










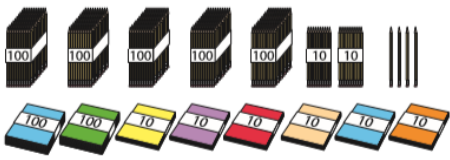
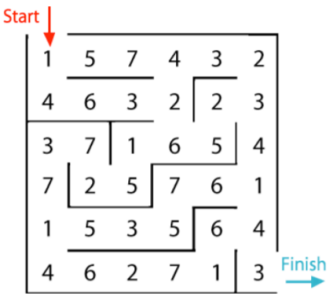


Anston Greenlands Primary School – Long Term Maths Curriculum
Year 3 Merlins – Can you survive the Stone Age?






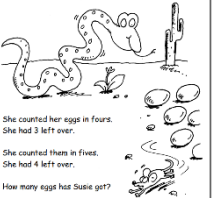


Term Autumn 22








<p>Objectives</p>	<p>Approximate number of lessons (70 total) but minus 3 due to Wow Day and 2 INSET days. 67 days.</p>	<p>Investigations/variation</p>		<p>Context</p>						
<p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p>	<p>5</p>	<p>What number is represented in each set?</p> 	<p>What is the value of the number represented by the counters in the place value grid?</p> <table border="1" data-bbox="1173 730 1536 836"> <thead> <tr> <th>100s</th> <th>10s</th> <th>1s</th> </tr> </thead> <tbody> <tr> <td>● ●</td> <td>● ● ● ●</td> <td>● ●</td> </tr> </tbody> </table> <p>Using all of the counters, how many different numbers can you make? Have you made all the possible numbers? Explain how you know.</p>	100s	10s	1s	● ●	● ● ● ●	● ●	<p>Practical – use of dienes</p> <p>Investigation – largest possible numbers/smallest possible numbers using dice to generate numbers.</p>
100s	10s	1s								
● ●	● ● ● ●	● ●								

<ul style="list-style-type: none"> compare and order numbers up to 1000 	<p>3</p> <p>Then M/O</p>	<p>Megan has made a 3-digit number with these cards.</p> <table border="1" style="margin-left: 20px;"> <tr> <td style="padding: 5px;">6</td> <td style="padding: 5px;">7</td> <td style="padding: 5px;">5</td> </tr> </table> <p>What other 3-digit numbers can she make with these cards?</p> <table border="1" style="margin-left: 20px;"> <tr> <td style="padding: 5px;">6</td> <td style="padding: 5px;">7</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </table> <p>What is the largest number she can make?</p> <p><i>Consider whether or not children are working systematically.</i></p>	6	7	5	6	7	5																<p>Generating own numbers using dice.</p> <p>Using 3 digit cards – make the largest number, make the smallest number.</p>
6	7	5																						
6	7	5																						
<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations 	<p>2</p>	<p>Captain Conjecture says 'The number in the place value grid is the largest 3-digit number you can make using all 10 counters.'</p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th style="padding: 5px;">100s</th> <th style="padding: 5px;">10s</th> <th style="padding: 5px;">1s</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">  </td> <td style="text-align: center; padding: 5px;">  </td> <td style="text-align: center; padding: 5px;">  </td> </tr> </tbody> </table> <div style="text-align: right; margin-right: 20px;">  </div> <p>Do you agree?</p> <p>Explain your reasoning.</p>	100s	10s	1s				<p>Bar modelling</p> <p>Partitioning</p> <p>Part part whole</p>															
100s	10s	1s																						
																								
<ul style="list-style-type: none"> read and write numbers up to 1000 in numerals and in words 	<p>2</p> <p>Then M/O</p>	<ul style="list-style-type: none"> 8 hundreds, 3 tens and 6 ones together make <input type="text"/>. 457 is made of <input type="text"/> hundreds, <input type="text"/> tens and <input type="text"/> ones. 250 is made of <input type="text"/> hundreds and <input type="text"/> tens. 																						

<p>solve number problems and practical problems involving these ideas.</p>	<p>4</p>	<p>Find the number of pencils. Find the number of exercise books.</p>  <p>Guide pupils to use practical equipment to deepen their understanding of place value and apply their knowledge of place value in mental and written calculation.</p>	<p>Stick or twist game (Superhero theme)</p>																			
<p>add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds 	<p>4 Then M/O</p>	<p>Maze 100</p> <p>What do you notice? Is there a relationship between the calculations?</p> <table border="0"> <tr> <td>$500 + 400 =$</td> <td>$523 + 400 =$</td> <td>$523 + 28 =$</td> </tr> <tr> <td>$400 + 500 =$</td> <td>$423 + 500 =$</td> <td>$423 + 28 =$</td> </tr> <tr> <td>$300 + 600 =$</td> <td>$323 + 600 =$</td> <td>$323 + 28 =$</td> </tr> <tr> <td>$200 + 700 =$</td> <td>$223 + 700 =$</td> <td>$223 + 28 =$</td> </tr> <tr> <td>$100 + 800 =$</td> <td>$123 + 800 =$</td> <td>$123 + 48 =$</td> </tr> </table> <p>Write the four number facts that this bar model shows.</p> <table border="1" data-bbox="616 957 817 1013"> <tr> <td colspan="2">540</td> </tr> <tr> <td>300</td> <td>240</td> </tr> </table> <p> <input type="text"/> + <input type="text"/> = <input type="text"/> <input type="text"/> + <input type="text"/> = <input type="text"/> <input type="text"/> - <input type="text"/> = <input type="text"/> <input type="text"/> - <input type="text"/> = <input type="text"/> </p> <p>Using coins, find three ways to make £1.</p> <p style="text-align: center;">Investigation</p> 	$500 + 400 =$	$523 + 400 =$	$523 + 28 =$	$400 + 500 =$	$423 + 500 =$	$423 + 28 =$	$300 + 600 =$	$323 + 600 =$	$323 + 28 =$	$200 + 700 =$	$223 + 700 =$	$223 + 28 =$	$100 + 800 =$	$123 + 800 =$	$123 + 48 =$	540		300	240	<p>Always/Sometimes/Never E.G. When you add 7 to a number ending in 8, your answer ends in 5.</p>
$500 + 400 =$	$523 + 400 =$	$523 + 28 =$																				
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<p>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>	<p>6</p> <p>Then M/O</p>	<p>Flo and Jim are answering a problem: Danny has read 62 pages of the class book, Jack has read 43. How many more pages has Danny read than Jack? Flo does the calculation $62 + 43$. Jim does the calculation $62 - 43$. Who is correct? Explain how you know. <i>Pupils might demonstrate using a bar model to explain their reasoning.</i></p> <hr/> <p>Sophie has five coins in her pocket. How much money might she have? What is the greatest amount she can have? What is the least amount she can have? If all the coins are different: What is the greatest amount she can have? What is the least amount she can have?</p>	<p>Hunters of woolly mammoths.</p> <p>How many miles travelled?</p>																			
<p>Add and subtract numbers mentally, including: -a three-digit number and ones -a three-digit number and tens -a three-digit number and hundreds</p>	<p>3</p> <p>Then M/O</p>	<p>What do you notice? Is there a relationship between the calculations?</p> <table style="border-collapse: collapse; width: 100%;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">$500 + 400 =$</td> <td style="border-right: 1px solid black; padding: 5px;">$523 + 400 =$</td> <td style="padding: 5px;">$523 + 28 =$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$400 + 500 =$</td> <td style="border-right: 1px solid black; padding: 5px;">$423 + 500 =$</td> <td style="padding: 5px;">$423 + 28 =$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$300 + 600 =$</td> <td style="border-right: 1px solid black; padding: 5px;">$323 + 600 =$</td> <td style="padding: 5px;">$323 + 28 =$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$200 + 700 =$</td> <td style="border-right: 1px solid black; padding: 5px;">$223 + 700 =$</td> <td style="padding: 5px;">$223 + 28 =$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$100 + 800 =$</td> <td style="border-right: 1px solid black; padding: 5px;">$123 + 800 =$</td> <td style="padding: 5px;">$123 + 48 =$</td> </tr> </table> <div style="margin-top: 20px;"> <p>Write the four number facts that this bar model shows.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <tr> <td colspan="2" style="background-color: yellow;">540</td> </tr> <tr> <td style="background-color: green;">300</td> <td style="background-color: blue;">240</td> </tr> </table> <p style="margin-left: 40px;"> $\square + \square = \square$ $\square + \square = \square$ $\square - \square = \square$ $\square - \square = \square$ </p> <hr style="width: 50%; margin-left: 0;"/> <p>Using coins, find three ways to make £1.</p> </div>	$500 + 400 =$	$523 + 400 =$	$523 + 28 =$	$400 + 500 =$	$423 + 500 =$	$423 + 28 =$	$300 + 600 =$	$323 + 600 =$	$323 + 28 =$	$200 + 700 =$	$223 + 700 =$	$223 + 28 =$	$100 + 800 =$	$123 + 800 =$	$123 + 48 =$	540		300	240	<p>Mental/oral starters and main lessons</p>
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<p>Estimate the answer to a calculation and use inverse operations to check answers</p>	<p>3 M/O</p>	<p> Zach estimated an answer to a calculation. He chose to round his numbers to the nearest hundred. What could the actual number sentence be?</p> <p><input type="text"/> + <input type="text"/> = 2 9 0 0</p> <p> Esin estimated an answer to a calculation. She chose to round her numbers to the nearest ten. What could the actual number sentence be?</p> <p><input type="text"/> + <input type="text"/> = 5 5 0</p> <p> Leanna estimated an answer to a calculation. She chose to round her numbers to the nearest hundred. What could the actual number sentence be?</p> <p><input type="text"/> + <input type="text"/> = 6 3 0 0</p>		<p>Mental/oral starters and main lessons</p>
<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p>	<p>5 Then M/O</p>	<p>Complete the sentences.</p> <p>a) </p> <p>There are <input type="text"/> equal groups of <input type="text"/></p> <p><input type="text"/> + <input type="text"/> + <input type="text"/> + <input type="text"/> + <input type="text"/> + <input type="text"/> = <input type="text"/></p> <p><input type="text"/> x <input type="text"/> = <input type="text"/></p> <p>Mo has 15 pencils. He shares them equally into 3 pots.</p> <p></p> <p>How many pencils will there be in each pot?</p> <p>Susie the snake</p> <p>Susie the snake has up to 20 eggs.</p> <p></p> <p>She counted her eggs in fours. She had 3 left over.</p> <p>She counted them in fives. She had 4 left over.</p> <p>How many eggs had Susie got?</p>	<p>2. 24 people travel to an airport in taxis. 4 people travel in each taxi. How many taxis are used?</p> <p></p> <p><input type="text"/></p> <p>3. Hanan is a keen archer. One day she shoots 5 arrows. Each arrow scores an 8. What is her total score?</p> <p></p> <p><input type="text"/></p>	<p>Practical activities – counters, pencils, etc.</p>
<p>Write and calculate mathematical statements for multiplication and</p>	<p>5</p>			

<p>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</p>		<p>a)</p>  <p>There are <input type="text"/> bags of pears.</p> <p>There are <input type="text"/> pears in each bag.</p> <p>There are <input type="text"/> pears in total.</p> <p>If $5 \times 4 = 20$ $4 \times 5 = 20$ $20 \div 4 = 5$ $20 \div 5 = 4$</p> <p>$5 \times 2 = 10$ $5 \times 20 = 100$ $10 \div 2 = 5$ $100 \div 2 = 50$</p>																	
<p>Solve problems including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>	<p>5</p>	<p>Partitioning 22×4 20×4 2×4</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="622 976 824 1241"> <p>Kelly has 3 coloured cards and 2 numbers. Complete the table to show how many different ways she could do if she wants to pair a colour and a number.</p> <table border="1"> <thead> <tr> <th>Colour</th> <th>Numbers</th> </tr> </thead> <tbody> <tr> <td>Green</td> <td>25</td> </tr> <tr> <td>Purple</td> <td>25</td> </tr> <tr> <td>Red</td> <td>25</td> </tr> </tbody> </table>  <p>25 32</p> <p>Daisy has 2 shape cards and 2 number cards.</p>  <p>She chooses a shape card and a number card. List all the possible ways she could do this.</p> </div> <div data-bbox="833 976 1034 1241"> <p>Andrew has 2 drinks and 3 foods. Complete the table to show how many different meals he can eat.</p> <table border="1"> <thead> <tr> <th>Food</th> <th>Drinks</th> </tr> </thead> <tbody> <tr> <td>Pizza</td> <td>Juice</td> </tr> <tr> <td>Sandwich</td> <td>Juice</td> </tr> <tr> <td>Hamburger</td> <td>Juice</td> </tr> </tbody> </table>  <p>Ella has 2 shape cards and 3 number cards.</p>  <p>She chooses a shape card and a number card. List all the possible ways she could do this.</p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Cinema tickets are £8. Six people go to see a film. How much will they pay altogether?</p>  </div> <div style="text-align: center; margin-top: 20px;"> <p>6. Cans of lemonade are sold in packs of 4. Cherie wants 36 cans for a party. How many packs should she buy?</p>  </div> <p style="text-align: center; margin-top: 20px;">Nrich – The Pied Piper investigation</p>	Colour	Numbers	Green	25	Purple	25	Red	25	Food	Drinks	Pizza	Juice	Sandwich	Juice	Hamburger	Juice	<p>Bar modelling.</p> <p>If I know, then I know.</p>
Colour	Numbers																		
Green	25																		
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Food	Drinks																		
Pizza	Juice																		
Sandwich	Juice																		
Hamburger	Juice																		
<p>Measure, compare, add and subtract:</p>	<p>4</p>	<p>Making bread, and stew for our Enterprise – Stone Age Survival Day Mixing cordials for drinks.</p>	<p>Enterprise – Stone Age Survival Day</p>																

lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)			Measuring and weighing ingredients to make recipes.
Measure the perimeter of simple 2-D shapes	2	Once chn are confident in calculating perimeter, then give chn shapes with perimeters, they have to find length of one side.	
Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight	3 Then M/O starter	Practical activities using the clocks. In PE – compare times of different activities. Diary of my day – using am and pm.	PE – shuttle runs Star jumps, etc.
		Other sessions were spent on overlearning above concepts – many more practical activities.	