequence of numbers?</p> <p><b>What's the same, what's different...</b> ... between the Roman system and our own?</p> <p><b>NRICH Count Me In</b></p>	<p>Revision of 3 and 4 times tables</p> <p>Number facts: nine times table</p>
6	<p><b>Number</b> <b>Calculation: Addition and subtraction</b></p>				
	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul> <p>WALT add or subtract 1s, 10s, 100s or 1000s to / from any number WAP adding 3-digit numbers using a place value grid WAP adding 3-digit numbers using a column</p>	<ul style="list-style-type: none"> <li>Add and subtract 1s, 10s, 100s and 1000s</li> <li>Add 3-digit numbers – no crossing</li> <li>Add 4-digit numbers – no exchange</li> <li>Add 3-digit numbers – crossing 10 or 100</li> </ul>	Place value grid, place value counters, column layout, bar model, part-whole model	<p><b>Hard and easy questions</b> Which questions are easy / hard? 13323 - 70 = 12893 + 300 = 19354 - 500 = 19954 + 100 = Explain why you think so</p> <p><b>What's the same, what's different...</b> ... between adding or subtracting ones and adding or subtracting thousands?</p>	<p>Counting in 25s</p> <p>Number facts: nine times table division</p>

	<p>method</p> <p>WALT use different columnar methods to add 4-digit numbers</p> <p>WAP adding 3-digit numbers with exchanging</p>				
7	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul> <p>WALT use different columnar methods for harder 4-digit addition</p> <p>WALT add 4-digit numbers using column addition</p> <p>WALT use different methods for subtraction, including counting on</p> <p>WALT use different columnar methods to subtract 4-digit numbers</p> <p>WALT use column subtraction with an exchange</p>	<ul style="list-style-type: none"> <li>Add 4-digit numbers – one exchange</li> <li>Add 4-digit numbers – two+ exchanges</li> <li>Subtract 3-digit numbers – no exchange</li> <li>Subtract 4-digit numbers – no exchange</li> <li>Subtract 3-digit numbers - exchange</li> </ul>	Place value grid, place value counters, column layout, bar model, empty numberline for counting on	<p><b>Missing digits</b> (or following week)</p> <p>Completed column calculations with missing digits</p> <p><b>What's next</b></p> <p>333 666 999 ...</p> <p>Can you solve this in your head? Can you make a similar puzzle?</p> <p><b>Challenge</b></p> <p>What's the hardest 4-digit subtraction calculation you can think of? Why is it so hard?</p>	<p>Revision of 8 times table</p> <p>Number facts: seven times table</p>
8	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul> <p>WALT use different columnar methods to subtract 4-digit numbers with an exchange</p> <p>WALT represent subtraction in different ways</p> <p>WALT choose between methods for subtraction</p> <p>WALT use rounding to estimate</p> <p>WALT use the inverse to check our calculations</p>	<ul style="list-style-type: none"> <li>Subtract 4-digit numbers – one exchange</li> <li>Subtract 4-digit numbers – more than one exchange</li> <li>Efficient subtraction</li> <li>Estimate answers</li> <li>Checking strategies</li> </ul>	Place value grid, place value counters, column layout, bar model, empty numberline	<p><b>Convince me</b></p> <p> - 666 = 8 5</p> <p>What is the largest possible number that could be in in the rectangular box? What is the smallest? Convince me!</p> <p><b>Making an estimate</b></p> <p>Which of these number sentences have the answer that is between 550 and 600?</p> <p>1174 - 611</p> <p>3330 - 2779</p> <p>9326 - 8777</p> <p><b>Comparison</b></p> <p>Which method(s) for calculating addition and subtraction do you prefer using – and why?</p>	<p>Counting on to find a difference</p> <p>Number facts: seven times table division</p>