


Learning Plan 1		Subject/Pwnc: Mathemateg	Year/Blwyddyn: 8			
<p><b><u>The Four Purposes in Maths and Numeracy:</u></b></p> <p><b>Ambitious, capable learners</b> who: set themselves high standards; seek and enjoy challenge; are increasingly knowledgeable and skilful; are questioning; enjoy solving problems; can communicate effectively; can explain the ideas and concepts; can use number effectively; understand how to interpret data and apply mathematical concepts</p> <p><b>Enterprising, creative contributors</b> who: connect and apply their knowledge and skills to create ideas; think creatively to reframe and solve problems; identify and grasp opportunities; take measured risks</p> <p><b>Ethical, informed citizens</b></p> <p><b>Healthy, confident individuals</b> who: face and overcome challenge; have the skills and knowledge to manage everyday life</p> <p>Knowledge focus/what matters:</p> <p><b><i>Venn diagrams, indices, factors and multiples:</i></b> <i>The number system</i> is used to represent and compare relationships between numbers and quantities.</p> <p><b><i>Probability:</i></b> <i>Statistics</i> represent data, probability models chance, and both support informed inferences and decisions.</p>						
Learning objective/key question	What will I know and be able to do? I can...	How will I develop my skills? (Success Criteria)		Homework/Gwaith cartref to support progress		
Week 1-2:  Interpret and use Venn diagrams	<ul style="list-style-type: none"><li>• Use Venn diagrams to group/categorise numbers</li><li>• Use Venn diagrams to display and interpret information</li><li>• Use Venn diagrams to solve problems that involve categories</li></ul>	<p>I can explain what Venn diagrams can be used for and what the different regions show.</p> <p>I am able to recall and describe number properties, and use Venn diagrams to classify or categorise numbers.</p> <p>I can start to solve more complex problems using Venn diagrams.</p> <p>I can generate explanations and solutions, with some guidance.</p> <p>I assess and evaluate my learning. I am starting to identify my misconceptions.</p> <p>I can interpret information presented in written and diagrammatical formats.</p> <p>I can communicate using symbols and diagrams.</p>		Wk 2	<p>Mathswatch homework</p> <p>Set: 12/9/25</p> <p>Due: 19/9/25</p>	

Weeks 3-4:  Investigate and use indices	<ul style="list-style-type: none"><li>Explain what square numbers and cube numbers are</li><li>Find any square or cube number.</li><li>Write products of numbers in the form <math>a^n \times b^m</math></li><li>Write algebraic expressions in index notation.</li><li>Investigate and use the rules of indices</li><li>Apply my indices knowledge and understanding to solve problems</li></ul>	I understand what square and cube numbers are - I build on this knowledge when investigating indices.	Wk 3	Mathswatch homework  Set: 19/9/25  Due: 26/9/25
		I can recall, explain and apply index laws.	Wk 4	Mathswatch homework  Set: 26/9/25  Due: 3/10/25
Assessment at the end of week 4				
Weeks 5-6:  Understand and use factors and multiples	<ul style="list-style-type: none"><li>Recall number properties and use them to categorise numbers</li><li>Work out the lowest common multiple of two numbers</li><li>Work out the highest common factor of two numbers</li><li>Apply my knowledge of HCF and LCM to solve problems in context</li><li>Identify prime numbers and prime factors Write numbers as products of their prime factors</li><li>Use products of primes and Venn diagrams to find HCF/LCM</li></ul>	I understand how a number relates to its factors and multiples.	Wk 5	Mathswatch homework  Set: 3/10/25  Due: 10/10/25
		I can recall and find factors and multiples of numbers.	Wk 6	Mathswatch homework  Set: 10/10/25  Due: 17/10/25
Weeks 7-8:  How likely?	<ul style="list-style-type: none"><li>Explain the meaning of the terms 'fair', 'an even chance', 'certain', 'likely', 'unlikely' and 'impossible'.</li><li>Recall and use the fact that the probability scale extends from 0 to 1.</li></ul>	I have a deeper understanding of probability, and how it is calculated.	Wk 7	Mathswatch homework Set: 17/10/25  Due: 24/10/25
		I can generate ideas, explanations and solutions, with some guidance.		
		I am able to respond and reason by applying my knowledge and understanding of probability.		

	<ul style="list-style-type: none"><li>Recall and use the fact that the total probability of all the possible outcomes of an experiment is 1.</li><li>Calculate theoretical probabilities based on equally likely outcomes.</li></ul>	<p>I can communicate using correct mathematical terminology/vocabulary, using the language of probability appropriately.</p> <p>I can make links between probability and my real-world experiences.</p>	Wk 8	<p>Mathswatch homework Set: 24/10/25</p> <p>Due: 7/11/25</p>
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